

TEACHING STUDENTS WITH AUTISM IN AN INCLUSIVE ENVIRONMENT: A CASE  
STUDY

by

Corey A. Brooks

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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### **Abstract**

The purpose of this case study was to understand the perspectives and experiences of general education teachers who teach high school students with autism spectrum disorder in inclusive education with respect to challenges teachers face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with autism spectrum disorder can learn and grow. Participants were identified via purposeful criterion sampling procedures, based on general education teachers in inclusive education. The setting for this study was an inclusive classroom in a public senior high school in North Carolina, referred to herein as Johnathon Brandon High School. Premack and Woodruff's theory of mind was used to guide this study and provide a clear understanding of the inability of youth with autism spectrum disorder to decipher facial expressions and body language, the pitch or tone of a person's voice, and the deeper meaning in conversations. The central research question focused on general education high school teachers' descriptions of the ways inclusive education impacted high school students with autism spectrum disorder. The sub-questions for this study focused on the challenges, strategies and intervention techniques, and general education teachers' efforts establishing a community based on collaboration. Data were collected and analyzed from an online survey, semi-structured interviews of 12 participants, and focus group discussion. Results revealed that participants desired more training to have a better understanding of autism spectrum disorder and the inclusive environment. Additionally, participants resolved that collaborative relationships established in inclusive education will help create an environment where students with autism spectrum disorder can learn and grow.

*Keywords:* case study, autism spectrum disorder, general education teachers, inclusive education, high school

**Copyright Page**

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### **Dedication**

To the four ladies that mean the most to me in my life, my mother's mom, Elaine Webster; my dad's mom, Lily Mae Conaway; my great grandmother Alice Dates; my great aunt, Aunt Delma. I am so grateful for the example of prayer, obedience and love God displayed in your life throughout my early developmental years. I would have never embarked on this journey without your support and encouragement to see it through to the end. A grandson, great-grandson, and great-nephew never had it so good. I love and miss each of you daily.

## Acknowledgments

Father God, I love you so much. I know I do not always do what I know is the right thing to do, but you love me regardless. I know I ask for forgiveness for sins than I turn around the following day or following week and commit those same sins again, and yet you continue to love and forgive me. I know, Father God, that I hear your Word and I argue within myself to do what you ask me to do, and you still love me. Lord God, it is your love and desire you have for me, desires for my good, to give me a future and a hope that allowed me to move forward through this process. Without you Father, I would never have known success.

In Proverbs, God tells us that whoever finds a wife finds a good thing. This dissertation is dedicated to my good thing, my wife, Chelsea, who inspired me with her strength and drive toward excellence. The grace that has been bestowed upon her has not only lit the flame in my life but also motivated our kids to strive for excellence.

To my two sons, you both have always been an inspiration in my life; a father could not ask for a better set of boys. Jahleel, the strength you have displayed in your life to approach every obstacle with only the desire to overcome it is a passion I pray to obtain one day. Jacob, your heart and the love you carry has comforted so many. Mix this with your desire to succeed regardless of your own challenges, it is heavenly and thus a gift from God. I love you both.

I also want to thank my parents, Arnold and Ruby Brooks, for always seeing the best in me despite my actions. I oftentimes find myself reflecting on those times in my life when I just needed an ear to listen as I vented my desperations or disappointments. No matter what the situation, you never judged me or made me feel like I was at a loss. I am so blessed to have you both as parents.

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### **List of Abbreviations**

Assembly Bill 2160 (AB 2160)

autism spectrum disorder (ASD)

Centers for Disease Control and Prevention (CDC)

cognitive-behavioral therapy (CBT)

Common Core State Standards (CCSS)

emotional self-regulation (ESR)

evidence-based practice (EBPs)

executive function (EF)

inclusive education (IE)

Individual with Disabilities Education Act (IDEA)

individualized education program (IEP)

insistence on sameness (IS)

Institutional Review Board (IRB)

least restrictive environment (LRE)

National Professional Development Center (NPDC)

National Research Council (NRC)

No Child Left Behind Act (NCLB)

repetitive sensory motor (RSM)

restrictive or repetitive behaviors (RRBs)

special educational needs and disabilities (SEND)

theory of mind (ToM)

typically developing (TD)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

The inclusion of students with autism spectrum disorder (ASD) in general education classrooms has continued to increase over the past few decades causing general education teachers to feel intimidated and unprepared to teach students with ASD in an inclusive environment (Bolourian et al., 2022; Van Hees et al., 2018). Chapter One includes a description of the background of the study, the situation to self, the problem statement, and the purpose of the study. It also includes an explication of the practical, empirical, and theoretical significance of the study and a description of the research questions. Chapter One concludes with definitions and a summary.

### **Background**

Inclusive education (IE) was designed to provide equal education for all students, which includes students with special educational needs and disabilities (SEND) and TD students (Hornby, 2015; Jokinen, 2018; Lyons et al., 2016; Smyth et al., 2014). Developing classrooms in IE where all students are treated equal is an ongoing process in which teachers must identify barriers that create an inequitable inclusive classroom and learning environment (Shani & Hebel, 2016). According to Goodall (2015), the model for IE is sometimes misunderstood by educators and is aligned more with integration and an expectation of students with SEND to include students with ASD, adapting to the environment rather than the environment adapting to meet the needs of special needs students. Goodall continues by suggesting that students with ASD may be academically capable of being in IE, but they are placed in this environment without considering if youth with ASD can endure the unpredictability and confusion that is oftentimes associated with mainstream classrooms (Goodall, 2015).

Determining if students with ASD in IE have access to a quality education is paramount because they could experience adverse implications if their learning needs are not met (Goodall, 2015). The Common Core State Standards (CCSS) are an educational initiative aimed at clearly defining what K-12 students throughout the United States should know at the end of each grade level (The National Joint Committee on Learning Disabilities, 2016). Quality educational standards include rigorous content wherein all students must use higher-order thinking skills to learn a challenging curriculum (The National Joint Committee on Learning Disabilities, 2016).

### **Historical Context**

Students with SEND to include students with ASD, have long been marginalized in society. Since 1893, students with SEND to include students with ASD, were excluded from public education after the Massachusetts Supreme Court decided to uphold a decision to maintain the expulsion of a student because of their inability to perform academically (Esteves & Rao, 2008). In 1919, the Wisconsin Supreme Court denied education to a student with cerebral palsy because, (as the report stated), the student caused the teachers and other students in the class to feel depressed and nauseated (Esteves & Rao, 2008). A paradigm shift began to occur in 1954 when the Supreme Court ruled that all individuals had the right to receive a free public education, regardless of their race, gender, and any disabilities (*Brown v. Board of Education*, 1954).

In 1975, another paradigm shift occurred with the enactment of the Education for All Handicapped Children Act, (commonly referred to as Public Law 94-142) as schools were required to provide a free and appropriate public education to students with SEND to include students with ASD in the least restrictive environment (LRE) through a process known as *mainstreaming* (Poon-McBrayer, 2014). Mainstreaming required students with SEND to include

students with ASD, first be assigned to a special education classroom and, over time, work toward earning their way into a general education classroom by demonstrating their ability to keep up with general education coursework (Poon-McBrayer, 2014). Students with mild learning disabilities, (dyslexia, dysgraphia, and dyscalculia), benefited from learning alongside their (TD) peers while mainstreaming; however, students with moderate to severe learning disabilities, (those disabilities identified by having little or no speech; individuals who find it difficult to learn new skills; those who need support with daily activities; and those who need life-long support), continued their education in special education classrooms (despite Public Law 94-142), with specialized teachers who are trained to implement appropriate services to meet their academic and social needs (Harkins, 2012).

Harkins (2012) discovered inconsistencies with mainstreaming. Inconsistencies in the implementation of the mainstreaming practice prompted the Office of Special Education and Rehabilitation Services of the U.S. Department of Education to reconsider options for making the boundaries between special education and general education more flexible. The Office of Special Education and Rehabilitation encouraged educators to provide students with disabilities with the same opportunities as their TD peers (Harkins, 2012).

### **Social Context**

Researchers note that IE is a multidimensional concept where students with SEND to include students with ASD, belong in and are only removed from general education classrooms when appropriate services cannot be provided (Goodall, 2015; Salisbury, 2006). Teaching in IE can be challenging for general education teachers. Some of the challenges general education teachers experience in IE involves ensuring students with SEND to include students with ASD, are provided an equal educational opportunity with appropriate adjustments to the curriculum

because of the implementation of an individualized educational plan (IEP) or ensuring changes to task associated with a particular assignment have been afforded to students with SEND to include ASD (Lang & Persico, 2019). Other challenges general education teachers face in IE consist of disruptive behavior often associated with a diagnosis of ASD, emotional difficulties, an inability to be fully attentive in class, and anxiety (Bolourian et al., 2022). General education teachers must also ensure there are measurable goals, mandatory assessments with measurable progress, increased parental involvement with an established parent-teacher relationship for continuity, and mandatory goal progress reports (Esteves & Rao, 2008; Mazon et al., 2021; Shani & Hebel, 2016).

Securing a prosperous future for students with ASD by providing quality education is the focus of the present study. Research suggest, students with ASD are among the poorest of those with any disability, which is often credited to a lack of support students with ASD receive in high school (Hedges et al., 2014; Lee et al., 2020; Van Hees et al., 2018). Whitten, Cimera, and Thoma (2019) insist 26% of youth with ASD work 2-years after completing high school and 43% of those youth with ASD work in segregated settings (Whitten et al., 2019). A study in 2015 revealed that only 47% of students with ASD graduated from high school (Kucharczyk et al., 2015), however, in a study by Van Hees et al. (2018) the increase in the prevalence of students with ASD along with evidence-based programs and improved legislation in education for youth with disabilities, there has been a growing rate of students with ASD going to a college or university. Unfortunately, compared to other disabilities, students with ASD in postsecondary education have lower graduation rates because of struggles with managing their academics and struggles appropriately managing their time, which can lead to unemployment and an unhealthy social life as they enter adulthood (Van Hees et al., 2018).



The term social life can have a variety of understandings depending upon the experiences of the person. Social life is the social participation that encompasses activities such as developing friendships and participating in either social events in the community or recreational activities that can lead to other social opportunities (Minor, 2018; Orsmond et al., 2014). Social competencies are critical for the development of self-confidence, interpersonal competence, and academic and vocational skills (Curtin et al., 2016).

Research suggests, in comparison to their TD peers and individuals diagnosed with other disabilities, as adults, individuals diagnosed with ASD experience the poorest quality of life (Azad et al., 2020; Lee et al., 2020). Azad et al., suggest, quality of life is measured by observing the occupational, recreational, as well as the social-emotional functioning of a person's life (Azad et al., 2020). To further clarify the idea of quality of life, research suggest, the quality of life for individuals with ASD can be better understood by observing their employment opportunities, the development of their peer network, and by observing if there has been any improvement to their expressive language skills (Plumet & Veneziano, 2015; Yeo & Teng, 2015). The Interagency Autism Coordinating Committee has requested continued research aimed at improving the quality of life of youth with ASD as they enter adulthood (Orsmond et al., 2014). The Interagency Autism Coordinating Committee's goal for their research was to enable adults with ASD to lead fulfilling and productive lives in their community.

### **Theoretical Context**

Theory of mind (ToM) is the theoretical and conceptual framework used to further explain and stimulate this research to ensure knowledge is shared by providing direction to the research (Adom et al., 2018). ToM is based on a study Premack and Woodruff conducted in which they sought to determine if chimpanzees could be assessed for ToM differently than

humans (Wellman, 2017). Premack and Woodruff launched an extensive training effort aimed at teaching chimpanzees how to deceive other chimpanzees through the logic of location change (Premack & Woodruff, 1978). Chimpanzees serving as recipients of a desired food, learned how to avoid providing other chimpanzees with the truth of the whereabouts of the desired location of the food. Their deception proved to be successful as two of the four chimpanzees deceived the other chimpanzees. Premack and Woodruff concluded that the deceptive act of changing the location of the food was an effective method for demonstrating ToM, because the test subject (subject 1) saw the essential value of food and its need for survival while also considering how the deceived subject's (subject 2) wrong belief would benefit the subject's (subject 1) overall goal.

Social and communication impairments that are common in youth with ASD are a result of deficit in ToM. Lantz (2017) noted that the use of persuasion, empathy, and self-consciousness is dependent upon ToM. Lantz reasoned that ToM helps youth with ASD understand many unwritten social rules that exist within neurotypical culture, thereby allowing them to recognize gestures that are indicative of others' interest in engaging in conversation. Youth with ASD have difficulties translating body language, understanding the pitch or tone of a person's voice, deciphering facial expressions, and understanding or finding the deeper meaning in conversations (Able et al., 2015; Van Hees et al., 2015).

For this study, it was imperative to situate the research problem toward the ToM and to integrate aspects of ToM into the research question and the purpose of the study as they must align with the theoretical framework (Adom et al., 2018). Other theories that supported this study were behaviorism, Bandura's social cognitive theory, and the theory of planned behavior. Behaviorism is the study of overt behaviors that can be observed and measured (Mergel, 1998).

Behaviorist researchers consider the mind to be a “black box” (Mergel, 1998). The idea that the mind is a black box infers that the mind is absent of thought or a blank slate in the presence of environmental stimuli. Piaget postulated that the mind was not absent of thought; however, behaviorism is too limited to explain how logic develops in the human mind and responds to environmental stimuli (Kamii, 1979).

Watson et al. (2017) described the roles of students from a behaviorist perspective, noting that students are passive and respond only to positive or negative stimuli in the environment. As students experience positive or negative stimuli in the environment, their behavior to this response is assumed. Students perceive punishments from teachers as negative stimuli that reinforce the negative behavior the teacher is attempting to discourage (Watson et al., 2017).

As students begin to change their behavior based on the stimuli they receive for positive behavior, they learn how to conduct themselves in the classroom. Behaviorism is one of the oldest personality theories. Descartes postulated the idea of a person being a machine, completely dependent on external events that generated a behavioral response (Naik, 2015).

The social cognitive theory has its roots in the theory of behaviorism. Behaviorists assume that social behaviors are reinforced by positive or negative stimuli that influenced a person’s response in social settings; however, Bandura and Walters believed that an individual could model behavior by observing the behavior of another person (Cherry, 2022).

Cognitive theorists believe learning involves associations established through direct contact with something and the repetition of a particular action or behavior (Mergel, 1998; Bandura, 2001). Like behaviorists, cognitive theorists acknowledge the importance of positive and negative reinforcement; however, cognitive theorists stress the idea of providing feedback about the correctness of responses. Despite their similarity to behaviorists, cognitivists believe

learning involves the reorganization of the cognitive structures that explain how humans process and store information (Mergel, 1998; Bandura, 2001).

The theory of planned behavior is one of the most influential theories that support theorist relations between cognition and behavior (Wilson et al., 2016). Proponents of the theory of planned behavior argue that attitudes relating to a person's behavior, subjective norms, and perceived behavior control combine to create a better picture of the intentions for a particular behavior (Wilson et al., 2016). These intentions are therefore influenced by the relationship between an individual's attitudes, subjective norms, perceived behavioral control, and the individual's behavior (Wilson et al., 2016).

The theory of planned behavior is appropriate for establishing a relationship between teachers' beliefs and inclusive behaviors that support socio-cognitive processes in an inclusive environment. With the growing number of students with ASD, classrooms are becoming more inclusive, and teachers must adjust their behavior and attitude to accommodate students with ASD and TD youth.

### **Situation to Self**

There has been a steady increase of students with ASD entering high school in IE, which has increased demands on general education teachers (Shani & Hebel, 2016). General education teachers, despite their lack of training, are expected to use effective practices to meet the complex needs of students with ASD and other students with distinct learning needs (Able et al., 2015; Hedges et al., 2014). IE is an ongoing process that requires daily maintenance and the ability to identify and remove barriers preventing general education teachers from building a stable foundation for effective learning (Hedges et al., 2014). Kucharczyk et al. (2015) expressed concerns about the limited knowledge of general education teachers and their understanding of

ASD and the barriers students with ASD encounter in IE. General education teachers' limited knowledge of ASD has a significant impact on their ability to collaborate and implement interventions for students with ASD (Kucharczyk et al., 2015).

As the parent of a high school student with a developmental disorder, I am concerned about his education in IE. I believe general education teachers in IE need effective training. In this study, I investigated general education teachers in IE who taught students with ASD, the challenges they faced, the strategies and interventions they used, and the relationships they built to assist them in creating an environment where students with ASD could learn and grow. Throughout this research, I acknowledged my bias regarding IE and ensured it did not overshadow or guide my findings.

This study was guided by two philosophical assumptions. The first assumption was ontological because there were multiple realities or perspectives to consider (Creswell & Poth, 2018). I believe general education teachers have a unique perspective regarding IE. The second assumption was epistemological because I interviewed participants to understand their perspectives (Creswell & Poth, 2018).

The research paradigm that guided this study was pragmatism. According to Illeris (2009), pragmatism is focused on life and growth. Creswell and Poth (2018) noted that pragmatism is focused on the outcome, the actions, and the consequences of an investigation. I believe finding a practical way to improve education is the purpose of educational research, and by interviewing and understanding general education teachers' experiences, I could improve education for students with ASD in IE. Multiple data collection methods were employed and analyzed to determine the practical implications of general education teachers' teaching students with ASD in IE.

## **Problem Statement**

The problem is research has not adequately investigated the perspectives and experiences of general education teachers who teach students with ASD in IE, the challenges they face, the strategies and interventions they use, and the relationships they build to create an environment where students with ASD can learn and grow. There is considerable information in literature concerning general education teachers teaching students with SEND to include ASD in IE (Able et al., 2015; Bolourian et al., 2021; Corona et al., 2017; Dynia et al., 2022; Hedges et al., 2014; Lee et al., 2020; Mazon et al., 2022; Raudeliunaite & Steponeniene, 2020). According to research, the prevalence of ASD has steadily increased over the past two decades and varies worldwide from 0.6% to 1.47% (Sugita, 2016; Van Hees et al., 2018). Research has shown that only 33% of students with ASD are included in the standard grade-level academic curriculum, which is commonly taught by general education teachers (Hedges et al., 2014). Research suggests that general education teachers may feel intimidated in an inclusive environment and less likely to use their best practices to teach students with SEND to include students with ASD in IE (Bolourian et al., 2021). Long-term outcomes for students with ASD are among the poorest of any disability category (Lee et al., 2020; Van Hees et al., 2018). Researchers attributed the poor long-term outcomes for students with ASD to their not receiving adequate support in high school (Lee et al., 2020; Hedges et al., 2014; Shattuck et al., 2012; Van Hees et al., 2018).

Although recent studies explored the problems associated with providing effective quality education to students with ASD, additional research is needed to determine the kinds of evidence-based practices are necessary to make a meaningful and lasting improvement to education for students with ASD (Austin & Pena, 2017; Cronin, 2014; Echaniz et al., 2022). This qualitative case study may provide a better understanding of the perspectives and experiences of

educators in IE and the barriers they encounter in providing effective quality education to students with ASD (Yin, 2018).

### **Purpose Statement**

The purpose of this case study is to understand teachers' perspectives and experiences teaching high school students with ASD in IE with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow. General policies within the United Nations Convention on the Rights of Persons with Disabilities (CRPD) provide guidance for persons with disabilities that allow access to a free and appropriate public education without discrimination. These principles provide context and definition for the present study (Jokinen, 2018). The theory that framed this study was Premack and Woodruff's ToM.

### **Significance of the Study**

I used a qualitative case study to investigate the perspectives and experiences of general education high school teachers who instructed students with ASD in IE. Previous studies have investigated challenges that general education teachers face in IE (Able et al., 2015; Corona et al., 2017; Emam & Farrell, 2009; Hedges et al., 2014; Kucharczyk et al., 2015; Robledo, 2017; Shani & Hebel, 2016), and several studies related to youth with ASD (Hedges et al., 2014; Hochman et al., 2015; Plumet & Veneziano, 2015; Reutebuch et al., 2015; Van Hees et al., 2015; Yeo & Teng, 2015). This study includes a synthesis of information gathered from empirical research to create a description of the context in which general education high school teachers instruct students with ASD in IE.

Conducting a qualitative single case study provided a means to identify and understand the experiences and perceptions of educators in an inclusive environment. Able et al. (2015)

conducted research on the perspective of educators in an inclusive environment and identified the dearth of research needed to support the further development of social skills in students with ASD. Researchers also identified the lack of research investigating the needs of educators in IE and effective intervention methods in IE (Able et al., 2015). It is equally as important to determine the challenges in IE and define those indicators to serve as criteria for success (Shani & Hebel, 2016)

General education teachers teaching students with ASD in IE feel as though they lack the required knowledge and have not received sufficient training to meet the needs of their students (De Boer et al., 2011). Their gap in knowledge could be the cause for general education teachers to feel frustrated, fearful of going into the classroom, angry, and demonstrate a lack of self-confidence in their ability to meet the needs of their students (Shani & Hebel, 2016). This single-case study occurred in a real-world setting using a less formal or direct observation method to understand the inclusive environment and gain an understanding of educators' experiences.

This study's findings include important information to help determine how the inclusive model meets the needs of students with SEND to include ASD (Goodall, 2015). Findings from this study could impact future effective intervention models and techniques with the potential to improve the overall education of students with SEND to include ASD. Furthermore, identifying the challenges and barriers in IE could provide researchers with a better understanding of the inclusive environment and provide an avenue for continued research to further enhance this multidimensional learning environment.

### **Research Questions**

The overarching goal of this case study was to discover and understand teachers' descriptions of their experiences teaching high school students with ASD in IE. Three different



types of data were collected for the study to achieve triangulation. This case study was guided by one central research question and three additional research sub questions.

### **Central Research Question**

What are the perspectives and experiences of general education high school teachers with teaching students diagnosed with autism spectrum disorder in inclusive education?

According to Love et al. (2019), the prevalence of youth diagnosed with ASD in the United States has increased from 1 in 88 to 1 in 68. Students with ASD can be the most challenging group of students with SEND to teach (Love et al., 2019). IE can be beneficial as students with ASD have access to the general education curriculum. However, students with ASD who have deficits in social and interpersonal communication skills struggle to develop healthy peer relationships and can experience loneliness, victimization, or bullying (Able et al., 2015).

### **Sub-Question One**

How do general education high school teachers in IE describe challenges they experience in the classroom while teaching students with ASD?

A challenge identified in this study for students with ASD was to relate socially with their peers and teachers. Some of the social communication issues were an inability to maintain good eye contact during a conversation, a short attention span, peculiar speech patterns, and acute difficulty maintaining or initiating conversations (Yeo & Teng, 2015). Teacher's self-efficacy was another challenge identified in this study. The self-efficacy of general education teachers is a byproduct of the struggle students with ASD have with communicating with peers and teachers (Shani & Hebel, 2016).

**Sub-Question Two**

What are general education high school teachers' descriptions of the strategies and intervention techniques they implement to assist students with ASD in IE?

Establishing an inclusive environment in IE is a challenge for general education teachers, mainly because of the discrepancy between the overall visions of the development of IE and managing resources allocated for IE. General education teachers must ensure IE strategies are focused on traditional classroom management techniques, learning objectives, and how teachers want their students to engage in learning activities (Molbaek, 2018). Effective strategies in an inclusive environment also require general education teachers to facilitate communication and cooperation within the school. General education high school teachers must know the subject they are teaching and their students' learning needs, and they must understand the schools' culture, norms, and values (Molbaek, 2018).

**Sub-Question Three**

How do general education high school teachers in IE describe their interactions with parents of students with ASD, their peers in special education, and the school administrative staff?

Success in inclusive education is influenced by a combination of collaborative relationships between general education teachers, special education, school administrators, and the parents of students with ASD. A major challenge in IE that hinders collaboration and negatively impacts the learning environment in IE, is a lack of communication between general education teachers and special education teachers (Chitiyo & Brinda, 2018). A benefit to teacher collaboration is the possibility for professional development and mentorship. When teachers who have a limited experience teaching in IE, collaborate with teachers with extensive experience

teaching in IE, they receive mentoring, increase their self-efficacy, and improve the learning environment in IE (Chitiyo & Brinda, 2018; Robledo, 2017). In addition to their colleagues, teachers must develop collaborative relationships with their student's parents. Syriopoulou-Delli et al. (2016) stressed that collaboration between teachers and parents is a significant part of fostering the educational experience of students in IE. Research shows that when parents are not involved in their children's educational development, their children perform poorly, a phenomenon often seen as children get older and the frequency of parents' participation begins to dissipate (Syriopoulou-Delli et al., 2016).

### **Definitions**

1. *Autism Spectrum Disorder (ASD)* – autism spectrum disorder is characterized as a multifaceted, pervasive development disorder (PDD), and progressive disability that usually affects a person's ability to communicate or interact with others. ASD can range from very mild to severe, affecting everyone differently (Echaniz & Cronin, 2014).
2. *Collaboration* – When members of an inclusive learning community work together to ensure the success of the students.
3. *Free and Appropriate Public Education* – Provides suitable education and related services at no cost to students or their families. Free and appropriate public education is provided with a zero-reject policy in the LRE (Echaniz & Cronin, 2014).
4. *Friendship* – A form of a dyadic peer relationship involving a sophisticated set of skills that include knowledge in a certain area of social cognition, language, and emotions. Friendship is characterized by a bond that is dynamic, stable, voluntary, and reciprocal, and it includes a degree of mutual affection and preference that results in the facilitation

of socially related functions such as intimacy, companionship, and closeness (O'Hagan & Hebron, 2017).

5. *Inclusive Education (IE)* – An educational system designed for all students (Jokinen, 2018). IE is accessible with reasonable accommodations and individual support in a nondiscriminatory learning environment that meets the diverse needs of all students (Jokinen, 2018).
6. *Individualized Education Program (IEP)* – An IEP is a document that establishes the procedures for the delivery of instruction and describes the related services for which the student is eligible. An IEP is also required by the Individual with Disabilities Education Act (IDEA). Parents or guardians can participate in IEP meetings and can affect all decisions regarding the assessment, identification, and placement of their child and the services they receive (Echaniz & Cronin, 2014).
7. *No Child Left Behind Act (NCLB)* – The NCLB Act, signed by former President, President George W. Bush, was passed by Congress in 2001. As a result of the NCLB Act, the federal government held schools accountable for the academic performance of their students. Schools were required to test their students in English, mathematics, and science. The NCLB Act gave prolonged flexibility, required the use of evidence-based teaching strategies, provided options for parents to transfer students out of low-performing schools, and required that teachers be highly qualified to teach (Echaniz & Cronin, 2014).
8. *Self-Efficacy* – The belief in one's abilities, particularly the ability to meet specific challenges and complete them successfully. Self-efficacy entails having the all-

encompassing belief in a personal ability to succeed despite physical, emotional, or circumstantial challenges (Ackerman, 2018).

9. *Emotional Self-Regulation (ESR)* – Involves controlling one’s behavior, emotions, and thoughts in the pursuit of long-term goals (Schmitt et al., 2015).
10. *Pragmatic* – The study of the speaker’s meaning about the use of language. The ability to use language and other expressive means (i.e., gestures, body movements, and facial expressions) to convey communicative meanings in context to the conversation (Bosco et al., 2018).
11. *Special Educational Needs and Disabilities (SEND)* – Special educational needs in children consist of learning difficulties or disabilities that make it harder for them to learn when compared to their same-age peers. There are a range of needs that affect children with special educational needs in four functional areas: (a) communication and interacting, (b) cognition and learning, (c) social, emotional, and mental health difficulties; and (d) sensory or physical needs (Department for Education & Department of Health & Social Care, 2015). A disability is described as a physical or mental impairment that has a long-term adverse effect on normal day-to-day activities (Department for Education & Department of Health & Social Care, 2015). Not every child or youth with a disability requires special educational provisions; however, youth with disabilities who require special educational provisions are provided those services under SEND.
12. *Theory of Mind (ToM)* – ToM relates to the ability to understand thoughts and feelings projected by others, thereby allowing the individual to interpret their intentions, beliefs, and desires (Echaniz & Cronin, 2014)

13. *Transitions Between Activities* – Change in the current activities or settings, moving from one activity to another or from a specific part of an activity to another (Hall et al., 2018).

### **Summary**

Chapter One included relevant contextual background information regarding the phenomenon under investigation and a description of the significance of the study. A brief explanation was presented regarding my role in the study and my motivation, as a parent of a child with developmental disorder, for conducting this study. The research questions were delineated and definitions specific to this study were also provided in this chapter. By conducting this study, I hoped to understand teachers' descriptions of their experiences teaching high school students with ASD in an inclusive environment, the challenges they faced, the strategies and interventions they used, and the relationships they built to assist them in creating an environment where students with ASD could learn and grow.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The purpose of this literature review is to provide pertinent literature to allow the development of relative arguments and opinions regarding this research. Conducting a literature review permits the researcher to gain potential knowledge and information from previous studies to identify gaps in the research by providing current knowledge and new evidence inherent to the study. This literature review includes various concepts concerning teachers' descriptions of their experiences teaching high school students with autism spectrum disorder (ASD) in inclusive education (IE).

The literature review thus provides detailed information regarding the failure of secondary schools to properly prepare students with ASD for future employment, college, living independently, achieving a career of their choice, and raising their own family (Sugita, 2016; Van Hees et al., 2015). The literature in this review will also provide significant relevance to the study reflecting on the various perspectives and experiences of general education high school teachers in IE, identifying challenges they face in IE, strategies and interventions teachers use to manage the classroom, and the collaborative efforts of general education teachers in IE.

### **Theoretical Framework**

According to Shochet et al. (2016), ASD is a heterogeneous neurodevelopmental disorder appearing in early childhood developmental stages and lasting throughout their entire life. Some core symptoms, according to the American Psychiatric Association (2013), include impairments in social communication skills that encompass limited verbal and nonverbal communication; deficits in communal social interaction, affecting their ability to develop or maintain

relationships; and unusual repetitive or restricted behavior (American Psychiatric Association, 2013).

Research suggests that ASD is the most common childhood neurological disorder (American Psychiatric Association, 2013; Lindsay et al., 2013; Shochet et al., 2016). The steady increase in youth being diagnosed with ASD has shown an increase in students with ASD in mainstream classrooms (Lindsay et al., 2013). Social and behavioral deficiencies associated with the ToM, create a considerable challenge affecting the experience of youth with ASD in high school and the self-efficacy of general education teachers (Lindsay et al., 2013).

### **Theory of Mind**

According to research, autism was introduced in 1943 by Leo Kanner, however, autism was originally labeled autistic disturbance of affective contact (Echaniz & Cronin, 2014; Zeanah, 2018). Children who were autistic displayed an inability to relate to themselves ordinarily in social settings as distinct characteristic of the disorder (Zeanah, 2018). Children who were autistic lived in a world of their own, cut off from normal social interactions due to a failure to develop the motivation to incorporate themselves in social settings (Echaniz & Cronin, 2014). Autism, which has been characterized as a pervasive developmental disorder (PDD), is a multifaceted developmental disability that affects a person's ability to communicate and interact socially with others (National Institute of Neurological Disorders and Stroke [NINDS], 2019; Plumet & Veneziano, 2015; Van Hees et al., 2015). Symptoms in youth are identified by parents as early as infancy with the typical age of onset being before the child turns 3 years old (NINDS, 2019). Autism is not a single condition, but it is a spectrum disability where individuals have a range of abilities and disabilities (Walker & Berthelsen, 2008).



A characteristic of ASD is socio-pragmatic dysfunction also called pragmatic communication (Grohol, 2019; Plumet & Veneziano, 2015). According to Plumet and Veneziano, individuals diagnosed with socio-pragmatic dysfunction display difficulties perceiving or using social cues, language to make requests or refusals, and in conforming to conversational rules used in everyday life. Another major dysfunction normally observed in youth with ASD is a deficit in their social interaction, displayed by an inability to modify their language to match peer to peer conversation and an inability to participate in cooperative play (Grohol, 2019; Plumet & Veneziano, 2015; Yeo & Teng, 2015).

Cooperative play requires ToM because this form of intentional social behavior requires youth to be able to understand the game, to anticipate their partner's moves, and have a complete understanding of the overall goal of the shared play (Etel & Slaughter, 2019). Youth with ASD enjoy playing, but because ASD affects the development of social and communication skills, certain types of play requiring youth with ASD to imagine what others are thinking and feeling, may present a certain level of difficulty. Communication and social developmental deficits associated with ASD may cause youth with ASD to shy away from playing with TD youth.

Etel and Slaughter (2019) described ToM as a foundational support for complex social behaviors in early childhood with an association to social competence, social skills, and social maturity. Etel and Slaughter's description supports theorist, claims that link the study of ToM to youth with ASD (Etel & Slaughter, 2019; Frith, 2016; Plumet & Veneziano, 2015; Wellman, 2017).

Frith (2016) states ToM is like an intuition or an ability to understand others in terms of what they feel and think. ToM explains the ability we as humans must consider what others may believe or know about another person in a social setting (Frith, 2016). Ondobaka et al. (2017)

described ToM as the cognitive ability that allows someone to understand the intentions and beliefs of others by observing their physical appearance and obvious behaviors. Clearly stated, ToM is the ability to ascribe mental states, beliefs, intents, desires, emotions, knowledge, etc., to oneself and to others. ToM is necessary to understand that others have beliefs, desires, intentions, and perspectives different from their own. ToM is considered crucial for everyday human social interactions and is understood when analyzing and judging individual behaviors.

A firm understanding of another's intentions and beliefs is evidence of human social cognition, often referred to as mentalizing (Ondobaka et al., 2017). Mentalizing is the process (implicitly or explicitly) that we subjectively use to make sense of each other in social settings (Bateman & Fonagy, 2010). Mentalizing consists of being attentive to the mental state of others, making it easier to track and follow the flow of conversations (Bateman & Fonagy, 2010; Frith, 2016).

Swiss psychologist, Jean Piaget introduced ToM in his study of infancy and early childhood development (Carey et al., 2015; Wellman, 2017). Piaget described egocentrism as an inability of children to perceive others' points of view. Piaget further explained, youth who demonstrated egocentrism found it difficult to look past their feelings about a particular issue to determine how someone may feel (Constable et al., 2013; Kucharczyk et al., 2015; Wellman, 2017). The idea fashioned by Piaget's theory of cognitive development was the starting point for the ToM design (Wellman, 2017).

Premack and Woodruff coined ToM in their studies on chimpanzees, developed from a similar study conducted 50 years prior by Kohler (Kohler, 1925; Premack & Woodruff, 1978; Wellman, 2017). In their research, Premack and Woodruff sought to determine if chimpanzees could be assessed to have a ToM not much different from humans. Premack and Woodruff

surmised that various systems of inferences could not be determined or viewed; however, they suggested that purpose and intention are the most common states portrayed by humans (Premack & Woodruff, 1978; Wellman, 2017). The question Premack and Woodruff sought to answer was whether chimpanzees could impute their mental state onto other chimpanzees.

ToM relates to the ability to understand thoughts and feelings projected by others, allowing the individual to interpret their intentions, beliefs, and their desires (Echaniz & Cronin, 2014). Anxiety is an emotion that develops from misinterpreting the motives or intentions of others. Misunderstandings are the underlying symptoms developed in school for youth with ASD. Youth with ASD often confuse conversations because of difficulties they face with translating body language, understanding how the pitch or tone of a person's voice changes the meaning of what is implied, and being able to decipher facial expressions, which provides a deeper meaning in conversations (Able et al., 2015; Echaniz & Cronin, 2014; Kucharczyk et al., 2015).

Youth with ASD may also suffer from anxiety because of difficulty they have planning or predicting unannounced circumstances. For example, TD youth will take an umbrella before leaving the house because they assume it will rain due to heavy cloud coverage. Youth with ASD may not consider the cloud coverage and therefore they would not take an umbrella in anticipation of the rain. Trouble associated with goal directed behavior, purposeful planning or being organized results from poor executive function (EF; Echaniz & Cronin, 2014; Wellman, 2017).

### **Pragmatic View**

Bosco et al. (2018) defined pragmatic as the ability to utilize language and other expressions (i.e., gestures, facial expressions, and body movement) to convey meaning in a

social setting. In conversation, pragmatic understanding requires more than literal comprehension of what was stated but it insists the individual allowed reasoning to fill the gap between what is said and what is meant (Bosco et al., 2018).

Key diagnostic features of ASD include a lack of social exchange and disabilities that affect communication in social settings (American Psychiatric Association, 2013; Echaniz & Cronin, 2014). Youth with ASD have a developmental delay in language skills that affect their ability to communicate using the spoken language because of impairments in the knowledge needed to sustain a conversation (Echaniz & Cronin, 2014; Tager-Flusberg, 2000). At the core, pragmatic disabilities that affect social interaction in youth with ASD are linked to weaknesses identifiable in ToM (Bosco et al., 2018; Tager-Flusberg, 2000). According to Bosco et al. (2018) pragmatism and ToM overlap in their social communication; however, these concepts must be recognized as distinct faculties of the human mind whose functions in social communication and language are not identical.

Pragmatic considerations that assist with all communicative uses of language in social situations involve having general world knowledge of the subject being discussed. These considerations can integrate an individual's utterances or micro-expressions into the context of the conversation and could interject thoughts into the conversation based off prior knowledge of the subject being discussed (Frank, 2018). If the ToM is a precursor to language development or language is a necessity for the ToM, youth with ASD, because of pragmatic deficits with uses of language in social situations, will have issues communicating and understanding the intent of the conversation (Bosco et al., 2018; Brewer et al., 2017; Deliens et al., 2018; Frank, 2018).

Deliens et al. (2018) believed youth with ASD have difficulty comprehending metaphors, indirect speech, and jokes. Frequently, misunderstanding the intentions and the literal meaning

behind questions or requests will cause youth with ASD to misunderstand the context of the conversation. General education teachers in IE must work hard to ensure students with ASD understand the literal meaning of what their teachers are saying (Jokinen, 2018; Shani & Hebel, 2016). Failure to recognize this shortcoming could result in their students not understanding or completing an assignment.

Plumet and Veneziano (2015) shared the same views as those of Deliens et al. (2018). However, Plumet and Veneziano believed that the pragmatic difficulties in youth with ASD are not only limited to language. Youth with ASD have very specific behaviors, create their language, have various facial expressions, gestures, and speech differences than those visible in TD youth (Gordon, 2017; Plumet & Veneziano, 2015). This creative language allows youth with ASD to escape reality and revert to a place where they can be fully engaged in a conversation they can follow (Plumet & Veneziano, 2015). Teachers may have a difficult time understanding these expressions and could mistake them for several different unintended messages. Teachers who are not trained with a basic understanding of ASD could find their inability to communicate with their students to be overwhelming and discouraging.

ToM refers to an intuitive ability to understand feelings, intentions, and beliefs by observing an individual's physical appearance and overt behavior (Frith, 2016; Ondobaka et al., 2017). Pragmatics is the ability to use language and other suggestive notions to convey the meaning of a conversation (Bosco et al., 2018). In social settings, Students with ASD display difficulties in identifying facial expressions as well as comprehending emotions of others and understanding the literal meaning of peer conversations (Bosco et al., 2018; Emam & Farrell, 2009). Emam and Farrell suggested, difficulties youth with ASD have understanding facial expressions and how those expressions relate to the meaning of the conversation could impede

their ability to participate in school activities. Not being able to fully understand the meaning of a conversation also affects youth with ASD relationships with their teachers and TD youth in their class (Emam & Farrell, 2009).

General education teachers in IE who teach students with ASD must work hard to ensure they do not fail to recognize the shortcomings in communication that can affect the learning environment. This research will explore challenges faced by general education high school teachers in IE who teach students with ASD. The struggles students with ASD have with communication because of a lack of ToM will be explored to potentially advance their knowledge in this field.

### **Related Literature**

The following review of related literature includes current research and literature about teachers' descriptions of their experiences teaching high school students with ASD in an inclusive environment. Also included is a closer look at the challenges general education teachers and students with ASD face in IE, strategies and interventions general education teachers use, and the relationships general education teachers build to assist them in creating an environment where students with ASD can learn and grow.

### **Challenges in High School**

High school presents its own set of challenges and obstacles for students from 9th to 12th grade (Able et al., 2015). Students in high school, unlike elementary and middle school, are expected to be more independent while being introduced to greater demands from their teachers (Hedges et al., 2014). High school teachers expect their students to be more organized and to be able to plan more efficiently to ensure their assignments are completed and turned in when they are due (Hedges et al., 2014).

High school students with ASD, despite their cognitive ability, face greater difficulties in comparison to TD youth. Youth with ASD have a difficult time developing relationships, working in groups, and because of deficits in communication youth with ASD have a difficult time participating in classroom activities (Able et al., 2015). Hedges et al. (2014) further explains youth with ASD in high school experience a heightened sense of social anxiety due to a growing self-awareness of their social difficulties and negative experiences with TD peers. The difficulties youth with ASD face in high school have a drastic effect on their overall performance and outcome during and after their high school experience.

Poor postsecondary education outcomes for students with ASD are attributed to a lack of support these students receive in high school (Hedges et al., 2014). Students with ASD, who leave high school, often leave without the skills, experience, or support needed to attend college or obtain employment (Kucharczyk et al., 2015). Research shows, two years following graduation youth with ASD who were taught in general education classrooms were not employed or living independently due to limited services being available to help them as they transitioned beyond high school (Hedges et al., 2014). The ramifications that follow poor postsecondary outcomes for youth with ASD are profound and have a lasting effect on the family and the community. Families of youth with ASD become lifetime caretakers and the community suffers as the cost of support for caring for an individual with ASD has been estimated to exceed \$3.2 million per person (Hedges et al., 2014).

Forty-seven percent of students with ASD graduate from high school and find a job, 11% live independently, and only 59% have a social life outside of the home (Kucharczyk et al., 2015). Hedges et al. (2014) emphasized the need for researchers and educators to examine the challenges students with ASD experience in high school. If the proper attention is contributed to

examining the challenges students with ASD face, it would provide the support they need and improve their quality of life starting with the learning environment in IE.

According to Hornby (2015) IE is the most controversial learning environment today. Goodall (2015) surmised that inclusion had to be identified as a complex process where all children (those with SEND and TD youth) come together with appropriate structures for support that would be provided equally. Creating an inclusive environment is an ongoing process that according to Shani and Hebel (2016) has four main components influencing its implementation (a) policy; legislation; coordination; and the needs of educators, administrators, and the staff; (b) the quality of support received by students with SEND; (c) quality of training by general education teachers, special education teachers, the administration, and the school staff; and (d) types of impairments along with educational capabilities.

High school students with ASD spend more than 80% of their time in an inclusive classroom (Adams et al., 2016). IE provides students with ASD the opportunity to spend more time interacting with TD youth. Aside from spending more time with TD youth, Goodall (2015) suggest IE has several benefits for youth with ASD, allowing them to learn from TD youth, providing opportunities to improve social skills, and providing teachers the opportunity to structure advanced educational goals. However, in a study conducted by Sreckovic et al. (2017) increasing the physical proximity of youth with ASD to TD youth did not increase social interaction. Research showed youth with ASD spent more time in solitary activities than they did in interactive activities with TD youth (Sreckovic et al., 2017).

There is a significant awareness of the difficulties students with ASD face when interacting socially with TD youth (Bell et al., 2017). In 2009, the CCSS was developed to standardize learning and proficiency throughout the United States for students with SEND and



TD youth (Constable et al., 2013; Sugita, 2016). The CCSS is an evidence-based standard that focuses on critical thinking and problem-solving students need to ensure they will be successful in college and their future careers (Sugita, 2016). However, the CCSS does not apply alternative approaches adequately to prepare students with disabilities to succeed in college or a future career. Without the guidance from the CCSS to implement alternative approaches for students with SEND, individual states are held responsible for creating plausible solutions for students with SEND to meet proficiency standards (Sugita, 2016).

Constable et al. (2013) provided an example of the CCSS requirement for reading literature. Students were expected to read a story and respond to major events that the character of the story experienced (Constable et al., 2013). However, students with ASD were identified as having an inability to place themselves in the story to allow themselves to feel how the character felt, a deficit of the ToM. The inability of students with ASD to understand the character's feelings in the story made it difficult for them to explain the mental state or imagine how the character in the story felt or thought (Brewer et al., 2017). Teachers with little to no experience teaching students with ASD in IE may find this environment overwhelming. It has been discovered that teachers experienced frustration, fear, anger, and a lack of confidence because of feelings that they cannot effectively reach their students (Shani & Hebel, 2016).

Youth with ASD face some of the same developmental concerns as TD youth. As youth with ASD mature to adulthood, there is a pressing desire to establish their identity, their independence, and a desire to become responsible adults. Students with ASD who want to pursue higher education face increased social, emotional, and organizational demands associated with their development into adulthood (Elias & White, 2018).

The idea of life after high school for youth with ASD can cause tremendous stress as they begin to experience increased responsibilities and expectations without additional assistance (Elias & White, 2018). Despite the physical concerns accompanied with change, difficulties with mental health also play a major role in the overall health of students with ASD. Reportedly, 71% of students with ASD have a form of anxiety, with 53% who experience loneliness, and 47% who deal with depression (Jackson et al., 2017). Suicide is another area of concern for post-secondary students with ASD. Statistics show a 66% increase in suicidal ideation with 35% of high-functioning students with ASD planning or attempting suicide (Jackson et al., 2017). Properly training teachers who teach students with ASD to identify these concerns would improve the quality of life for youth with ASD and provide an avenue for assistance from other services postsecondary education.

### **Social Challenges**

According to Mody et al. (2017), studies have shown shortfalls in communication skills for youth with ASD are linked to deficits in oral motor and manual motor skills that may be genetic. Statistically, 25%–30% of youth diagnosed with ASD who are minimally verbal (MV) past 5 years old (Chenausky et al., 2016). Research has also shown that due to their reduced ability to socially interact, students who are MV suffer from greater psychiatric disorder related impairments due to a lack of verbal coping strategies and interventions (Lerner et al., 2017).

Thompson et al. (2017) discussed the importance of social interaction as a part of human development. In addition, they attempted to identify the boundaries and obstacles that form healthy friendships, such as the socioeconomic status of an individual, the educational, vocational, and ethnic background, and in person communication versus electronic

communication. Poor social skills can hinder an individual's productive and meaningful interactions within their environment (Thompson et al., 2017).

One of the major concepts for IE was establishing an environment that would allow students with and without disabilities the opportunity to interact socially (Goodall, 2015; Pickard et al., 2018). IE was designed to help students with ASD learn basic social skills, however, students with ASD had difficulties engaging with their peers and forming friendships. Difficulties engaging with TD peers and forming friendships in IE has produced issues that impact the social interaction of students with ASD; limited interaction between TD students and students with ASD are often reported as victims of school bullying (Winchell et al., 2018).

Youth with ASD who have TD youth as friends, attempt to participate in more complicated play and communication versus those with ASD who have only been exposed to youth with disabilities (Jones et al., 2017). The nature of a friendship changes over time, especially during adolescence, and becomes progressively more complex (O'Hagan & Hebron, 2017). However, as relationships become more complex, youth with ASD become less familiar with understanding how to deal with emotions and feelings expressed by other youth and they could begin to feel socially anxious or unsure, often evident with increased restrictive or repetitive behaviors (RRBs; Joyce et al., 2017).

RRBs are common among youth with ASD and are separated into two categories: repetitive sensory motor (RSM) and insistence on sameness (IS) behaviors (Joyce et al., 2017). RSM is commonly explained as an excessive smelling or touching of an object, whereas IS is commonly observed when routines have changed or when specific daily patterns are not followed (Joyce et al., 2017). Youth with ASD find it difficult to maintain friendships with TD youth because of RRBs. Social communication and RRBs are conditions of ASD that contribute

to an atypical social profile, which includes a difficulty in responding to or initiating social propositions, staying on topic when discussing issues of personal interest, and displaying difficulty in interpreting when individuals are being sarcastic (Bottema-Beutel et al., 2017). Students with ASD in IE are less accepted by TD youth because they are socially awkward and do not fit into social settings (Vincent et al., 2018).

Social anxiety is a common issue and one that has a direct correlation to social communication difficulties (Pickard et al., 2018). Social anxiety, as the third most common psychiatric disorder, is prevalent in adolescent youth. Studies show the prevalence of anxiety disorder amongst students with ASD ranged from 22% to 84% (Vasa & Mazurek, 2015). Camargo et al. (2014) suggested that social anxiety in students with ASD is a response to their difficulty with sustaining eye contact, sharing in activities, and understanding other's feelings enough to respond appropriately. Without clinical treatment, social anxiety is likely to cause further psychiatric disorders (Pickard et al., 2018).

Pickard et al. (2018) suggested that youth who have a social communication disorder in conjunction with ASD, are routinely victims of teen and peer bullying or isolation. Forming friendships is an important experience in human development especially in the earlier stages of development (Pickard et al., 2018). Friendships can provide a level of support for youth with ASD, which can help them manage complex social interaction presented daily in school (O'Hagan & Hebron, 2017). Despite the obvious benefits to developing friendships, studies have shown that students with ASD spend less than half their time involved in social interaction and have less contact with friends outside of school (O'Hagan & Hebron, 2017).

Youth with ASD who have deficits in social skills could also display behavioral issues, which will harm their academic performance. A combination of behavioral issues and low

academic performance could cause youth with ASD to be removed from the general education classroom to a more restrictive environment (Camargo et al., 2014). Youth who find it difficult to engage in social communication will struggle with forming healthy friendships, making them vulnerable to victimization and further leading them to increased feelings of social isolation, feelings of withdrawal, and a lack of companionship (Jackson et al., 2017; Pickard et al., 2018).

The effect of ASD on communication has a huge influence on the youth's social interaction, but the repetitive patterns seen in the youth's behaviors, interests, and activities also create difficulties socially (Yeo & Teng, 2015). Some of the social communication complications deal with an inability to maintain good eye contact during a conversation, low attention span, peculiar speech patterns, and an acute difficulty with maintaining or even initiating conversations (Yeo & Teng, 2015). Difficulties with speech and understanding what was heard, along with having the ability to say what is on their mind, are examples of the problems that youth with ASD experience in IE (Pickard et al., 2018).

As the number of students with ASD increases in IE, a greater demand is placed on general education teachers to foster an environment where students with ASD can learn and grow. For general education teachers to be effective in IE, they must receive the necessary training that will teach them how to effectively reach their students. Holcombe and Plunkett (2016) stated a challenge for educators is understanding that ASD has a different impact on the individual behavior of students. Holcombe and Plunkett further stated, "Without a definitive understanding of the condition, knowledge of ASD in education has been built on shaky foundations" (Holcombe & Plunkett, 2016, p. 27).

### **Ineffective Teacher Training**

Two years ago, the Center for Disease Control and Prevention (CDC) estimated the prevalence rate of ASD was 1 in 88 (Slade et al., 2018). By 2016, the prevalence rate was estimated to be 1 in 68 a 47% increase in ASD cases among youth in multiple communities throughout the United States (Able et al., 2015; Slade et al., 2018). A mandate under the Individual with Disabilities Education Improvement Act (2004) specifies youth with SEND are to be taught to the greatest extent possible in the LRE with their TD peers (Able et al., 2015; Yell et al., 2006). This mandate has impressed upon school administrators to increase the presence of youth with ASD in general education classrooms. However, general education teachers do not feel they are prepared to teach students with ASD alongside TD youth in general education classrooms. Research has shown that some general education teachers do not support the inclusive model in education (Able et al., 2015). General education teachers' disapproval of the inclusive model in education is a result of them feeling inadequate due to their lack of knowledge of ASD and their lack of training to properly prepare them to teach in an inclusive classroom (Able et al., 2015; Hedges et al., 2014; Kucharczyk et al., 2015; Reese et al., 2018). Equipping students with ASD for postsecondary education and future employment is the central purpose of transition services and special education (Kucharczyk et al., 2015). Inclusive classrooms under federal regulation were designed to provide students with SEND the opportunity to have access to general education curriculum and have peer interaction in an inclusive classroom (Able et al., 2015).

Schools must ensure compliance with special education legislation, requiring all students to have access to general education curriculum in the least restrictive environment (LRE; Friend et al., 2010; Sanz-Cervera et al., 2017). As legislation continues to change, governing officials

must be ensuring students with special needs receive a quality education (Sanz-Cervera et al., 2017). General education teachers teaching in an inclusive environment are frustrated, as most are experiencing a lack of confidence in their training, which hinders their ability to establish an environment conducive to learning (Shani & Hebel, 2016). General education teachers have determined that students with ASD, compared to other students with SEND, have the most challenging and complex challenges to learning (Ho et al., 2018; Lindsay et al., 2013; Love et al., 2019). General education teachers need professional development to enhance their knowledge of ASD, develop alternative teaching styles designed to teach students with SEND, and increase access to consultation support and advice (Ho et al., 2018; Lindsay et al., 2013).

General education teachers have a lot of misconceptions about youth with ASD because of their lack of knowledge, understanding and training needed to effectively teach students with ASD (Able et al., 2015). Without the training, general education teachers' self-efficacy and belief in their abilities to motivate their students along with their ability to influence dialogue between the school staff and parents causes teachers to feel frustrated, angry, and fearful of failure (Corona et al., 2017; Shani & Hebel, 2016).

Research suggests that general education teachers who teach students with ASD in IE may be at risk of experiencing burnout and exhaustion attributed to role overload and managing challenging student behavior (Corona et al., 2017). The unique needs of students with ASD make it mandatory to have general education teachers and school professionals create specified plans, supports, provide focused curriculum, and create a learning environment designed for students with ASD to grow and develop (Corona et al., 2017; Lindsay et al., 2013). Providing general education teachers with specific training would serve to improve teacher self-efficacy and help to combat stress and prevent burnout (Able et al., 2015).

According to Corona et al. (2017), teacher self-efficacy is the inherent belief teachers hold concerning their ability to change the dynamics of their classrooms and bring about a desired outcome. Tendencies in teacher self-efficacy solidify the relation between teacher burn-out and their commitment to prior training philosophies; applied behavioral analysis (ABA); and treatment and education of autistic and related communication handicapped children (TEACCH; Corona et al., 2017). The connection between teacher self-efficacy and the training philosophy of teachers, who teach students with ASD, warrant the proper attention (Able et al., 2015; Corona et al., 2017).

One of the areas where general education teachers feel they need more training is implementing an IEP. An IEP is the outline or roadmap designed to meet the needs of students with SEND to include those students with ASD. An IEP is intended to promote communication between parents, administrators, educators, and counselors to develop the best-suited educational plan for students with ASD (Slade et al., 2018). General education teachers are new to the idea of implementing an IEP (Rotter, 2014). However, special education teachers have received extensive training and serve as a critical player when planning and executing an IEP (Rotter, 2014). As laws continue to be revised, general education teachers will be expected to understand, plan, and implement IEPs in inclusive classrooms. Schools are also held accountable by federal mandates and must ensure IEPs are being handled properly by school administrators, staff, and teachers of students with SEND (Rotter, 2014; Slade et al., 2018).

The National Research Council (NRC) has provided instruction for implementing various teaching techniques to be incorporated by teachers who have received specified training (Marder & deBettencourt, 2015). Training is an essential prerequisite to ensure evidence-based teaching strategies are enforced when working with students with ASD (Marder & deBettencourt, 2015).



Research has shown that professionals in specific communities, such as health care, social care, and education have not had sufficient training (Able et al., 2015; Bond et al., 2017).

In an inclusive environment, there are often students who display a variety of disabilities. Implementing any form of technique without the proper training could be detrimental to the learning environment. Studies show that the more training teachers receive, their confidence in the classroom is bolstered, improving the strategies and interventions teachers use in IE (Able et al., 2015; Lindsay et al., 2013; Sanz-Cervera et al., 2017). Improving teacher training will provide them with a better understanding of ASD and help them become more familiar with various support systems designed to assist students with ASD in their academic pursuits (Able et al., 2015; Robledo, 2017).

According to Sugita (2016), California has started providing pre-service teacher training programs for all licensed special education teachers. To ensure educators are properly prepared, the California Board of Education has provided special education teachers with instruction inclusive of culturally responsive training (Lopez & Bursztyn, 2013; Sugita, 2016). This program is designed to train special education teachers to deal with students with ASD, while integrating culturally enriched responsive teaching to enhance the learning for multiple cultures (Sugita, 2016). The training provided to special education teachers has not been made available to general education teachers, despite the rise of students with ASD in general or inclusive classrooms (Sugita, 2016).

The significance of the training opportunity in California, supported by the Assembly Bill 2160 (AB 2160), requires special education teachers to be experts in ASD. The law also makes it mandatory for general education teachers to complete a program distinctly focused on the strategies and support systems established to assist students with ASD (Sugita, 2016). In addition

to AB 2160, the NCLB Act requires states to give teachers quality professional developmental training. The training required by the NCLB Act is designed to ensure teachers are mastering the desired content and to assist them to become effective educators in their classrooms (Echaniz & Cronin, 2014). Success for general education teachers and students with ASD in IE results from teacher preparation and understanding of students with ASD before, during, and after teaching (Able et al., 2015; Lindsay et al., 2013).

In 1989, former President George H. W. Bush initiated the NRC to support the national standards for science education (NRC, 1997). In 1994, the NRC outlined eight components that are considered essential skill areas of instruction. The NRC requires students with ASD to display functional unprompted communication, social and play skills, proficient cognitive development, and preventative strategies as a part of their social development (Marder & deBettencourt, 2015).

Aside from social interaction and communication difficulties, students with ASD are emotionally unattached and therefore fail to realize the thought processes, challenges, or bottom-line issues teachers face in the classroom (Balli, 2014; Shochet et al., 2016). The unique needs of students with ASD are a preliminary cause of teacher exhaustion and frustration, all of which can be reduced through teacher training, self-efficacy, calculated strategies, and interventions (Able et al., 2015; Corona et al., 2017; Lindsay et al., 2013; Sugita, 2016). Due to a lack of knowledge and understanding, teachers in IE struggle to implement specific strategies and interventions to teach students with ASD (Hedges et al., 2014).

### **Strategies and Intervention techniques**

Students with ASD show little interest in academics due to a lack of motivation to achieve the desired academic standards, challenging behaviors in the classroom, and social

communication deficits that contribute to academic difficulties (Reutebuch et al., 2015).

Statistics show that 15% to 40% of individuals with ASD also presently have an intellectual disability (Parent et al., 2016). Socio-emotional and psychiatric difficulties are experienced more by individuals with ASD regardless of if they have an intellectual disability (Parent et al., 2016). The lack of social communication skills hinders inclusion and affects the continuation of students with ASD in general education classrooms (Camargo et al., 2014).

Studies revealed, youth with ASD despite their involvement in the social structure of the classroom, experience more loneliness than TD youth (Goodall, 2015). Loneliness and the stress associated with deficits in communication are associated with the struggle youth with ASD have managing their emotions (Fage et al., 2019). Whenever youth with ASD struggle with managing their emotions, studies suggest students with ASD begin to feel hampered in IE (Fage et al., 2019; Jahromi et al., 2013).

Inclusion can be stressful for youth with ASD. Studies show youth with ASD experience anxiety and depression due to social isolation caused by difficulties with communication and social interaction (Hedges et al., 2014). Learning to manage or control their emotions is a skill known as emotional self-regulation (ESR). Self-regulation is defined as a function that allows individuals to affectively adapt their behavioral responses to their social environment (Fage et al., 2019). Youth with ASD display unique challenges in ESR, for example, they have difficulty managing their emotions, they have inhibited reactions, delayed gratification, and difficulty tolerating transitions in their daily routine (Laurent & Gorman, 2017). Fage et al. (2019) insisted utilizing mobile technological devices as an intervention for ESR. These devices would assist in teaching youth with ASD how to recognize facial expressions and emotions. Mobile

technological devices are designed to assist youth with ASD to better understand teachers and build relationships with their TD peers.

Reporting showed that approximately 40% of youth with ASD were diagnosed with social anxiety disorder (Drmic et al., 2017; Syriopoulou-Delli et al., 2018). A contributing factor of social anxiety disorder in youth with ASD is loneliness and social isolation (Drmic et al., 2017). Essential to social anxiety disorder is a fear youth with ASD have of being scrutinized by their peers, which is an anxiety of social situations (American Psychiatric Association, 2013).

Studies show, in youth with ASD there is a common rate of comorbid ASD and anxiety disorder ranging between 11% and 84% (Syriopoulou-Delli et al., 2018; Wise et al., 2019). Anxiety can exacerbate the intensity of restricted behaviors and social communication deficits in youth with ASD. The augmented intensity can lead to increased social withdrawal and various stereo typical behaviors such as body movements, shaking, hand rotation, and repetitive questioning, which can have a drastic impact on their school performance (Drmic et al., 2017; Syriopoulou-Delli et al., 2018).

According to Maddox et al. (2016), the preferred treatment for anxiety in TD youth is cognitive-behavioral therapy (CBT). CBT is a well-established treatment method for TD youth and young adults with anxiety disorders. A study conducted on CBT treatment, adolescents, and young adults with various comorbid symptoms of ASD, depression, anxiety, and stress, after nine weeks of group intervention demonstrated a reduction in depression and stress symptoms (Wise et al., 2019). Maddox et al. (2016) suggested modifying CBT for youth with ASD would target social impairment, which is a core feature of ASD. Unfortunately, the CBT intervention program did not alleviate anxiety in youth with ASD, suggesting further research on interventions specifically targeting anxiety.

Cognitive behavioral intervention (CBI) is another evidence-based practice (EBP) based on the belief that behavior is mediated by a cognitive process (Wong et al., 2014). These interventions are used with students who display problem behavior related to negative emotions such as anger, fear, or anxiety (Brock, 2013). Students are encouraged to study their thoughts and emotions to identify when negative thoughts are escalating in intensity and use the strategies associated with the EBP to change their behavior (Wong et al., 2014). Overall CBI addresses issues associated with the social, behavioral, cognitive, and the mental health of the learners (Wong et al., 2014). Joshi et al. (2018) insisted that youth with ASD are referred to as psychiatrists for management of emotional and behavioral difficulties at a substantially higher rate than their TD peers. Their inability to identify and regulate their emotions often leads to poor emotional control, especially when dealing with stressful situations.

Individuals with ASD commonly have a low frustration tolerance followed by significant irritability attributed to emotional dysregulation (ED; Blankenship & Minshawi, 2010). ED is characterized by poor self-regulation, impatience, an inability to govern emotions, and difficulty determining the emotional state of others (Blankenship & Minshawi, 2010; Joshi et al., 2018). Research has shown social communicative deficits are associated with higher levels of ED for youth with ASD (Laurent & Gorman, 2017). Anxiety, depression, and maladaptive behaviors are indications of sensory processing deficits that are prone in youth with ASD, which displays significant challenges in emotional self-regulation (ESR; Laurent & Gorman, 2017). Managing emotions, inhibiting reactions, and tolerating transitions are also significant challenges youth with ASD face in high school in their struggles with ESR.

High school is a place of continued transition with shifting schedules where students rarely stay in the same classroom throughout the day (Able et al., 2015). Youth with ASD find it

difficult to transition from one activity to another. ASD students often display RRBs, such as RSM behaviors, and excessive touching of objects also known as repetitive hand mannerisms or IS (Hall et al., 2018; Joyce et al., 2017).

Assistive technology, defined as any device or piece of equipment purchased or modified to improve the functional capability of disabled youth, is a recommended means of intervention to assist students with ASD who struggle with daily transitions (Ben-Avie et al., 2014). Video modeling, considered high-tech support or a high-tech device due to the additional training needed to operate the equipment efficiently, utilizes videos to display the targeted behavior or skill for the viewer to learn (Ben-Avie et al., 2014; Hall et al., 2018).

Transitioning involves having a clear understanding of the perception of time or having a clear understanding of the concept of how much time has passed, which is a common impairment for students with ASD (Ben-Avie et al., 2014). Goldman et al. (2018) considered using environmental modifications to create structure and predictability in daily routines that assist youth with ASD to respond naturally to periods of transition. A commonly used environmental modification for youth with ASD is a visual schedule. Visual scheduling teaches steps to a single activity or routine and supports transitions between very specific activities and routines (Goldman et al., 2018).

Schools have shifted their emphasis and are now moving toward measuring student outcomes to determine teacher effectiveness in the classroom (Marder & deBettencourt, 2015). EBPs are essential when trying to determine the success of educators; however, several factors determine appropriate success for this pool of students (Marder & deBettencourt, 2015). The National Professional Development Center (NPDC) on ASD created and refined a model to assist in addressing the learning needs of students with ASD. The NPDC's model consists of

three components starting with conducting assessments of EBPs, implementation of EBPs and finally putting the determined outcomes into practice (NPDC, 2017).

EBPs, according to Marder and deBettencourt (2015) are instructional plans, policies, intervention tactics or teaching programs designed to produce consistent and positive student outcomes when tested. For programs or practices to be considered as an EBP multiple studies must show its effectiveness to meet the strict criteria associated with student outcome (Torres et al., 2014). High-quality research testing must be conducted on each practice before EBPs being labeled an application (Marder & deBettencourt, 2015). Without these test instructional strategies, interventions or teaching programs will not be labeled as EBPs; regardless of the test (Marder & deBettencourt, 2015; Torres et al., 2014). EBP's in special education have proven to improve the performance of students with SEND (Torres et al., 2014). EBPs are effective when teachers are aware of how to apply them to their students (Torres et al., 2014). EBPs are not guaranteed to work for every student; however, EBPs are effective for most students (Marder & deBettencourt, 2015; Torres et al., 2014).

There are approximately 27 evidence-based strategies available that address difficulties associated with ASD; however, what works effectively in schools and what is considered a best practice is questionable (Anderson et al., 2018). Evidence-based instructional practices are successful when used with students with ASD who are struggling; however, there are still challenges finding interventions for students with ASD who are not receptive to this method (Reutebuch et al., 2015). Other intervention methods targeting students with ASD had dedicated efforts toward challenging their behavior and communication skills (Reutebuch et al., 2015).

Students with ASD are characterized by having social interaction and communication difficulties. At the core, students with ASD experience difficulties with social interaction due to

a social reciprocity defect. Impairment in social reciprocity may be seen as an inability to empathize with others while being aware of their emotional or interpersonal signs making it difficult to recognize distress in others or showing a lack of interest in the topic of conversation (ASBC, 2020; Lee et al., 2018). It is imperative for youth with ASD to receive a clinical assessment and diagnoses to identify the best services to meet the students' needs (Rutherford et al., 2018).

Consequently, ASD is considered one of the most widespread disabilities, greatly impacting the learning abilities and autonomy of youth with ASD in an inclusive setting (Cappe et al., 2017). Lai et al. (2016) insisted the burden on educators in IE is growing more difficult as limited time, resources, and scheduling conflict provide little opportunity to properly implement recommended strategies and interventions. In culturally and linguistically diverse (CLD) groups impacted by socioeconomic status (SES), disparities in ASD diagnoses and educational identification persist, creating greater problematic delays in early intervention techniques (Harris et al., 2019).

Intervention techniques and strategies were introduced to improve the behavior and academic prowess of youth with ASD; however, due to time and resource constraints and teachers' schedules, teachers found it difficult to properly implement various strategies and interventions (Lai et al., 2016). Teachers' difficulties in implementing strategies and interventions caused school counselors and other professionals to intervene (Lai et al., 2016). As a result, teachers would have fewer opportunities to master the skills necessary to effectively teach students with ASD in an inclusive setting (Lai et al., 2016). Higher levels of stress, burn out, and a lower sense of self-efficacy are a result of the lack of experience and knowledge



teachers experience in IE due to professional inadequacies and missed opportunities to learn valued skills (Able et al., 2015; Cappe et al., 2017).

Lai et al. (2016) defined inclusive teaching self-efficacy as the ability to implement the required teaching practices in IE. Efficacy is hypothesized to be fashioned from a mastery of experiences, secondhand experiences, social persuasion, the emotional state of the students, and the emotional state of the teachers who have the responsibility to teach and manage the classroom (Lai et al., 2016). Stronge et al. (2018) defines classroom management as an action and strategy teachers use to solve problems and provide order in the classroom. Management is not an attempt to control students' behavior; however, it is a means to influence and direct students' behavior in a constructive manner to set the stage for an efficient learning environment (Stronge et al., 2018).

Van Brummelen (2002) would agree that for teachers to effectively manage their classrooms they must understand fully their responsibility to teaching. According to Van Brummelen, responsibility teaching clarifies the way teachers view their students, requiring teachers to see their students as unique and made in the image of God and flawed. Responsibility teaching also addresses teacher curriculum requiring teachers to carefully plan ways to engage their students' minds and inspire their actions towards overcoming real issues (Van Brummelen, 2002).

Self-efficacy is also defined as an individual's belief that can produce behaviors required for a specific outcome (Corona et al., 2017). There are several benefits to teaching practices that are directly associated with higher teacher self-efficacy. These benefits include the teacher's ambitious approach to goal setting for oneself and their students, selecting strategies that

improve student development, a willingness to test new instructional programs, and involving parents of students with ASD in classroom activities (Corona et al., 2017; Lai et al., 2016).

Teacher self-efficacy and the ability to implement EBPs are hinged on a collaborative effort between the teachers in IE, the parents of students with ASD, special education teachers with the training and know how to effectively teach students with ASD, and school administrators (Able et al., 2015; Marder & deBettencourt, 2015; Molbaek, 2018). For teachers to manage their classrooms and establish an effective learning environment where EBPs can be implemented, there must be an acknowledgement of the importance for collaboration. Teachers' practice of inclusion is complex and presents several dilemmas that teachers must learn to handle through practice (Molbaek, 2018). However, the complexity of implementing strategies in IE can be handled practically as teachers collaborate with other colleagues, leaders, and parents (Molbaek, 2018).

### **Collaboration**

“The heart of inclusive education is collaboration” (Florian, 2017, p.249) a statement affirmed by Kyro-Ammala and Lakkala that highlights the benefits of collaboration between general education teachers, special education teachers, school staff, and parents. For half a century there has been a need for a close and effective professional collaborative relationship between teachers, parents, service providers, and school-house administrators (Friend et al., 2010). Lai et al. (2016) affirm that IE requires collaboration and teamwork to succeed. Effective schools realize that teamwork is not optional (Glaze, 2014). Teamwork provides an opportunity for teachers to share methods for overcoming challenging issues and it could provide more experienced teachers the opportunity to share creative lesson plans they used to reach students with challenging behavioral or neurodevelopmental disorders (Glaze, 2014).

Collaboration is a partnership shared between caregivers and educators, which rely on their judgement and individual expertise to benefit the education of students with SEND (Jigyel et al., 2018). Collaboration is defined as a shared and dynamic process that allows people with diverse abilities to develop solutions to address and find answers to shared problems (Darrow, 2017). Friend et al. (2010) defined collaboration as a professional routine educators employ based on mutual goals; shared responsibilities involving key decisions; shared acknowledgement of the outcome of student performance; and the development of trust, respect, and community understanding in the classroom. Zagona et al. (2017) further characterized collaboration to carefully plan and implement instruction while considering the perspective of different team members.

Parent and teacher collaboration on behalf of students with SEND was presumed in federal mandates with the establishment of the No Child Left Behind Act of 2001 (NCLB), the Individual with Disabilities Education Improvement Act of 2004 (IDEA) and with the Education of All Handicapped Children Act of 1975 (PL 94-142; Friend et al., 2010). Provisions under these federal statutes were enacted to protect the rights of youth with disabilities; to ensure youth with disabilities have access to general curriculum in the LRE; provide access to student's academic needs through direct lines of communication with teachers, school administrators, and other professionals responsible for the academic success of students (Friend et al., 2010; Garcia et al., 2020).

Research has shown that there is often tension between parents and schools that ask the hard questions, for example, how are students' needs being met and how do we best achieve academic success in IE (Garcia et al., 2020; Russa et al., 2015). According to Russa et al. (2015) parents of youth with ASD are under considerably more stress than parents of TD youth and are

victims of anxiety, depression, and often experience a poorer quality of life. However, parents are beginning to become viewed as important and valued partners in their youth's academic success. Parents are credited with providing positive intervention techniques, perhaps not considered by educators and they are encouraged to provide insight into the building of their student's individualized education program (Schultz et al., 2016; Syriopoulou-Delli et al., 2016; Syriopoulou-Delli & Polychronopoulou, 2019). Youth with ASD also need their parents to serve as their advocate, mediator, and help them when making complex decisions (Russa et al., 2015; Syriopoulou-Delli & Polychronopoulou, 2019).

Although parent involvement in the education of their youth is more prevalent when children are younger (Schultz et al., 2016), youth with ASD in high school need their parents to be involved. As parents of youth with ASD seek to build relationships with their teachers, they are provided the opportunity to share intervention strategies they may have learned that focus on improving their youth's social and communication skills (Russa et al., 2015; Schultz et al., 2016; Syriopoulou-Delli et al., 2016). However, general education teachers are concerned about the inadequate support they receive from the school staff and the lack of preparation time to establish relationships that would yield the support they need to enhance their classrooms (Able et al., 2015; Glaze, 2014).

In research conducted by Damore and Murray (2009), survey questions were provided to 118 special and general education teachers to better understand their perception of collaborative teaching. Findings from the study revealed, 92% of teachers believed collaborative practices were being conducted in their schools, but only 57% of the teachers reported practicing collaboration in their classrooms (Able et al., 2015; Damore & Murray, 2009). Challenges that hinder collaboration in IE are attributed to insufficient resources, teacher related vacancies and

turnovers, unqualified or untrained teachers, low sense of self-efficacy, and limited time set aside by teachers for collaboration planning (Able et al., 2015; Damore & Murray, 2009).

Effective communication in IE involves open and effective communication between parents, general and special education teachers, and school administrators (Jigyel et al., 2018; Schultz et al., 2016). Parents especially appreciate open communication because it provides a means for parents to engage and participate in their student's educational experience (Jigyel et al., 2018). In a study conducted by Schultz et al. (2016) parents indicated that negative communication and negative collaboration efforts resulted in a lack of trust in the teachers and school staff that proved difficult to overcome. Parents expressed a sense of resentment that was expressed by school personnel because of the time and resources required by teachers when teaching youth with SEND (Schultz et al., 2016).

Inadequate communication between parents, general education teachers, and special education teachers prevents successful collaboration, repeating unsuccessful intervention strategies (Hedges et al., 2014). Research has shown that parents of youth with SEND have complained about teachers for their lack of knowledge of youth with SEND and because of the poor communication they display between parents and other teaching staff members (Lai et al., 2016). Shani and Hebel (2016) insisted the training general education teachers received needed to include lessons that taught them how to work as a member of a team. Teamwork training would provide general education teachers with the skills they needed to form effective relationships with special education teachers and parents of students with special needs.

Building teams or school-family relationships will require everyone to work hard and commit to creating and sustaining professional team building skills. Goldman et al. (2019) suggest that equality, commitment, mutual respect, open and honest communication, and

reciprocated trust are the skills needed to sustain and build an effective team. To maintain and develop a family-centered practice of collaboration, school administrators and teachers must be family oriented while developing intervention techniques (LaBarbera, 2017).

Goldman et al. (2019) supported the idea that open communication is the key to solving behavior issues of youth with SEND. However, parents have suggested that establishing an open line of communication should also allow for discussions which praise the youth's successes as well as discuss behavior issues (Goldman et al., 2019; Russa et al., 2015). Building relationships that are beneficial to the overall development of the youth should include designing a method of assessment which incorporates effective communication, intervention techniques, and notes taken by parents and teachers observing the student home (Goldman et al., 2019). The relationship between the parent and teacher should not only be working toward improving student behavior but there should be a concern to establish intervention techniques to assist parents with issues at home (Goldman et al., 2019; Schultz et al., 2016).

General education teachers and special education teachers must also establish collaborative relationships. Pulschen and Pulschen (2015) defined interpersonal collaboration as an interaction between at least two coequal parties who work toward making clear, concise decisions for a common goal. As coequal partners, teachers are placed in a position to support one another, which in turn supports the needs of the students in their class. Older, more senior teachers should communicate to provide newer younger teachers an opportunity to learn how to better communicate and understand their students (Glaze, 2014; Robledo, 2017). Younger and less experienced teachers will learn simply by listening to more experienced teachers as they discuss their time teaching and overcoming various obstacles in their classrooms (Glaze, 2014; Robledo, 2017).

Collaboration alone between general education teachers and special education teachers is not guaranteed to produce a thriving and enriched learning environment. General and special education teachers must positively perceive their partnership (Gebhardt et al., 2015). There must be a belief their collaboration works and enhances the learning environment. A positive perception toward general and special education teachers' collaboration can further improve teachers' commitment and communication skills when problem-solving or managing conflict (Pulschen & Pulschen, 2015).

Research shows that nationally, 61% of students with disabilities are taught in an inclusive classroom at least 80% or more of the school day (Reese et al., 2018). In addition to these statistics, the U.S. Department of Education reported 81% of youth from 6-21 years of age receive some type of special education service and spend 40% of their time in an inclusive classroom (Reese et al., 2018). Due to the increase of reported cases of youth with ASD, teachers are experiencing various levels of stress triggered by increased or high workloads, noisy classrooms, and communication hurdles with their students, parents, teachers, and school administrators (Pulschen & Pulschen, 2015).

For general education teachers to meet the diverse needs of students in an inclusive environment and for their overall psychological health, collaboration is paramount. Most school systems have restructured their instructional models to allow special education teachers to partner with general education teachers in an effort called co-teaching to better support the needs of students with disabilities (Chitiyo & Brinda, 2018).

Co-teaching, also known in Germany as teaching a dyad (formed by one general education teacher and one special education teacher that share the instruction for some lessons in one classroom (Jurkowski & Muller, 2018)), was established to manage the increasingly diverse

needs of inclusive classrooms and to adjust instruction to suit students with special needs (Jurkowski & Muller, 2018). According to Friend et al. (2010) co-teaching is defined as a partnership between the general and the special education teacher to provide joint instruction to a diverse group of students in an inclusive classroom. Co-teaching was established to ensure curriculum was designed with the ability to provide instruction for various students with different learning abilities and students with SEND (Jurkowski & Muller, 2018).

Co-teaching allows teachers to collaboratively plan, instruct, and assess the progress of the students in the class (Guise et al., 2017). Co-teaching also allows for co-generative dialogue between cooperating teachers. Through co-generative dialogue, co-teachers discuss issues that impact teaching and learning to create a means for collective solutions to problems encountered in the classroom (Guise et al., 2017). Pancsofar and Petroff (2016) describe six approaches to co-teaching as teach-one assist, one teach-one observe, station teaching, parallel teaching, alternative teaching, and team teaching.

Research has shown teachers and students appear to benefit more from utilizing a variation of the one teaches one assist model (Pancsofar & Petroff, 2016). The one-teach one-assist model allows one teacher to assume a primary role in the class while the other teacher fills a passive role in the classroom. The teacher providing the passive support role is inevitably there to support the individual student struggling with the content being presented. In some instances, special education teachers according to Jurkowski and Muller (2018) perform in a passive supportive role and mostly assist general education teachers by instructing subgroups of students in different classrooms.

Research shows teachers with experience co-teaching and teaming with other paraprofessionals find the experience to be beneficial to their overall professional development



and beneficial to students' educational performance (Pancsofar & Petroff, 2016). Nurturing and strengthening the relationship between parents and other paraprofessionals create teams where paraprofessionals work together to eliminate school workforce stress and consider recommendations for the most appropriate educational decisions for students with SEND (Friend et al., 2010; Pulschen & Pulschen, 2015).

In a study on collaboration in IE, Pulschen and Pulschen (2015) insist establishing effective collaborative practices in IE can be complex and trigger individual stress responses in general education teachers and their students. However, a main contribution of the stress experienced by general education teachers is the tendency they must isolate themselves (Glaze, 2014). According to Glaze, there are two types of isolation general education teachers experience in the workplace. First, egg-crate isolation is caused by the physical layout of the school building. This type of isolation causes teachers to have little contact with others whereas they may experience feelings suggesting they have no support system (Glaze, 2014). The second type of isolation is called avalanche isolation, which results from teachers feeling overwhelmed by all they need to know and do to reach the diverse needs of their students (Glaze, 2014; Rigelman & Ruben, 2012).

Special education teachers, because of their training and their experience working with students with SEND are familiar with receiving support from other paraprofessionals to include speech-language specialist, school psychologists, counselors, and occupational and physical therapists (Friend et al., 2010). Evidence suggests, as teachers collectively work toward professional collaboration to manage the challenges and complexities of teaching, they are better able to meet the needs of all their students (Rigelman & Ruben, 2012).

Collaboration in IE is critical and provides support to the student body, the inclusive classroom, and the development of teacher competence in IE (Jurkowski & Muller, 2018). General education teachers who do not support the inclusive model of teaching may find it difficult to form working relationships with their colleagues or parents of students with SEND. Therefore, it is imperative to teach general education teachers how to engage in philosophical discussions to clarify their differences and dislikes to build healthy working relationships (Able et al., 2015).

General education teachers and teachers in training need professional collaborative learning (Rigelman & Ruben, 2012). Establishing the trust and support of parents, obtaining the administrative assistance from school staff, and receiving advice from experts and other paraprofessionals are effective collaborative methods for obtaining the best results in IE (Lai et al., 2016). Shifting the training needs of general education teachers in IE to areas where they feel less efficacious is suggested (Lai et al., 2016). In a survey conducted by Syriopoulou-Delli et al. (2016), they found that general education teachers want their professional development training to focus on counseling, collaboration, and establishing healthy and productive relationships with parents of students with SEND.

Cooperation between parents of students with ASD, general and special education teachers, and school staff contributes to the skills youth with ASD need to succeed in school and at home (Syriopoulou-Delli & Polychronopoulou, 2019). Establishing an effective relationship between parents, teachers, and the school staff provides an invitation for additional collaborative efforts from speech therapists, physiotherapists and other paraprofessional services needed to assist in the success of students with ASD in IE (Syriopoulou-Delli & Polychronopoulou, 2019).

## Summary

Chapter Two included the statement of the problem, discussion of the theoretical framework used for this research study, and a review of relevant existing literature about understanding general education high school teachers' descriptions of their experiences teaching high school students with ASD in IE. Specifically, the discussion encompassed the ToM model (Echaniz & Cronin, 2014; Zeanah, 2018), which is the theory this study was grounded in. A synopsis of related literature about understanding teachers' descriptions of their experiences teaching high school students with ASD in IE was provided concerning challenges they face, strategies and interventions they use, and the relationships they build to assist them in creating an environment where students with ASD can learn and grow.

The problem identified in this study is students with SEND including those with ASD are graduating from high school with at least half earning a diploma (Torreno, 2012). Over 90% of students with ASD are receiving an education in a typical school with almost half included in general education classrooms at least 80% of the school day. General education teachers, despite their lack of training, are expected to use effective interventions and strategies to meet the complex needs of students with ASD and respond appropriately to every problem related to the diverse needs of their students (Able et al., 2015; Hedges et al., 2014). Additional research is needed to determine the kinds of development necessary to make meaningful and lasting improvement to education for students with ASD (Austin & Pena, 2017; Echaniz & Cronin, 2014). This research study provided an opportunity to fill the gap in the current literature regarding understanding general education high school teachers' descriptions of their experiences teaching high school students with ASD in IE.

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this case study was to understand teachers' perspectives and experiences teaching high school students with autism spectrum disorder (ASD) in inclusive education (IE) with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow. This case study was based on the theory of mind (ToM), which was initially developed by Premack and Woodruff (Wellman, 2017). The ToM was used to guide this study and provide insight into the experiences of general education high school teachers had teaching youth with ASD in an inclusive environment. Understanding how youth are affected because they lack ToM will help determine if youth with ASD in IE are receiving a quality education.

Chapter Three includes an outline of the methods used to describe the participants' experiences teaching high school youth with ASD in an inclusive environment. Furthermore, the intent of this study and a detailed depiction of the methods for conducting the research are described. Chapter Three also details the procedures I used to conduct the study. Chapter Three will conclude by acknowledging the trustworthiness and ethical considerations to be considered while conducting the research.

### **Research Design**

This qualitative research begins with a problem and places the researcher in the natural setting to interpret and analyze data (Creswell & Creswell, 2018). Therefore, the type of research most appropriate for this study was qualitative because I could immerse myself in the natural context, conduct individual interviews, and provide a rich description of the problem. The qualitative design was also appropriate for this study because there was a need to explore how

general education high school teachers described their experiences teaching students with ASD in an inclusive environment. A quantitative method would not provide the necessary data that personal interviews with the participants in an educational setting would provide.

This study was a qualitative single case study and based on a theoretical framework that adds to the existing knowledge within the study of IE. The theoretical framework guides the central research question, and addresses the research problem (Creswell & Creswell, 2018). Additionally, this research encompassed an emerging approach to allow changes to be made to the design as needed based on information gained during the research process. Regarding the setting, I conducted this study in the natural setting of the inclusive classroom, which was critical to understanding the experiences of the participants. Conducting the study in the natural setting is a characteristic of qualitative research (Yin, 2018).

Inclusion must be viewed as a complex, ongoing, and evolving process (Goodall, 2015; Shani & Hebel, 2016). Implementing inclusion requires effective classroom management techniques to identify and remove barriers and to construct a stable foundation for inclusive learning (Shani & Hebel, 2016). To fully understand the inclusive environment, I relied on the descriptions and experiences of the general education teachers who were considered the key to success in IE (Shani & Hebel, 2016).

The qualitative method is flexible in its approach, encompassing various options and accepted methods for collecting data that will support the research findings. This study was conducted in a traditional high school in an inclusive classroom where a general education teacher had students with SEND who were taught alongside TD youth. Conducting this study in an inclusive classroom was critical to understanding the experiences of the participants, which

were elucidated in their descriptions during the individual interviews and the group discussion sessions (Kvale, 2007; Yin, 2018).

The case study approach provided an opportunity to develop a complete picture of the phenomenon under investigation. According to Yin (2018), researchers use the case study design to answer questions of why, how, and what. Case studies are an empirical method researchers use to conduct an in-depth investigation of an existing phenomenon within a real-world context (Yin, 2018). The single-case research design was appropriate to test the validity of the ToM (Kimbi, 2014).

The single-case study research design was appropriate to describe the phenomenon in the setting in which it occurred and to describe the experiences of general education high school teachers who teach high school students with ASD in IE. The goal of this single case study was to detail and analyze the case to determine how general education teachers experience a particular phenomenon (Neuman, 2006). Additionally, choosing the single case study design allows for the collection of data, the use of other data sources provided by previous researchers, and the exploration of data in a real-world environment to explain the phenomenon (Yin, 2018).

When collecting data, care was afforded to understand the participants' descriptions of their experiences teaching high school students with ASD in IE. A complete description of participants' experiences and challenges to create an effective learning environment and collaborative efforts in IE was considered (Yin, 2018). Inductive reasoning was applied to investigate the experiences of general education high school teachers who instructed students with ASD in IE (Creswell & Creswell, 2018; Yin, 2018).

## **Research Questions**

### **Central Research Question**

What are the perspectives and experiences of general education high school teachers with teaching students diagnosed with autism spectrum disorder in inclusive education?

### **Sub-Question One**

How do general education high school teachers in an inclusive environment describe challenges they experience in the classroom while teaching students with ASD?

### **Sub-Question Two**

What are general education high school teachers' descriptions of the strategies and intervention techniques they implement to assist students with ASD in IE?

### **Sub-Question Three**

How do general education high school teachers in IE describe their interactions with parents of students with ASD, their peers in special education, and the school administrative staff?

## **Site**

In a case study, the setting is critical to understanding the case since the situation is bounded by a precise set of circumstances (Stake, 1995; Yin, 2018). The setting for the present study was inclusive classrooms where general education high school teachers taught TD students and students with SEND to include students with ASD. The inclusive classrooms were in a public senior high school in the Cumberland County School District in North Carolina. The site, referred to by the pseudonym Johnathon Brandon High School, was selected as the location because it was a model for other high schools across the target school district. The school district

consists of 86 schools, including 53 elementary schools, 15 middle schools, 14 high schools, and approximately four special schools and academies (Cumberland County Schools, 2018).

Johnathon Brandon High School has a diverse student body of approximately 2,000 students in grades 9 through 12. Johnathon Brandon High School had a performance grade score of 86 during the 2017–2018 school year, which exceeded the overall growth for the state (National Center for Education Statistics [NCES], 2018). Johnathon Brandon High School employs 102 teachers, and its student-to-teacher ratio is 19:1 (NCES, 2018). During the 2016–2017 school year, 30% of teachers at Johnathon Brandon had advanced degrees, 90% were fully licensed, and 64% had 10 years or more of teaching experience (NCES, 2018). Specific information regarding the number of students with SEND or youth with ASD attending Johnathon Brandon High School was not made available at the time of this research.

Johnathon Brandon High School has been recognized by the North Carolina High School Athletic Association (NCHSAA) as an exemplary school and was commended for its overall programs, including athletic opportunities and facilities, community interest and involvement, and academics. Organizationally, Johnathon Brandon High School has a diverse administrative staff consisting of 51.72% female and 48.28% male. The racial demographics of the staff are as follows: 37.6 % = Caucasian, 31.6% = African American, and 15.3% = Hispanic (School Digger, 2019). The Johnathon Brandon High School administrative staff is organized with one senior school principal and five assistant principals. Each administrator has their area of responsibility to ensure full managerial oversight for areas deemed critical for student success.

### **Participants**

This research utilized purposeful criterion sampling procedures (Creswell & Creswell, 2018). Participants were selected from a pool of general education teachers who taught in IE at



Johnathon Brandon High School and, more specifically, general education teachers with students diagnosed with ASD. Twelve participants were selected. The influx of students identified with SEND in general education classrooms is conducive to investigating the challenges, strategies, and collaborative efforts of general education teachers in an inclusive environment.

The participants were high school teachers who taught Grades 9 to 12 in an inclusive environment. They taught students in Grades 9 to 12 with special needs, with some identified as students with ASD. According to the NCES (2018), there are approximately 102 nationally certified teachers at Johnathon Brandon High School.

Volunteer participants were recruited from the staff of general education teachers at Johnathon Brandon High School during the 2019–2020 school years. All general education high school teachers who had students with ASD in an inclusive classroom received a survey (see Appendix A) approved to solicit their participation. The survey included questions regarding the teachers' experience teaching students with SEND and their demographic data to understand how general education teachers were selected to teach students with SEND. I provided the senior principal at Johnathon Brandon High School with a copy of the survey and the Informed Consent Form for Teachers (Appendix A) to help foster a greater sense of trust between the researcher and the administration staff.

Purposeful sampling procedures were used because the participants needed to have experience working in the same learning environment and educational settings. Although some variables were present, such as the total number of students in an inclusive classroom and the teacher teaching the class, the participants were exposed to the same learning environment as defined by the case. The participants should have understood, through their experience, the dynamics of a typical classroom and if it was an effective learning environment. The participants

for this research were investigated to understand general education teachers' perspectives and experiences teaching high school students with ASD in IE with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow.

### **Procedures**

Before collecting data for this study, I sought approval from the Institutional Review Board (IRB) at Liberty University. All proper protocols were followed to ensure the appropriate permissions are obtained from the staff and faculty according to Liberty's IRB protocol. A copy of the participant consent form and the Liberty University IRB approval letter were included as appendices. A request was sent to communicate with the county school board and the administrators at Johnathon Brandon High School to describe the purpose of the study. Upon receiving permission from the county school board at the administrators, participants were provided with a description of the purpose of the study.

Once participants were identified, each participant received an informed consent form for teachers (see Appendix A) and an accompanying cover letter that explained the nature of the study. To ensure participant confidentiality, the names of participants did not appear on a teacher demographics questionnaire (see Appendix B). Data will be stored and locked in a locked cabinet for 3 years after completing the study. After 3 years, the data will be destroyed.

The informed consent process ensures that participants are protected. Confidentiality is the primary assurance under informed consent, and it is an ethical requirement in research (Creswell & Creswell, 2018). Informed consent consisted of informing participants that participation in this study was voluntary. Participants could withdraw from this study at any time, for any reason, without consequences, and an informed consent form for teachers (see

Appendix A) ensured confidentiality for all information collected. Prior to collecting data, participants were aware of the purpose of the study and the procedures for selecting participants and collecting data, withdrawing from the study, and contacting either Liberty University or the researcher if they had any questions.

Data collection began by providing general education teachers with the Teacher Survey (see Appendix D), which provided a context for the study. The survey revealed specific and significant response patterns that guided the individual interview questions, and the focus group questions (Patton, 2015). The survey consisted of 12 participants who elected to complete it. Of the 12 participants who completed the survey, nine participants volunteered for the individual interview and five volunteered to participate in the focus group. The survey was collected and analyzed prior to the individual interviews to gain insight into the impact IE had on students with ASD, the challenges general education teachers experienced teaching youth with ASD in IE, and the strategies and interventions general education teachers implement in IE. The survey also provided insight into the relationship general education teachers had with parents of students with ASD, special education teachers, and administrators at Johnathon Brandon High School.

Individual interviews were conducted with participants in accordance with proper protocols described, in part, by Castillo-Montoya (2016), to gather insight from participants regarding their experiences teaching high school students with ASD in an inclusive environment. The semi-structured interviews elicited participants' responses regarding their experiences as general education high school teachers in IE. I asked follow-up questions to further develop the participants' stories (Kvale, 2007).

I sought to develop rapport with the participants by speaking candidly about myself and the purpose of the study. Speaking openly about myself was an effective medium for participants

to gain an understanding of me and to establish a sense of trust between me and the participants (Kvale, 2007). As participants began to trust me and gain an understanding of the purpose of the study, they felt free to speak and divulge more of their experiences and feelings (Kvale, 2007).

As the researcher for this study, I followed the seven stages of an interview as described by Kvale (2007). The first stage consists of ensuring that I developed the purpose of the interview and that I understand topic being discussed before I committed to conducting the interviews. Kvale insisted that the ‘why’ and the ‘what’ of the phenomenon being investigated should be answered long before attempting to answer the ‘how’.

The second stage of Kvale’s seven stages of an interview involves planning the design of the study. Kvale (2007) concluded that designing the research study required researchers to obtain the intended knowledge and consider the moral implications of the study. Researchers who conduct qualitative interviews seek to uncover different aspects of the interviewee’s life (Kvale, 2007). The description of the phenomenon as experienced by the interviewee was provided with precision during the interview and corresponded to the exactness found in qualitative works (Kvale, 2007).

Face-to-face interviews were not possible because of the pandemic. It was not considered safe to sit in a closed area with anyone during the earlier stages of the pandemic. The school principal at Johnathon Brandon High School was not allowing research projects to be conducted in the school and discouraged his teachers to not participate in research projects for fear of someone getting sick. Bearing in mind the parameters I had to operate in, I scheduled virtual meetings with participants via Zoom and Google Meet. Of the 12 participants who participated in the survey, only nine were willing to participate in the individual interview. I scheduled the virtual interview based on the availability of the participants. I did not use a separate recording

device during the virtual interview. Zoom and Google Meet has a recording option to record meetings. Written consent forms for me to record the virtual meetings were required for the virtual interviews.

The transcribing is stage four of Kvale's interview plan. To prepare the interview materials for analysis, I manually transcribed the recorded oral speech for further analysis (Kvale, 2007). Once the data was manually transcribed, I provided a copy of the text to participants to ensure I captured what participants wanted to convey during the interview. Researchers refer to this process as member checking (Birt et al., 2016; Kvale, 2007).

The semi-structured focus group session was this study's final method of data collection. Because of the global pandemic, the focus group sessions occurred virtually to provide participants an opportunity to provide deep reflection pertaining to the questions in a nonthreatening permissive environment (Krueger & Casey, 2015). The focus group session was conducted utilizing a synchronous virtual meeting platform, web-conferencing tool. There were several synchronous web-conferencing tools available on the web; however, Zoom and Google Meet were the only web-conferencing tools that were available to participants.

Participants who selected to use Zoom could preserve their privacy during meetings with end-to-end encryption. This ensured that communication between all meeting participants was encrypted using cryptographic keys that were familiar only to participants' devices. If participants wanted to use Google Meet, all data in Google Meet were encrypted in transit by default between the client and Google for video meetings on the web browser, on the Meet Apple iOS apps, and in meeting rooms with Google meeting room hardware. Participants were emailed and asked which virtual meeting platform they preferred and the date and time they wanted to meet. A consensus was reached to determine the best date and time to meet, and the

meeting platform participants preferred. After determining an appropriate virtual meeting platform and the date and time to meet, I reserved the meeting date and time in the virtual web-conferencing tool selected by the group and emailed it to all members of the group. The schedule and the weblink for the virtual meeting platform were emailed to everyone in the group as an invitation to the focus group session. A reminder was sent out 24 hours prior to the start of the meeting, reminding everyone in the group of the pending meeting.

The focus group session was recorded using the audio-visual recording software to ensure the accuracy of the transcripts for data analysis. Zoom and Google Meet had the requisite audio-visual recording software, so additional software was not necessary. Each single-session focus group was scheduled for 90 minutes. By scheduling a 90-minute focus group, I could give participants time to introduce themselves and establish the group norms (Krueger & Casey, 2015).

Participants who volunteered for the individual interview were also asked to participate in the focus group. Through a combination of the individual interview questions and the focus group, I could provide a comprehensive description of participants' experiences. A focus interview protocol for the focus group was used to help gain a thick, rich description of the experiences of general education high school teachers teaching youth with ASD in an inclusive environment (Creswell & Poth, 2018; Yin, 2018).

The focus group discussion included five participants and followed a semi-structured focused format, thereby allowing the discussion questions to change and emerge based on the information provided by the participants (Krueger & Casey, 2015). Throughout the focus group sessions, I used memoing to note participants' digital interactions and my observations (Birks et al., 2008; Corbin & Strauss, 2014). Data collected from the focus group will be stored securely

on a password-protected electronic file and backed up on a flash drive that will be stored in a locked file cabinet (Creswell & Poth, 2018). Transcribed written notes will be stored and locked in a locked cabinet for 3 years after completing this study. After 3 years, the data will be destroyed.

The focus group discussion followed Krueger and Casey's (2015) focus group protocol and was hosted virtually on either Zoom or Google Meet. Following the introductions and norm-setting, the questions were posed in the following order: (a) opening questions, (b) introductory questions, (c) key questions, and (d) ending questions (Krueger & Casey, 2015). As the facilitator or moderator, I opened the discussion by describing the goal for the focus group. By identifying the focus group's goal, I encouraged participants to provide different ideas and opinions regarding the phenomenon. Efforts were made to encourage participants to provide input during the discussion, and specific steps were taken to ensure that one or two participants did not dominate the discussion. A set of 10 predetermined questions were posed to participants, but the discussion was designed to allow participants to make comments and to encourage them to share their thoughts and ideas with each other (Krueger & Casey, 2015).

The fifth and sixth stages of Kvale's interview plan encompass the data analysis process. The data analysis process will be explained in greater detail in the Data Analysis section. My goal during data analysis was to provide a description of the experiences of general education high school teachers who instructed students with ASD in IE (Yin, 2018). Collected data were analyzed through the following procedures: (a) categorical aggregation, (b) direct interpretation, (c) pattern identification, (d) a description of the case, and (e) a natural generalization regarding the data collected (Creswell & Creswell, 2018; Creswell & Poth, 2018).

The integration of the document analysis procedures, interview protocols, and case-study protocols fulfilled the requirements of triangulation (Yin, 2018). Trustworthiness was demonstrated through a combination of credibility, dependability, confirmability, and transferability. Pseudonyms were used for the participants and the setting to protect identities of the individual participants and the setting (Creswell & Poth, 2018; Yin, 2018). All collected data were protected by storing them in a locked cabinet and saving them in a password-protected file.

### **Researcher's Role**

I served as the primary human data collector and nonparticipant observer throughout the life cycle of this research. I conducted structured interviews with participants and facilitated a semi-structured focus group session, taking copious notes to gain a better understanding of general education high school teachers' experiences teaching students with ASD in an inclusive environment (Creswell & Creswell, 2018; Yin, 2018). I also analyzed notes taken from the interviews and the group discussion session. The focus of the interviews and group discussion session was to identify the challenges that general education teachers experienced in an inclusive environment and describe the strategies and interventions they used to create an effective learning environment and their collaborative efforts in IE (Yin, 2018). I made a concerted effort to select participants with whom I did not have a personal or professional relationship. Regarding the setting, I did not work for the high school in which this study occurred, and I did not serve in a position of authority over any of the participants.

Personal interviews and the focus group discussion follow the protocols suggested by Krueger and Casey (2014), Yin (2018), and Creswell and Poth (2018). I noted any personal biases pertaining to general education high school teachers instructing students with SEND and TD youth in an inclusive environment. It was not possible to eliminate all personal biases;



however, acknowledging my perceptions and experiences was necessary to increase the trustworthiness and authenticity of the research process. A detailed description of any potential bias on the implementation of this study and the analysis of the results will be described within this chapter (Creswell & Creswell, 2018).

To limit personal bias regarding general education high school teachers who taught students with ASD in an inclusive environment, I monitored my interview questions (see Appendix C) when interviewing participants or sitting in classrooms collecting data during my observations. The interview questions were drafted to avoid leading questions and personal biases. By considering my biases and remaining subjective in my questioning, I gleaned accurate responses from participants regarding their experiences teaching high school students with ASD in an inclusive environment (Creswell & Creswell, 2018; Yin, 2018).

### **Data Collection**

Data collected for this study included a survey, individual interviews, and a focus group discussion. The rationale for the order of the data is included in each data explication. The following sections include a detailed discussion of each data source.

#### **Survey**

The first type of data collection was a survey. Prior to administering the survey, the teacher survey (see Appendix D) was provided to administrators for their review and approval. After they reviewed and approved the survey, I provided the survey to the general education teachers at Johnathon Brandon High School who taught youth with ASD in IE. The survey provided answers to questions surrounding the perceived impact general education teachers have on the inclusive environment and students with ASD. The survey also provided a general understanding of the relationship general education teachers had with parents of students with

ASD and the administrative staff and special education teachers at Johnathon Brandon High School.

Because youth with ASD may appear to be academically capable, they are often placed in IE. However, they may struggle academically because of the unpredictability often associated with IE (Goodall, 2015). The survey used in this study was appropriate for gaining an understanding of the academic performance of students with ASD in IE, the curriculum orientation of general education teachers in IE, and the learning outcomes general education teachers had for their classes. The academic performance of students with ASD could be the result of difficulties students with ASD encounter because of their inability to relate in a social setting and to communicate when they struggled understanding the academic content.

Items pertaining to student demographics were not included in the survey because of mandated student privacy laws. Parents of students with SEND received and signed a Parent Consent form (Appendix F). Students with SENDs, including those with ASD, were not questioned by the researcher to avoid violating any student privacy laws. General education teachers were asked to provide only pertinent information to understand students' disposition in the classroom. Care was taken to avoid collecting unnecessary data.

### **Individual Interviews**

Individual interviews were the second method of data collection. Face-to-face interviews were not possible, so I interviewed participants via Zoom and Google Meet, depending on their preference. The interviews were conducted following Kvale's (2007) seven stages of an interview inquiry. The interviews were semi-structured and designed to reveal the essence of the phenomenon from the participants' perspectives (Kvale, 2007).

The in-person interviews were recorded using audio-visual digital recording devices to ensure accurate transcripts for data analysis. Individual interviews conducted via Zoom or Google Meet, I was able to use the built-in recording option each virtual meeting room was designed with, to record the interviews. I followed a semi-structured format (Appendix C) to decrease the likelihood of projecting bias when questioning and to allow me to adapt or change questions based on participants' responses (Catherine & Gillian, 2004; Yin, 2018).

Throughout the interviewing process and immediately following the interviews, I used memoing to take reflective notes of participants' body language, voice tone, and nonverbal responses (Creswell & Creswell, 2018). Because taking reflective notes of participants' body language, voice tone, and nonverbal responses was challenging when interviewing participants via Zoom, I relied on active listening to hear inflections in participants' voices that could have communicated changes in their perceptions because of answering certain questions.

Qualitative researchers occasionally impose their personal beliefs and interests on participants during the interview stage (Hogbacka, 2017; Knapik, 2006). When researchers impose or reveal their personal beliefs and interests during interviews, they increase the likelihood of response bias among participants (Birt et al., 2016). To prevent researcher bias, I used member checking to ensure participants' thoughts were conveyed accurately. Researchers use member checking to help them validate and assess the trustworthiness of the qualitative results and promote active involvement among participants in the processes of checking and confirming the interview transcripts (Birt et al., 2016).

Each participant checked the transcription of their interview to ensure the transcription of the interview was accurate. Changes to the transcripts occurred only after participants reviewed the transcripts and requested that changes be made (Creswell & Creswell, 2018). The interviews

were conducted and recorded on Zoom. Participants were allowed to review the audio recordings and review all transcriptions from the interviews. Changes to the transcripts occurred if participants deemed that what was written was inaccurate. By allowing participants to review the interview transcripts, I decreased the likelihood of researcher bias. Data from the interview were stored in a locked filing cabinet. Electronic files were secured in a password-protected file on my computer desktop. The predetermined, open-ended questions used during the semi-structured interview format are included below, with the related central research questions (CRQ) and the research sub questions (SQs) listed in parentheses.

1. In what way did your practice as a teacher change based on your experiences teaching youth with ASD in an inclusive classroom? (SQ1, SQ2, SQ3)
2. What experiences went well with the inclusion of students with ASD in your class? (CRQ, SQ1)
3. What experiences did not go well with the inclusion of students with ASD in your class? (CRQ, SQ1)
4. What skills are needed to be an effective teacher in inclusive education, especially teaching students with ASD and their TD peers? (SQ1)
5. What are some general factors that describe the communication you have with the parents of students with ASD? (SQ3)
6. How would you describe the communication you have with the parents of students with ASD? (SQ3)
7. What are some general factors that describe the communication you have with the teachers who teach special education classes? (SQ2, SQ3)

8. How would you describe the communication you have with the special education teachers? (SQ2, SQ3)
9. How would you describe the partnership that exists between the homes of students with ASD and school? (SQ3)
10. What additional relationships could be established to enhance the learning environment in an inclusive classroom? (SQ3)
11. What types of interventions and strategies were you able to implement to control disruptive behavior of students with ASD? (SQ2)

Questions 1, 2, and 3 were designed to develop a baseline of participants by understanding, from their perspective, their experiences teaching youth with ASD in an inclusive environment. Establishing rapport at the onset of the interview helps to develop a connection between the participants within the group and the facilitator of the group. Establishing rapport within the group also helps to create an environment that is non-threatening and conducive for sharing information (Creswell & Creswell, 2018).

Question 4 addressed training general education teachers received to teach students with disabilities in IE. Shani and Hebel (2016) suggested that teachers with special education training in their background demonstrated a greater sense of competence when working with students with disabilities, the parents of students with disabilities, and colleagues who worked with students with disabilities. According to Able et al. (2015), teachers reported that students with ASD were less likely to share their presentations, ask their teachers questions, or work with their classmates on specific projects than students without ASD. They found students with ASD were less likely to do those things because their teachers were uncertain of how to engage with them and encourage them to participate in class. Able et al. (2015) suggested if teachers had the

training they needed, they would know how to overcome these issues or challenges appropriately and be more confident when encouraging students with ASD to participate in the learning process.

Question 4 also addressed the teachers' self-efficacy. Shani and Hebel (2016) found that when teachers felt they lacked the requisite training to deal with issues experienced in an inclusive classroom, they developed negative emotions about their performance. The challenges teachers encounter when working students with ASD include addressing specific and individual learning needs, creating a specialized curriculum to enhance the learning environment, and addressing misbehavior (Corona et al., 2017). Addressing those challenges could increase teacher burnout; however, providing proper training and increasing teacher self-efficacy can decrease the likelihood that teachers experience frustration, anger, or burnout (Able et al., 2015; Corona et al., 2017; Shani & Hebel, 2016).

Questions 5, 6, 7, 8, 9, and 10 addressed the collaboration efforts that researchers found were necessary in schools. Schultz et al. (2016) suggested that parental involvement in the school is a primary link to students' performance and that parental involvement supports academic success, increases the likelihood that students participate in school organizations, and creates a healthy social environment. Parents, as the primary advocate for their student, are not the only ones who should be supporting teachers' efforts to improve the inclusive learning environment. Echaniz and Cronin (2014) found that for collaboration to be effective in the classroom, a relationship must be established between the teacher and the parent(s) of students with ASD, the school administrator(s) and the teacher, and other educators who have experience working with students with ASD. Echaniz and Cronin called for collaborative teams to address issues and

concerns that arise in an inclusive environment. Asking the participant about the level of collaboration addresses several concerns in this research.

Question 11 addressed inclusive education and its impact on students with ASD.

According to Goodall (2015), the inclusive environment is complex and perceived by teachers as a method of integration instead of an environment to meet the learning needs of students. Shani and Hebel (2016) concluded that inclusive education is a process that requires daily maintenance, while at the same time, demands administrators identify and remove barriers to construct a foundation inherent to an inclusive organization and an environment conducive to learning.

Questions 12 and 13 focused on the teachers' experience to answer questions that addressed interventions and strategies implemented in IE. Teachers are responsible for ensuring their classrooms are safe learning environments that are free of distractions and disruptive behaviors (Van Brummelen, 2009). For teachers to ensure their classrooms are free of distractions, they must receive the proper training to deal with disruptive behaviors. Marder and deBettencourt (2015) found that EBPs were evidence-based strategies for teaching students with ASD; however, the NRC (1997) stressed that teachers must receive the required training to ensure they implement evidence-based strategies correctly when teaching students with ASD.

### **Focus Group Interview**

The focus group was the final method of data collection. Because of the COVID-19 pandemic, the focus group was conducted virtually to offer the participants an opportunity to provide deep reflections to the questions in a non-threatening, permissive environment (Krueger & Casey, 2015). Participants were emailed and given the option to meet via Zoom or Google Meet. In the email, I also asked them to select a date and time to meet. They elected to meet via Zoom. Zoom can preserve participants' privacy during meetings with end-to-end encryption.

This ensured that all communication between participants was encrypted using cryptographic keys known only to participants' devices.

Upon agreeing to meet via Zoom and identifying a date and time that fit everyone's schedule, I reserved the meeting date and time in my planner. Next, I sent a meeting invitation via Zoom to everyone in the focus group meeting. The invitation included a weblink to the focus group meeting. An email was sent out 24 hours prior to the start of the meeting to remind everyone in the group of the pending meeting.

The focus group meeting was recorded using the audio-visual recording software to ensure the accuracy of the transcripts for data analysis. Zoom has audio-visual recording software, so additional software was not necessary. The session focus group lasted approximately 90 minutes. By providing participants with 90 minutes, I could allow participants to introduce themselves and set the group norms (Krueger & Casey, 2015).

There were nine participants who volunteered for the individual interviews who were also asked to participate in the focus group. However, only five of the nine participants volunteered to participate in the focus group. A combination of individual interview questions and the group discussion provided a more comprehensive perspective of participants' experiences. A focus interview protocol for the focus group was used to help gain a thick, rich description of the experiences of general education high school teachers teaching youth with ASD in an inclusive environment (Creswell & Poth, 2018; Yin, 2018).

Focus group discussions followed a semi-structured focused format to enable the discussion questions to change and emerge based on the information provided by the participants (Krueger & Casey, 2015). Throughout the time the focus group met, I used memoing to help keep note of participants' digital interactions and any observations made during the discussion



(Birks et al., 2008; Corbin & Strauss, 2014). Data collected from the focus group were stored securely on a password-protected electronic file, backed up on a flash drive, and stored in a locked file cabinet (Creswell & Poth, 2018). Transcribed written notes will be stored and locked in a locked cabinet for three years after completion of the study. After three years, the data will be destroyed.

The focus group discussion followed Krueger and Casey's (2015) focus group protocol and hosted virtually on Zoom. Following the introductions and norm-setting, the questions were in the following order: (a) opening questions, (b) introductory questions, (c) key questions, and (d) ending questions (Krueger & Casey, 2015). Serving as the facilitator or moderator, I opened the discussion with an explanation of the goal for the focus group. By stating the goal of the focus group, I generated a variety of different ideas and opinions regarding the phenomenon under investigation. Efforts were made to encourage all participants in the group to provide input during the discussion, and specific steps were taken to ensure that one or two individuals did not dominate the discussion. A set of 10 predetermined questions were posed, but the discussion was designed to allow participants to provide other thoughts and ideas (Krueger & Casey, 2015). Below are the focus group predetermined, open-ended questions and the central research questions (CRQ,) and the research sub-questions (SQs) addressed in parentheses (Yin, 2018).

1. How would you describe your experience as a general education high school teacher teaching youth with ASD in inclusive education? (SQ1, SQ2, SQ3)
2. What experiences went well with the inclusion of students with ASD in your class? (CRQ, SQ1)
3. What experiences did not go well with the inclusion of students with ASD in your class? (CRQ, SQ1)

4. What skills do you need as a teacher to be effective teaching students with ASD?  
(SQ1)
5. How would you describe the communication you have with the school administration? (SQ3)
6. How would you describe the communication you have with the parents of students with ASD? (SQ3)
7. What are some general factors that describe the communication you have with special education teachers? (SQ2, SQ3)
8. How would you describe the partnership that exists between the parents of students with ASD and the school administration? (SQ3)
9. How would you describe your relationship with the parents of students with ASD? (SQ3)
10. How would you describe your relationship with special education teachers teaching at your high school? (SQ3)
11. What additional relationships could be established that would enhance the learning environment in your classroom? (SQ3)
12. What types of interventions and strategies were you able to implement to control disruptive behavior of students with ASD? (SQ2)

Question 1 was designed to provide insight into general education high school teachers' experiences teaching youth with SEND in an inclusive environment. This question also helped the group become better acquainted with one another, creating a more welcoming environment, and establishing better group discussions.

Questions 2 and 3 provided insight into how the group viewed their time teaching youth with SEND in IE. Research revealed that general education teachers often experienced frustration, anger, and fear when teaching students with SEND in IE and a lack of confidence in their ability to meet those students' needs (Shani & Hebel, 2016). Understanding the groups' perception of their experience in IE teaching students with ASD provided a foundation for discussing and addressing the purpose of this research. When answering these questions, participants could have revealed preconceived thoughts or notions about teaching in IE and if those preconceived notions affected their experience teaching students with ASD in IE. Participants could have also revealed what affect their preconceived thoughts or notions had on the learning environment.

Question 4 addressed the special education training that general education teachers in IE received. Shani and Hebel (2016) found that teachers who received special education training demonstrated a greater sense of competence when working with students with SEND, the parents of students with special needs, and school administrators. According to Able et al. (2015), teachers reported their students with ASD were less likely to share presentations, ask questions, or work with other students on specific projects than their peers. They attributed the unwillingness of students with ASD to do those things to teachers' inability to engage students and encourage them to participate in class. Able et al. believed that if teachers had the requisite training, they would know how to engage students with ASD appropriately and encourage them to participate in class.

Question 4 addressed the teachers' self-efficacy. Shani and Hebel (2016) found that when teachers did not have the requisite training to deal with issues they experienced in IE, they developed negative perceptions of their performance. The challenges teachers encounter in the

classroom deal when addressing the distinct needs of students with ASD include developing specific and individual plans, creating a specialized curriculum to enhance the learning environment, and managing deviant student behavior (Corona et al., 2017). Addressing these challenges could cause some teachers to feel burned out; however, providing proper training and promoting teacher self-efficacy are effective strategies for reducing feelings of frustration, anger, and burnout (Able et al., 2015; Corona et al., 2017; Shani & Hebel, 2016).

Questions 5, 6, and 7 addressed the communication general education teachers had with parents of students with ASD, special education teachers in the school, and school administrators. Schultz et al. (2016) underscored the inextricable link between parental involvement and students' academic performance, and they noted that parental involvement promoted academic success, moved students to become more involved in school organizations, and created a healthy social environment. Echaniz and Cronin (2014) concluded that teachers must establish a positive relationship with the parent(s) of youth with ASD, the school administrator(s), and other educators with experience working with students with ASD. Echaniz and Cronin called for collaborative teams to address issues and concerns that arise in an inclusive environment. Developing a clear understanding of the communication that occurred between parents of students with ASD, special education teachers, and the school administrators could provide insight into further collaboration efforts. These questions could have also provided insight into the collaboration these teachers experienced in their school and helped generate conversation toward the next group of questions.

Questions 8, 9, and 10 addressed the collaboration efforts between general education teachers, parents of students with ASD, special education teachers, and the high school administrators. Understanding general education teachers' communication is one aspect, but with

questions 8 through 10, I wanted to know if general education teachers felt alone in their efforts to provide a curriculum to students with SEND to include ASD in IE. These questions helped me to understand general education teachers' self-efficacy in an inclusive classroom.

Question 11 addressed agencies or organizations general education teachers collaborated with to receive assistance teaching in IE. Van Brummelen (2002) believed that teachers have a responsibility to not only own a curriculum vision but also work with others to implement the vision. Van Brummelen further noted that positive collaboration is a basic building block for successfully implementing the vision.

Question 12 provided insight into the interventions and strategies general education teachers planned and implemented to create a positive learning environment in IE. Discussions could have uncovered what interventions and strategies teachers developed and if those interventions and/ strategies implemented were successful. By discussing interventions and strategies, teachers could discuss discipline issues they encountered in IE. Discipline issues could contribute to the challenges of general education teachers in IE experience. This conversation could also address the training teachers received in managing discipline issues or the training they needed to manage discipline issues effectively.

### **Data Analysis**

Data analysis is an ongoing nonlinear process (Creswell & Creswell, 2018). The goal of the data analysis procedures was to provide a rich description of general education high school teachers' experiences teaching students with ASD in IE (Creswell & Creswell, 2018; Yin, 2018). The ToM model was the theoretical framework for this study, and the model was the guide for the data analysis procedure (Yin, 2018). The data collected throughout this single-case study followed specific propositions, thereby providing information in a manner conducive to the

general analytic strategy (Yin, 2018). The data were compiled into emerging categories to identify themes. The collected data were coded and organized into Qualitative Data Analysis Software (QDAS) a program called, MAXQDA. Once the data were organized in MAXQDA, the data were analyzed. The data were then placed into chronological order to represent patterns and themes identified during the data collection process and to analyze the information in the order in which the data were collected (Creswell & Poth, 2018).

I used categorical aggregation, direct interpretation, and pattern identification to make naturalistic generalizations about the collected data (Creswell & Creswell, 2018; Creswell & Poth, 2018). Before the interviews and focus group discussion, a survey was administered to general education teachers who taught students with SEND in IE and collected for final analysis. The information developed through analysis was placed in categories and organized for insight into the challenges educators encountered in IE, strategies and interventions educators implemented in the classroom, and the efforts educators made to build relationships that enhanced the learning environment. The insight gained from analyzing the surveys drove the personal interviews.

Memoing was used to take reflective notes about additional information I learned. Participants selected for the semi-structured personal interview described their experiences teaching high school students with ASD in IE. Participants' responses to the interview questions were manually transcribed and the transcripts were provided to individual participants for member checking to ensure validity. Once participants signed and verified their responses to interview questions, I coded the interview data and developed categories. I carefully read the manually transcribed data and divided the data into meaningful analytical units (Creswell & Creswell, 2018). I used MAXQDA to facilitate data storage, coding, and data linkage.

MAXQDA is a data analysis software system that streamlines how researchers process extracted data. MAXQDA enables researchers to code, analyze, and visualize complex datasets with an innate drag-and-drop functionality. I used MAXQDA to analyze the qualitative data, develop connections, and create complex insight that helped develop common themes. Meaningful segments of text were assigned a code or category name until all data was coded (Creswell & Creswell, 2018).

Following data coding, I initiated enumeration strategies to identify the frequency of specific statements or themes (Creswell & Creswell, 2018). Enumeration is the process of quantifying data by counting the number of times a word appears or the number of times a code is applied. Peer debriefing procedures were also employed to check the accuracy of data collection, reporting, and analysis procedures. Specific attention was given to overemphasized points and vague descriptions. I met with my peer following the completion of important tasks to ensure credibility. In addition to meeting in person, I communicated with my peer frequently through email to ensure the process went smoothly.

Data analysis procedures for the focus group discussion followed the same procedures as the data analysis procedures for the personal interviews. I used the Classroom Observation Protocol (Appendix E) to capture notes for each classroom observation I conducted. Memoing was used to capture notes not captured at the observation site. The data from the observations were manually transcribed, analyzed, and stored in MAXQDA. Once the data was entered in MAXQDA, I coded the data and segregated the data using descriptive words (Creswell & Creswell, 2018). Creswell and Creswell (2018) noted that keeping a master list that houses a list of all codes is paramount when coding.

Enumeration was used with the data from classroom observations. Similar words and codes were counted to help define frequencies (Creswell & Creswell, 2018). Peer debriefing for classroom observations occurred concurrently with personal interviews to ensure the accuracy of the data collection, reporting, and analysis procedures.

A form of pattern-matching was used to determine how the data fit within the ToM and the subunits identified in this study (Yin, 2018). To ensure consistency, triangulation occurred when data from all three sources were received and compared (Yin, 2018). Collected data were organized into tables to compare and explore similarities or differences in participants' perspectives of their experiences teaching youth with ASD in an inclusive environment.

The integration of the document analysis procedure, interview protocols, and case study protocols fulfilled triangulation (Creswell & Creswell, 2018; Yin, 2018). Conclusions were drawn after the data collected has been joined from the previously stated procedures (Yin, 2018). A rigorous analysis involving multiple sources and their convergence was conducted as a validation strategy for this study (Creswell & Creswell, 2018; Yin, 2018).

### **Trustworthiness**

Trustworthiness was established through a combination of credibility, dependability and confirmability, and transferability. Trustworthiness starts with an explanation of the methods for establishing credibility followed by a description of the methods for establishing dependability and confirmability. It is paramount to take specific steps to confirm that the findings are trustworthy. O'Leary (2017) stressed that a qualitative researcher must take purposeful steps to provide precise descriptions and analyze collected data meticulously. Trustworthiness includes findings that are credible, dependable, confirmable, and transferable. Addressing each of these components is essential to create "research that has been approached as disciplined rigorous



inquiry and is therefore likely to be accepted as a valued contribution to knowledge” (O’Leary, 2017, p. 56). The subsequent sections include a description of the steps I took to address trustworthiness.

### **Credibility**

Credibility refers to the accuracy of the information being presented. By interviewing participants and conducting a focus group session, I enhanced the credibility of this single-case study (Yin, 2018). By spending time with participants and listening to them describe their experiences, I developed an understanding of the phenomenon and could answer questions about teachers’ perspectives and experiences teaching youth with ASD in IE. Member checking, a technique wherein participants checked the transcript for accuracy, added to the credibility of the study (Birt et al., 2016; Creswell & Creswell, 2018).

### **Dependability and Confirmability**

Dependability and confirmability relate to the consistency of the findings to ensure the findings are dependable. I used triangulation to establish dependability and confirmability. Triangulation is achieved when multiple data sources are used to authenticate data collected by one method by using other methods (Gall et al., 2010). The data sources I used for this study were a survey, individual interviews, and the focus-group session. By using multiple sources, I contributed to and established the dependability of the findings.

In addition to using multiple sources, I contributed to the dependability of the findings by ensuring appropriate and accurate data collection procedures, correctly analyzing the findings, and reporting the findings. All data were consistently collected and verified by the participants. By spending equitable time with participants, listening to their experiences, and understanding

the nuances of the experiences of teachers who taught students with ASD in IE, I contributed to the dependability of the findings.

I established confirmability by remaining neutral throughout this study. To reduce the potential for bias, I based the findings on the notes from participants' interviews and their responses to the initial questions. The interpretation of a participant's narrative was not skewed to fit a particular opinion other than that of the participant. To report the findings, I used factual description and accurate analysis, not a subjugated perspective; however, I acknowledged when there was a subjective belief on my part pertaining to a theme or concept expressed in the findings (Patton, 2015). Criteria for truth were established to ensure credibility and impartiality of the findings to ensure consistent data collection, to expose gaps in the research, and to explain or prevent inconsistencies throughout the study (Patton, 2015).

### **Transferability**

Transferability is the degree to which the findings of qualitative research can be applied to other settings. The best way to ensure that the findings are transferable to other settings is to provide rich, thick descriptions about the research site, the participants, and their experiences. Researchers achieve transferability by providing evidence that their findings are applicable in other contexts, situations, times, and populations (Patton, 2015). To establish transferability, I provided a thick description of the phenomenon under investigation. By providing a thick description of the phenomenon, I achieved what Lincoln and Guba (1985) described as a type of external validity. I provided a comprehensive description of the setting wherein I conducted interviews, clearly stated the time at which I interviewed participants, and ensured participants had a clear understanding of the data collection methods and the research I conducted (Patton, 2015).

## **Ethical Considerations**

To ensure ethical standards, I followed the procedures that Creswell and Creswell (2018) identified and described. Liberty University's IRB protocols require that I communicate with the administration staff to provide clarity on the purpose of the research. Appropriate permissions will have to be given by the school of education and steps taken to complete Liberty University's IRB process. After receiving approval from Liberty University's IRB staff to conduct this study, I recruited participants. The participants for this study were contacted to provide them with a clear description of the study. I made a request to the senior principal at Johnathon Brandon High School to meet with the participants, the school counselor, and the assistant and senior principal to discuss the details of this study. A survey was provided to teachers through the school's administrative staff to identify prospective participants.

Individuals who were interested in participating in this research were instructed to contact me through either email or telephone. An informed consent form was provided to participants, and the informed consent form included directions for returning the form to me. In the informed consent form, I apprised participants of their right to withdraw from the study at any time without any repercussions. I used pseudonyms and composite profiles for the participants and the site to protect the identities of those involved in the research (Creswell & Creswell, 2018; Yin, 2018). All data were protected by storing them in a locked cabinet or in password-protected files on my desktop computer.

As the primary human data collection instrument, I took copious notes to identify any personal biases I had about general education high school teachers who instructed students with ASD in IE. When conducting individual interviews and the focus group session, I refrained from

asking participants leading questions (Austin & Sutton, 2015; Creswell & Creswell, 2018; Yin, 2018).

### **Summary**

This qualitative single-case study was an exploration of the perspectives and experiences of high school teachers who taught high school students with ASD in IE. Purposeful sampling was used to identify participants for the study. A qualitative approach was appropriate for this research as I could ask participants questions to gain an understanding of their perspectives and experiences with the phenomenon under investigation and to provide rich, detailed descriptions of their perspectives and experiences (Creswell & Creswell, 2018).

Chapter Three included an overview of the research design. Chapter Three also included a description of the methods for collecting and analyzing data, the research site, and the participants. Chapter Three concluded with a discussion of the procedures for establishing the trustworthiness of this study.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

The purpose of this case study is to understand teachers' perspectives and experiences teaching high school students with autism spectrum disorder (ASD) in inclusive education (IE) with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow. Data captured using methods described in Chapter Three were analyzed using the general analytic strategy of relying on theoretical propositions and Sinkovics (2018) pattern-matching logic (Sinkovics, 2018; Vargas-Bianchi, 2020). Themes emerged based on repetition of comments and ideas shared via the survey, individual interviews, and the discussions during the focus group sessions. Provided in the following subsections are descriptions of the participants, then the case, and finally the results of the findings.

### **Participants**

The composites of the participants are accurate with attention to detail to describe the experiences of general education teachers who teach students with SEND, which also includes students diagnosed with ASD, and TD youth in IE. The composites are a compilation of the survey the participants completed, the individual interviews, and the focus group discussions that provided a rich, thick description of their experiences. Every attempt was made to give a vivid and detailed description of the participants while maintaining their anonymity. All names are pseudonyms, details of the interviews and accounts are accurate, and the reflections are those expressed by the individual participant.

Johnathon Brandon High School, the original selected research site, was not as accommodating as I originally assumed they would be when I wrote the proposal for this

research study. Problems with acquiring participants at Johnathon Brandon High School caused me to acquire participants from other schools in other districts. Issues associated with the current pandemic made it difficult to present my research proposal, gain an audience with the administration, and recruit participants. Acquiring participants for this research study was difficult because of the current pandemic; however, there were a few who were willing to participate. Each of the participants elected to participate in different stages of the study after receiving a notification of an option to participate in a personalized email from me. Not all 12 of the participants could participate in each stage of the collection process due to prior work commitments that extended into their personal time because of the pandemic. Of the 12 participants, nine volunteered to participate in the individual interviews while only five participants volunteered to participate in the focus group.

Data collected on students diagnosed with ASD in IE was inclusive of their age ranges, gender, and their ethnicity. The data was collected through the participant interest survey and was used to gain insight into the demographic composition of the participants. The sample size of the participants was smaller than expected due to the current pandemic. However, Creswell and Poth (2018) suggest researchers interview from 5 to 25 individuals with experience of the phenomenon being studied. Educators and school administrators were hesitant to participate in the research and expressed concern since educators' work schedules were expanding past normal business hours. Teachers at the research site were experiencing tremendous pressure from the parents of students due to policies concerning the wearing of masks in class and other policies and regulations being instituted because of the pandemic. Understanding the pressure teachers were facing because of the pandemic and the reaction of parents to state policies and regulations, I chose not to put too much pressure on teachers to participate. All those who indicated they had

an interest to participate in the study and completed the informed consent were included in the participant population of the study. Interestingly, a diverse cross-section of participants was captured naturally as shown in the demographic data.

The participants included eight males and four females. Of the 12 participants who participated in the survey, eight identified as African American, two identified as Caucasian, and two identified as Multi-Ethnic. Finally, three of the participants were between the ages of 20 and 25, two were between the ages of 26 and 30, one between the ages of 35 and 40, and six were between the ages of 41 and 45 (see Table 1).

Table 1

*Participant Demographic*

Name	Gender	Age	Ethnicity	Occupation	FG   IN Participant
Aaron	Male	42	African American	General Education Teacher	N   Y
Abdul	Male	40	African American	Special Education Teacher	Y   Y
Abel	Male	44	African American	General Education Teacher	N   N
Abram	Male	42	African American	General Education Teacher	N   Y
Adaline	Female	25	Caucasian	General Education Teacher	N   N
Adolfo	Male	25	Multi-Ethnic	General Education Teacher	N   Y
Ahmad	Male	26	Multi-Ethnic	General Education Teacher	Y   Y
Bambi	Female	44	African American	General Education Teacher	Y   Y
Barbara	Female	30	African American	General Education Teacher	Y   Y
Billy	Male	43	African American	General Education Teacher	N   N
Calvin	Male	45	African American	General Education Teacher	N   Y
Candi	Female	25	Caucasian	General Education Teacher	Y   Y

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*Note.* Participants' demographic list consists of those participants who participated in the survey; FG- Focus Group; and IN- Individual Interviews. All participants participated in the survey.

### **Aaron**

Aaron is an African American male who, at the time of the study, was 37-years of age and serving as a high school teacher, teaching high school in North Carolina. Before serving as a teacher, Aaron served in the United States Army, retiring as a Lieutenant Colonel. After his commitment to the country, Aaron decided that he wanted to give back by supporting the youth, tomorrow's leaders, and decided to enter academia. Aaron acquired two master's degrees while serving on active duty.

Aaron shared many positive experiences he had while teaching high school students. He also shared some disappointing and difficult times he faced. Aaron explained some of the challenges he had teaching students with SEND alongside TD students in an inclusive classroom. Specifically, Aaron stated when he was first assigned to teach IE, he did not know how to address the various needs of the students in the class. He also shared that he had difficulty communicating with his class, expressing his intent, and receiving a response from the students indicating that they clearly understood his intent. Surprisingly, when asked, Aaron stated because he worked hard trying to communicate with those students with SEND, he forgot about his TD students, assuming they merely understood since they did not have any disabilities.

Aaron described how he felt disconnected from the students in his class and insisted if it were not for the assistance of the special education teachers in his school, that he would not have known how he was going to reconnect with his students. When asked what he did to reconnect to his students, Aaron stated,



The worst feeling a teacher can experience is not being connected or not being able to reach the students in your class. I felt totally ineffective and wanted to give up; walk away from the class and allow someone else who was more prepared to teach. The special education teacher told me that it was okay to feel the way I was feeling but not stay where I was in my thoughts.

### **Abdul**

Abdul is an African American male who, at the time of the study, was 40 years of age, married and serving as a special education teacher within a special education class in a high school in North Carolina. Before serving as a special education, Abdul served as a general education teacher in a different high school. While serving as a general education teacher, Abdul decided he wanted to further his education and gain a master's in special education. Abdul understood that a Master of Arts in Special Education would provide him with the tools he needed to provide person-centered education and better adapt lessons based on different learning types and levels. His degree also made him more effective as a teacher, teaching diverse students in an inclusive environment.

During the personal interview, Abdul shared several insights pertaining to his experiences as a special education teacher teaching youth with SEND in high school. Abdul stated that among those youth with SEND, he has also had students of various levels of ASD, ranging from level 1 to level 3 in accordance with the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition (DSM-5, 2013). While talking, I learned that Abdul enjoyed his time in the classroom but thought he should have spent more of his time structuring, planning, and providing effective professional development to general education teachers. Abdul believes that professional development is structured learning that results in changes in teacher practices and improvements

in student learning outcomes. He stated that general education teachers needed a platform of learning that supported collaboration, used models of effective practices, and provided some form of coaching with expert support.

### **Abel**

Abel is an African American male who, at the time of the study, was 40 years old, married, and working as a general education teacher at a high school in North Carolina. Abel recently completed his Master of Arts in Education with a focus in Curriculum and Instruction. He has a goal of one day becoming a vice principal and high aspirations of becoming the principal of a high school. Abel has several years of experience teaching high school students with ASD in an inclusive environment.

I was able to speak to Abel on the phone and he expressed interest in the study and wanted to participate in the individual interview and the focus group session. Unfortunately, due to restrictions placed on him by the school administrators, he was not allowed to participate in the individual interview or focus group session. During the phone call, Abel revealed that his time in IE was difficult at first but as time passed, he began to learn the intricacies of working in IE. Prior to ending the phone call, Abel alluded to a lack of training and professional development contributed to some of the challenges he faced while teaching in IE.

### **Abram**

Abram is an African American male who, at the time of the study, was 42 years old. Abram completed a Master of Arts in Education with a concentration in Instructional Design and Technology and was moving toward becoming an assistant principal soon. Abram had experience in teaching youth with ASD in an inclusive classroom as well as teaching youth with

SEND in special education. Abram is married with two boys who are preparing for their first year in college in the fall.

Although at the time of this interview, Abram was preparing to take over as the assistant principal, he volunteered to participate because he started thinking back and reflecting on his 23-years as a teacher, and as he put it, recalling the great experiences he had as a teacher. Abram shared, when he first went into an inclusive classroom with students with SEND and encountered some with ASD, he, not having any formal training, did not know what to do. Abram shared, he was really surprised that he was selected to teach in an inclusive classroom and thought that a teacher with training in special education would be better suited for the position.

Abram stated that after sitting in the class for about a month, he noticed how much effort his students with SEND put forth and because of their effort, he wanted to provide them the best of himself as a teacher. Abram arranged time in the evening at the end of the school day and researched the best and most effective means to create a learning environment in an inclusive classroom.

Abram stated, “it is important to think about those times, the times that appeared difficult because it was in those times when we and who we are to be are forged.” Abram was excited to participate in the interview process and he deeply enjoyed talking about his experience teaching in an inclusive classroom.

### **Adaline**

Adaline is a Caucasian female who, at the time of this study, was approximately 25-years old and aspired to obtain a Master of Arts in Special Education for grades K-12. During the interview, Adaline was working in a high school in North Carolina, as a general education teacher in an inclusive classroom teaching students with SEND. Adaline informed me during the

interview, that she had experience teaching youth with ASD, but all the students she taught with ASD were level 1, meaning these students usually were able to speak in full sentences but had trouble engaging in back-and-forth conversation, making it difficult for them to make friends. Adaline stated that she loved her time in an inclusive classroom. Adaline continued by saying that she wished she had formal training and a better understanding of autism but what she found was all students regardless of their disabilities, if the teacher was willing to teach them, they could learn. Adaline appreciated receiving an invitation to participate in this research and thanked me for sending her the invitation.

### **Adolfo**

Adolfo is a Multi-Ethnic (Native American and White) male who, at the time of the study, was 25 years old. At the time of the interview, Adolfo was a newlywed with hopes to be a father soon. Adolfo is a general education teacher currently teaching in an inclusive classroom. Adolfo loves being a teacher and states that it is the most rewarding job since graduating from college.

Adolfo could not submit to be interviewed due to an increased workload from new classroom requirements changed, because of state policies used to govern the populace during the pandemic; however, Adolfo was willing to commit to completing the survey.

### **Ahmad**

Ahmad is a Multi-Ethnic (African American and Pacific Islander) male who, at the time of the study, was 26 years old, married with an infant at home. Ahmad is a general education teacher teaching in an inclusive classroom in a school in North Carolina. Ahmad is also a Sergeant in the United States Army Reserves who will be deploying to operations in Afghanistan

sometime in October 2021. Ahmad stated that he enjoyed being a soldier in the Army Reserves but during those times when he must leave his class, he has mixed emotions.

Ahmad was excited to be a participant in this research and stated that he aspired to finish his master's degree and apply to a doctoral program in education soon. He continued by saying he wished he had more training in dealing with students with special educational needs and those students who were autistic. One of the challenges he faced in an inclusive classroom was developing and implementing an IEP for a special needs student. Ahmad stated,

For a long time, I did not know what the acronym IEP stood for, nor did I know how to implement an IEP and the students may have suffered because of my ignorance. Teaching is personal and calls for the individual who elects to be a teacher to think less about themselves and more about the students entrusted to them. The students must be viewed as more than just a number or a way to get funding for the school, they must be valued, and the teacher must be ready to lay aside their pride or whatever would keep them from learning how to reach their students.

### **Bambi**

Bambi is an African American female who, at the time of the study, was 44-year-old. Bambi decided years ago not to marry but instead she moved in with her parents to help them as they aged. Bambi had a unique career having worked in the field of education for a better part of her life since graduating from high school. Bambi started off working in a daycare with children ranging in age from infancy to 5-years old. The daycare offered pre-kindergarten curriculum as well as kindergarten early learning. Bambi taught pre-kindergarten and kindergarten classes. During her time with the daycare, Bambi had the opportunity to work with kids who were diagnosed with various forms of autism. Enjoying her time with the daycare and the teaching

opportunity she had, Bambi sought a teaching career with the local high school. Currently, Bambi is a high school general education teacher who has a desire to achieve a Master of Arts in Special Education. Bambi wants to continue to teach and find a way to design curriculum for students with SEND to include students with ASD.

Bambi was excited to participate in the interview process and provided many great insights pertaining to her experience teaching in IE. One key point Bambi shared was regarding the importance of involving parents in the education process of students with ASD. Bambi explained,

Without the parents' support, any efforts made in the class could be lost because it is not supported at home. The student spends approximately 8 hours in the class, Monday through Friday. The remaining time is spent at home with the parents. Providing the student with homework and explaining the work to the parents will better enhance the students' academic success.

### **Barbara**

Barbara is an African American female who, at the time of the study, was 30 years old and pursuing a Master of Arts in Education with a concentration in Early Childhood Education. Barbara is considering leaving the education field to act as the new assistant director of a daycare currently owned and operated by her mom. At the time of the research, Barbara worked as a general education teacher who had experience teaching youth with ASD in IE. Barbara was leaving the school system not because of a negative experience teaching but because better benefits and pay were offered as an assistant director.

At the time of the interview, Barbara was unsure about going through with the interview because she was leaving the education field. Barbara was under the assumption that the school

she was leaving would be notified and a bad report would be added to her final evaluation. I assured Barbara that her information and the fact that she spoke with me would remain confidential. Comfortable, Barbara decided to go through with the interview.

During the interview, Barbara provided some insightful information concerning general education teachers in IE. Barbara believed general education teachers received the training they needed to teach regardless of the students' abilities or disabilities in the classroom. She stated, "All teachers could use additional training to better enhance their knowledge of classroom dynamics but for the most part, teachers are equipped to teach any student." Barbara remained professional and insisted on being candid throughout the interview. I had a great time interviewing Barbara.

### **Billy**

Billy is an African American male who, at the time of the study, was 44 years old. Billy is married with two kids who are currently in college and works as a high school teacher in a school in North Carolina. Billy recently received his Master of Arts in Education with a concentration in Higher Education. Billy has a desire to be a high school principal and ultimately a superintendent.

Billy was not able to participate in the individual interview or the focus group discussion, but he was willing to participate in the survey. In Billy's email response to my initial invitation, he mentioned his views on IE. Billy shared, "IE is complex and can be challenging especially for general education teachers, but it is needed. Not just for students diagnosed with special educational needs or disabilities but typically developed students as well." Billy surmised that inclusion was beneficial for all students, providing students with SEND the opportunity to develop stronger academically and socially, while providing TD students the opportunity to

develop tolerance for others with differences. Billy continued by suggesting, inclusion also provides TD students the opportunity to increase their positive self-esteem and can help them to better manage diverse friendships. Billy said his time in IE was short, but it was rewarding, seeing how the students came together, despite their differences. I did not actually have an opportunity to speak directly with Billy; but Billy's message provided added value to the discussion.

### **Calvin**

Calvin is an African American male who, at the time of the study, was 45-years old. Calvin is married with a son in his junior year of college. Calvin served as a teacher in high school for 15 years. Aside from teaching, Calvin enjoys spending his time serving in the community alongside his son and supporting various community service projects as a member of his fraternity. Calvin also supports the local Boys Scout Pack through donations and by showing up as a scout supporter at least twice a month. During Calvin's time as a teacher, he had the opportunity to teach students with SEND as well as students with ASD in an inclusive classroom. Calvin stated that he enjoyed his time in inclusive education and said it was one of the most rewarding experiences of his teaching career. Calvin stated that he saw some of the greatest examples of cooperative learning that he had ever seen. He said,

The students in the class naturally try to help one another. As a teacher, when I give an assignment, it is not always meant to test their knowledge. What I would really like to test is their social interaction skills. The students are continually talking and showing each other what to do to complete the assignment. The best part about what I saw was not TD students helping students with disabilities but students with disabilities assisting TD students. To see this type of support was exciting.



Calvin was excited to be interviewed and shared his perspective regarding general education teachers teaching students with ASD in IE. Throughout the interview, Calvin remained professional and asked if he could be candid in his response.

### **Candi**

Candi is a Caucasian female who, at the time of the study, was approximately 25-years old. Candi is a newlywed having only been married 2-years. Candi is hoping to one day have kids but first wants to establish her career and make sure her and her husband are financially stable. Candi has been a general education teacher for almost 3 years. She has limited experience teaching in IE, only having worked as an assistant in an inclusive classroom. Candi stated that her primary job in the classroom is to walk around the class and tend to the students in the class that needed help.

Candi was excited to be asked to participate in this research. Throughout the interview, Candi provided some great insight into her experience in IE. Candi said her time in an inclusive classroom exposed her to students with ASD in a way that she never expected. She said as an assistant she is not preparing curriculum to teach but she said she is certainly responsible for maintaining the learning environment in the classroom.

The students see me as a help aide and sometimes as the ‘fun’ teacher. Whenever I sit down beside them to help them with an assignment, they love to give out hugs or lay their heads on me. It is the best experience of my teaching career. I think every teacher should teach in an inclusive classroom.

### **Results**

The following are the results of this single-case study. Data collected from the case included surveys, individual interviews, and a focus group interview. Specific interview

questions were designed to identify specific aspects of IE, provide details about the experience and perspectives of general education teachers who teach students with ASD in IE, and answer the research questions. Results from the individual interviews and the focus group interview are described under each thematic heading. A systematic analysis technique was used to analyze the case and its subunits through pattern matching. The single case study design provided the structure to better understand teachers' experiences and perspectives while teaching high school students with ASD in IE. This single case study design created the platform to consider the challenges general education teachers faced teaching students with ASD in IE, strategies and interventions used to influence the learning environment in IE, and to understand the relationships general education teachers had to build to assist them in creating an environment where students with ASD can learn and grow within IE. The following sections describe the themes developed during the case analysis through pattern matching, the research question results, and the synthesis of all data collected.

### **Theme 1: Meeting the Needs of Students with ASD**

The first theme to emerge from the data, meeting the needs of students with ASD, addressed the concern felt as general education teachers enter IE classrooms to teach students with ASD. These aspects include challenges teachers have communicating with students with ASD, recognizing the strengths and weaknesses of students with ASD, and presenting curriculum in a manner students with ASD will understand and recall. Within the first theme of understanding the needs of students are three subthemes: self-efficacy, the role of the teacher, effective communication (see Table 2).

Table 2

*Theme 1 Meeting the Needs of Students with ASD*

Subtheme	Code
Self-Efficacy	Fearful (17), Anxious (13), Negative Impact (12), non-Effective (9), Failing/Failures (7), Pressure (7), Unmotivated Students (5), Negative Behavior (3), Underachiever (2)
The Role of the Teacher	Lack of Clarity (23), Unclear Learning Needs (20), Not Enough Time and Resources (15), Unrealistic Goals and Objectives (15), Building Genuine Relationships (11), Determine Performance Proficiency (7), Limited Support (5)
Effective Communication	non-Verbal (36), Negative Interactions (27), Anxiety (27), Confusion (24), Verbalism (22), Not Interested, (18), Speaking too Fast (17), Guessing (16), Unclear Expressions (15), Physical Discomfort (12), Imperception (7)

*Note.* Numbers in parentheses indicate the number of times specific responses were provided.

***Self-Efficacy***

The first subtheme that emerged within the theme, meeting the needs of students with ASD was self-efficacy. Of the 12 study participants, eight indicated that understanding the needs of the students was important as a teacher in IE. Of the eight participants who indicated that understanding the needs of the students in IE was important, three indicated that understanding the needs of the students shapes the learning environment in IE and creates an environment that invites all students to interact in the learning process. Of the eight participants who indicated that understanding the needs of the students was important in their perspective, four shared that creating group activities provided an opportunity for students with ASD to interact with their classmates and the teachers. Group activities allow the teacher an opportunity to study the student and learn how the student learned and communicated.

Of the 12 participants, three indicated in their individual interview that they would prefer more individual activities that allowed the students to rely on the teacher instead of other students in the class. Specifically, participants want to create an environment that allows the student and teacher to interact so the teacher can learn through communicating with the student, how the student learns and communicates. Teachers in IE experienced a low sense of self-efficacy that created feelings of fear and anxiety in some, while others felt as if they were failing their class. The participants conveyed feelings like there was an unhealthy pressure to succeed, ideas that they were having a negative impact on the class, and there were feelings of being an under achiever.

Bambi, like some of the other participants, shared that IE intimidated her. In fact, Bambi said that she fears failing so much that she paid more attention to her TD students because she understood their needs. Realizing she was ignoring her special needs students, Bambi started paying more attention to her special needs students and ignoring her TD students. Bambi notices because she was ignoring part of her class that all her students started displaying negative behavior and were unmotivated to learn. Bambi stated that she lacked balance and began to realize that all her students, regardless of if they had special needs or not, deserved a balanced display of attention from her. Bambi stated, “Although I failed in my initial approach, I learned a lifelong lesson in education that helped me to succeed in my future efforts. I would not change this experience for anything.”

Ahmad had a totally different experience than Bambi and most of the other participants. Ahmad shared that he was diagnosed as a youth with a special need, and he felt his teachers treated him differently than they may have treated his TD peers. Because of the teachers in Ahmad’s earlier school experience, Ahmad did not want to make his students, who were

identified as having special needs, appear to be different than his TD students. Going into an inclusive classroom, Ahmad admitted that he felt anxious, and he felt a tremendous amount of pressure concerning the academic success of his class.

### ***The Role of the Teacher***

The second subtheme that emerged within the theme, meeting the needs of students with ASD is understanding the role of the teacher in IE. While teaching students with special needs, seven of the 12 participants indicated that they initially struggled to understand their role as a teacher in IE. Participants' unsurety of their role as a teacher in IE stemmed from a lack of clear and concise instructions and because of a lack of resources needed in IE, to aid in the learning process for youth with ASD. During the interview, Ahmad shared,

Originally going into IE, I felt like I really did not understand my role as a teacher having students with SEND and TD students. I did not understand how I was supposed to communicate daily lessons and more importantly, how was I supposed to ensure all the students understood the lesson. This was a lonely time in my teaching career. I did not understand the importance of building relationships with other professionals to include the special education teachers who would have been a great help. Eventually, through trial and error, I learned these important lessons.

During the focus group, Ahmad provided more insight into his discomfort of not understanding the role of the teacher in IE. Ahmad shared, "To be honest, I felt lost, and I felt like the administration made a huge mistake placing me in an inclusive classroom. I did not have any training that would help me teach my students at the time."

In the focus group, Abdul supported Ahmad's remarks and simply stated, "I think general education teachers going into an inclusive environment should have some additional training.

Moreso, I think special education teachers should be providing mentorship and professional development to general education teachers.”

Barbara, however, shared a different perspective and a crucial note worth mentioning here. She stated,

I still hold true to an original statement I made during the interview, I believe teachers have the training they need to teach students and it does not matter if those students have special needs or not. Also, professional development or mentorship is crucial in any field but to think as a teacher that I am not equipped to teach a student because they have a disability or special educational need, is not correct, we are equipped.

Abdul provided the final statement that closed the discussion on the role of the teacher. He stated,

I think it is healthy for us as teachers to come together and discuss those things that affect our classrooms in an inclusive classroom. But something I want to go back and reiterate; I still think that it is vital for general education teachers to receive professional development training and/or conduct workshops to exercise those skills we will need in an inclusive environment. As teachers, I agree that we are trained to teach but to say that we are properly prepared just with a general education bachelor’s degree, I think is a little far-fetched. I think it is a great foundation, but with any foundation, we need to build on top of it to perfect our craft.

### ***Effective Communication***

The third subtheme that emerged within the theme, meeting the needs of students with ASD was effective communication. Of the 12 study participants, eight indicated that effective communication was important when seeking to understand the needs of students with ASD in IE.

Of the eight who indicated that effective communication was important, seven agreed, without effective communication when teaching students with ASD in IE, teachers can develop a lot of anxiety, there is a higher risk of confusion surrounding the students understanding of assignments/task and teacher's acknowledgement of students' understanding of course curriculum.

During the focus group, Ahmad provided some insight into the importance of effective communication and his steps to ensure as a teacher he was able to effectively communicate with his students. Ahmad shared the following:

There are several things I try to remember when addressing my students who were diagnosed with ASD. I always try to remember that although this student has a disability, they are still my students and just like everyone else. When speaking, I always try to remember to look and speak directly to the person who I am speaking to instead of looking at one of their peers. It is also good to refocus that student and ensure they are looking directly at you while you are talking. And most importantly, as a teacher in IE, patience and providing the student time to gather their thoughts or complete their statement is paramount when creating an environment where there is effective communication.

Expounding on Ahmad's comments, Bambi further stated,

To add to what Ahmad just stated, the special needs students in the class need to know that what they are saying, what they are thinking is just as important as any other student in the class. And believe me, they (students with special needs) will know if what they are saying is not as important. They might not talk about it right there in the classroom, but they will bring it up at home or to their friends. When my students with special needs

are talking, I stop what I am doing and I give them my full undivided attention, exactly what I would do for my TD students. I do it because I want them to know that I care about them and what they have to say.

Ahmad responded with,

Therefore, it is important for general education teachers to be in programs where they will receive continued education, professional development, and/or mentorship. The things we are discussing now, we learned through trial and error; but how many students were negatively affected by teachers who had in-effective communication skills.

All the participants shared the same perspective concerning the need for effective communication when trying to understand the needs of the students in IE. Although the participants agreed on the importance of effective communication, not all the participants agreed on how to establish effective communication in IE. Six of the eight teachers agreed that a collective exercise would aide in building effective communication in IE; however, two of the eight agreed that dealing directly with a special needs student individually, away from their TD peers, is a better way to establish effective communication.

## **Theme 2: Continued Education and Training**

The second theme that emerged from the study, continued education and training, addressed the concern general education teachers have regarding their assumption of their inept ability to teach special needs youth in an inclusive classroom. Some of the general education teachers in this study question if the general education curriculum from an accredited university or college is enough to prepare them to teach students with SEND in IE. Accordingly, these same teachers have conveyed feelings of anxiety, fear, anger, and negative pressure concerning the success of their students diagnosed with special needs. A low sense of self-efficacy could be



perceived in these moments, causing a snowball effect in the class that further hinders the learning environment. Within the theme, continued education and training, three subthemes emerged: professional development, high-leverage teaching practices, and collaboration efforts in the classroom (see Table 3).

Table 3

*Theme 2 Continued Education and Training*

Subtheme	Code
Professional Development	Financial Resources (35), Mentorship (33), Knowledge of Best Practices (31), Online Collective Training (26), Workshops (23), Coaching (16), Webinars (6),
Responsible Teaching	Setting Learning Goals (37), Lesson Designing (31), Explaining and Modeling Content (26), Coordinating Instruction (22), Implementing Norms (19), Understanding Patterns in Student Thinking (18), Designing Assessments   Test (17), High-Leverage Teaching Practice (13), Giving Feedback to Students (10)
Professional Learning Communities	School Administration Support (37), Collaborative Teaching (35), Special Education Teacher Support (23), Content-Specific Expert Support Teams (22)

*Note.* Numbers in parentheses indicate the number of times specific responses were provided.

***Professional Development***

The first subtheme that emerged within the theme, continued education and training was professional development. Professional development for general education high school teachers in IE, according to Goetz et al. (2002), is a requirement, providing insight as to how to close the gap between students with SEND to include students with ASD and TD students. In an article by Royster et al. (2014), the authors suggest that both general education teachers and special education teachers need professional development to help create a platform for effective instructional and interpersonal skills for the delivery of classroom-based services for students

with SEND. It was also suggested that professional development helps educators develop skills necessary to manage an inclusive classroom (Royster et al., 2014).

In a personal interview with Candi, she shared her experience teaching youth with ASD in IE and a need she realized she had for continued education. Candi stated,

As a teacher, I was trained to be able to take information and break it down in a way that students would be able to understand and learn the steps to see the higher function of that subject. The problem is, when working with youth who have some type of SEND to include ASD, normal mechanics, say communication, is difficult and thus makes it difficult to present the curriculum or instruction. Learning how to communicate, how to ensure your student with ASD understands the curriculum, and/or being provided strategies to improve teaching methods, enhances the learning environment in the classroom and makes teaching easier.

Ahmad, in his personal interview, also provided some good insight. Ahmad said from his experience in IE teaching youth with SEND, he focused more on their strengths and the understanding that everyone wants and can learn. Ahmad believes that regardless of a student's disability, that student can learn, and it is the teacher's job to figure out how to teach the student. Ahmad believes that continued learning should be provided throughout an educator's time teaching and should be provided through a specific program that strengthens the teacher's classroom mechanics. Ahmad further stated,

Professional mentorship with a seasoned IE teacher or a special education teacher can provide the insight needed to help with classroom management or improving the learning environment in IE. Improving the learning environment should be evident by the increase

in understanding of topics taught, improved test results, and in my experience, improved teacher, and student confidence.

### ***Responsible Teaching***

The second subtheme that emerged within the theme, continued education and training was responsible teaching. Van Brummelen (2002) discusses the idea of responsibility teaching. Responsibility teaching, unlike responsible teaching, reminds teachers to identify ways they would view their students. Responsibility teaching is having the ability to carefully plan how teachers should see their students to inspire their actions to overcome issues they may be facing (Van Brummelen, 2002). Teachers are encouraged to view their students as uniquely and wonderfully made in the image of God regardless of any flaws (Van Brummelen, 2002).

Responsible teaching bears to mind the teacher's professionalism, their character, and their willingness to adhere to standards or policies that govern the profession (Chatelier and Rudolph, 2018). Chatelier and Rudolph continue by insisting that standards and policies exist for the sole purpose of holding teachers accountable by demanding good teaching practice. As with responsibility teaching as discussed by Van Brummelen (2002), responsible teaching demands teachers to make a conscious effort to display characteristics that are of high ethical, moral, and professional standards.

Teachers are also responsible for influencing their students to display these same characteristics, but it requires teachers to envision these characteristics in their students (Van Brummelen, 2002; Osguthorpe, 2008). Osguthorpe insists that teachers are in a prime position to influence the moral development of their students in their classroom. The presumption that the relationship between the moral disposition of teachers and the moral development of students is

evidence for creating a platform in teachers' professional development programs suggestive of training that address character flaws (Osguthorpe, 2008).

Study participants agreed that the way students are viewed by the teacher could sway the teacher's learning goals for the class and the teacher's expectations of student performance. When these expectations are not met, teachers could begin to show low sense of self-efficacy, which according to Tschannen-Moran and Woolfolk-Hoy (2001), will begin to show in the students' overall academic performance since the efficacy of the teacher has a strong impact on student performance. Ahmad shared,

The way a student is viewed, in my experience, can have a negative effect on the entire class. It does not matter if I am teaching students with special needs, students with ASD, or TD students, I see them as students who are lent to me for the purpose of teaching. I want all my students to know that I believe in them. When I set goals for the class, I like to include all my students in setting goals for the class. I found that when everyone is involved in the learning process, it makes for a better class where the students now come with an expectation to learn.

However, Bambi shared,

My experience was different than Ahmad's experience. When I first entered IE, I saw the difference in the students. I saw that my students with special needs were different than those without (TD students). I think this had a drastic effect on me as a teacher and certainly my class. I was not until I sat down with another teacher who had taught IE for several years that I learned how to view my class.

The comments by Ahmad and Bambi during the focus group session were in line with Candi's comments during the personal interview when she was asked to recount her experiences teaching IE that went well and those that did not go as expected. In her response, Candi stated,

It is important to identify how as I teacher, I am viewing the students in the class. Some teachers walk into a classroom and can view all their students the same. While others become fixated on the students' disabilities. When I first entered an inclusive classroom, I did become fixated on the disabilities of some of the students in the class and I became overwhelmed; wondering how I was going to be effective as a teacher in this class.

During this discussion using the subtheme, responsible teaching, the participants appeared to agree concerning the importance of being able to set specific realistic goals in an inclusive classroom. They also agreed on the importance of understanding how to view their students and to make sure they, as teachers, are not building barriers in the classroom because of a student's disability that would disrupt the learning environment.

### ***Professional Learning Communities***

Professional learning communities was the third subtheme that emerged within the theme, continued education and training. When asked, the participants all agreed that classroom instruction should be provided not just by the teacher assigned to the class, but it takes several offices and other services to provide instruction. A professional learning community is a team of educators who provide mentorship through shared ideas and enhance teaching practices to create a conducive learning environment that allows students to reach their fullest academic potential (Serviss, 2020).

Providing an avenue for students to reach their fullest academic potential is a major goal of IE. According to Acedo (2021), inclusive education provides a means to address and respond to diversity in a positive environment where cultures and communities come together, reducing exclusion from education. Community settings in education allow not only students, but teachers to interact with one another in hopes of gaining better insight into how to effectively operate within an inclusive classroom.

The participants agreed that they would like to have more interaction with special education teachers who could provide them with a better understanding of IE and more importantly, a better understanding of students with SEND that also includes students with ASD. In a personal interview, Abdul shared the following,

As a special education teacher, in my experience, I think we (special education teachers) should be assisting general education teachers especially in IE. General education teachers are asked to implement IEPs, and, in most cases, there are those general education teachers who do not know what an IEP is or how to implement one within their daily lesson plans. Not only am I trained at implementing IEPs, but I am also a part of the working group when IEPs are developed for the student.

Ahmad agreed with Abdul and added,

As a general education teacher, I have never been trained in implementing an IEP. As a matter of fact, I have been teaching in an inclusive environment for almost five years, but I am just learning what an IEP is and how it benefits a student with SEND.

A final recurring response from the participants was that support was needed from the school administration. Specifically, participants stated that the school administration had their goals while teachers had their goals, but these goals should intersect in several areas. Bambi

shared the notion that teachers understand running a school can be political and almost like a corporate business, but the goal should be the success of the students. All the participants insisted that principals and assistant principals should make a gallant effort to visit classrooms, talk to the students and look for ways to assist teachers in improving the learning environment.

Participants did not want to disengage from their discussion on the theme, continued education and training. In some instances, participants stated that they felt empowered because of the discussion. When asked what contributed to their feeling of empowerment, they agreed that having a discussion that dealt with continued education for teachers was helping them to gather their thoughts so they could address the issues identified by the group with the school administration. The participants remained professional throughout the group discussion and provided significant and insightful input while discussing theme 2, continued education and training. Participants also appeared to be very interested in discussing this theme and the subthemes that followed. When asked, the participants stated they would prefer discussions surrounding continued education and training by school administrators and others who could institute the changes suggested during the group discussion.

### **Theme 3: Classroom Management**

The third theme that emerged from the study, classroom management, is learner-centered and describes the responsibility of the teacher to prepare and organize course curriculum, while keeping in mind measurable, realistic, and well-defined academic goals (Branch & Kopcha, 2014). Van Brummelen (2009) explores this concept a little deeper in his discussion on teachers as shepherds or guides. In his analogy, Van Brummelen draws attention to the careful watch and leading a shepherd has for the sheep they are responsible for leading and guiding. He describes using a rod and staff to nudge them in the right direction (Van Brummelen, 2009).

It is easy to assume that Van Brummelen is merely talking about discipline and the stern guidance used to lead the sheep. But, in a previous discussion, Van Brummelen (2009) describes the Behaviorist's views of students (human beings) as trainable objects and Traditionalist's views as looking at students as blank slates, just means to transcribe information for the student to recall from memory. In both these instances, the educator neglects to see the holistic view of the student as created beings and made in the image of God. When a student is seen as created in the image of God, the teacher addresses other aspects of the students' learning experience. The teacher considers the physical, emotional, and spiritual aspects of the students' learning needs and addresses them all as God intended (Van Brummelen, 2009). By neglecting a holistic view, educators may teach toward the learner's cognitive intelligence but fail to see their emotional, social, and creative dimensions overemphasizing the rational dimension of the student.

The rod and staff mentioned by Van Brummelen (2009), is drawing attention to the care and watchfulness a shepherd must have while leading the sheep. The sheep's learning experience is not divided into separate secular and spiritual experiences, but the shepherd recognizes that God calls the learner to serve Him in all they do, not having a divided heart (Van Brummelen, 2009). As teachers organize appropriate pedagogical scenarios and set instructional goals, they should note how they are viewing their students. If they are viewing their students as trainable objects as behaviorist view their students; as traditionalists, viewing their students as blank slates for them to write on; or as beings created in the image of God, having a holistic view of life, and needing a nudge in the right direction.

The aim of instructional design is to create an instructional experience that can help facilitate learning for all students, those with SEND and TD students, more effectively. The third theme, classroom-oriented instructional design, triggered a lot of insightful conversations from



the participants during personal interviews and the focus group session. From the discussions surrounding the theme, three subthemes emerged, classroom procedures, systematic process, and principles of learning and instruction (see Table 4).

Table 4

*Theme 3 Classroom Management*

Subtheme	Code
Classroom Procedures	Penalties and Rewards (36), Student Participation (34), Student Behavior (29), Dealing with Unfinished Work (27), Requesting help (17), Entering and Exiting the Classroom (11)
Systematic Instruction	Purposeful Instruction (30), Student-Directed Learning Strategies (26), (Learner) Key Entry Skills (23), Curriculum Delivery (23), (Educational) Technology (21), Defined Instructional Goals (Objectives) (15)
Principles of Inclusive Education	Recognizing Individual Differences (32), Building a community (32), Curriculum Challenges (31), Assessing Diverse Learners (25), Learner-Centered Instruction (15), (Identifying) Emotions are Essential to Learning (12), Co-Constructed Learning Goals (9)

*Note.* Numbers in parentheses indicate the number of times specific responses were provided.

***Classroom Procedures***

The first subtheme that emerged within the theme, classroom oriented instructional design, was classroom procedures. Some key components in IE consist of providing teacher candidates with more of a core focus in inclusive education, making proper accommodations and modifications to course curriculum, assisting students using assistive technology, and setting classroom norms by establishing and implementing classroom standards and policies (Rapp et al., 2019). Participants insisted that their experience taught them to establish classroom operating procedures and share those expectations with the students and their parents at the start of the class. Participants also mentioned the importance of posting classroom procedures and providing

a reminder for students and their parents at least quarterly or when progress reports are sent out. Some participants shared, establishing classroom procedures and standards in IE can be challenging. From their experience, these teachers asserted, teachers in IE must find alternative methods to ensure students with ASD understand classroom procedures and the reward and punishment system (Schuetz et al., 2017).

When asked, what skills do teachers need to be effective in IE, several participants asserted they not only needed a firm understanding of the inclusive environment, but they also needed to understand how to manage an inclusive classroom and incorporate classroom procedures. Bambi shared some insight into her experience with incorporating classroom procedures in an inclusive classroom. Bambi stated,

After I was assigned to teach special needs youth and TD youth in IE, just like any other class, I wanted to ensure the students understood how to conduct themselves in the classroom. The issue was, how do I communicate in such a way to ensure all my students, those with autism and those TD students, understand with complete clarity all the suggested procedures for the class. I decided, instead of listing classroom expectations, I would allow the students to develop the classroom procedures. This would allow all the students to work together and allow me the opportunity to learn how my students with autism communicate.

Abdul provided similar feedback during the personal interview:

I personally think it is vital to the learning environment in an inclusive classroom to communicate and implement procedures along with expectations for the conduct of student behavior, repercussions for instances of misbehavior, and rewards following good behavior. Issues general education teachers may encounter is communicating their

intentions and expectations in a way that students with special educational needs who have communication impairments will understand.

Abdul further suggested, general education high schools teaching students with SEND to include ASD in IE should consider communicating classroom procedures with the parents of the students in the class. According to Abdul, in his experience, parental support is paramount to student development and could be sought after to assist with ensuring students understand and comply with classroom procedures.

During the focus group session, Ahmad discussed his views on communicating penalties and rewards to the students in an inclusive classroom. Ahmad stated,

When I had to talk about penalties and rewards as a part of classroom procedures, I would focus more on rewards than penalties. I would address the positive outcomes of what would happen when students completed assignments or participated rather than lead with discussing penalties for not completing assignments. I did this to motivate the students through rewards to complete their assignments or accomplish whatever task the reward was attached.

Barbara did not share the same outlook for communicating penalties and rewards to students in IE. Barbara found, in her experience, that providing the students with direct insight into violating classroom procedures established the authority in the class from the onset. Barbara believes that students need to understand where their right and left limits are and understand what will happen if they decide to go outside of those limits. Barbara stated, “When students are provided their left and right limits from a seat of authority, there is a better chance that they will respect and attempt to comply with classroom procedures.”

### *Systematic Instruction*

The second subtheme that emerged within the theme of classroom-oriented instructional design was systematic instruction. Ascherman (2017) stated that systematic instruction is an evidence-based method used in education to teach individuals with SEND. Incorporated in systematic instruction is the principle of applied behavior analysis, which allows teachers to teach a wide range of skills including functional living skills (Ascherman, 2017). The most important aspect of systematic instruction, according to Ascherman (2017), is systematic instruction is the process of breaking down concepts into smaller units and providing a strategy for improved understanding and comprehension of course curriculum. During the group discussion with Candi, she stated,

As a teacher in an inclusive classroom, I found that it is important that I know how to implement various instructional strategies to address issues when a student is having difficulty understanding the instruction from a specific lesson. The goal is to walk the students through the process, ensuring the instructional objectives are meant and eventually getting them to the point where they can complete the skills on their own.

Some participants echoed Candi's perspective, while others shared their challenges faced with developing purposeful instruction and defining realistic and attainable instructional goals. Bambi shared, "My biggest regret is that I do not believe I received the training needed to be able to set defined and realistic instructional goals in IE."

Bambi's comment prompted Ahmad to share,

I am not arguing the idea that as a general education teacher, there is a need for additional or continual training. What I do not believe is there is some magical formula I need to learn for curriculum delivery or setting curriculum goals. What I have learned in my

experience, both students with SEND and TD students need structure, individual, and group or class academic goals. When I am setting goals for the class, I consider if the student has any disabilities, but I do not allow the answer to that question stop the student's pursuits. I love to challenge my students and watch as they climb the proverbial ladder of success.

Barbara continued the conversation with the following point,

I understand the importance of challenging the students but because of state standardized testing, students must be able to understand, retain, and regurgitate information geared toward passing those tests. Providing students with information for the sake of them being challenged may not be a valid instructional goal. I think additional mentorship or professional development will help define better what we as general education teachers in IE should be looking at when setting instructional goals.

Abdul then shifted the focus of the group discussion from setting instructional goals to issues general education teachers have with understanding when or how to implement student-directed learning strategies. Abdul explained,

The goal of student-directed learning is to promote or create a platform where students with disabilities learn a sort of self-determination toward learning. In this learning environment, students with disabilities are taught how to regulate their behavior and take ownership of their learning by getting involved in the educational planning and decision-making process.

Abdul further stated,

It is important that teachers are not creating an environment where students are becoming drones; merely following orders with no thought or insight into their actions and no claim

or ownership for the curriculum being shared by the teacher. We want our students, especially those in high school, to be more independent and purpose in their actions toward learning. They should be given the opportunity to set SMART educational goals, learn how to conduct self-monitoring, and conduct self-evaluation, which is important for students to learn prior to submitting assignments.

Ahmad continued by sharing his thoughts about the difference between teacher-directed learning and student-directed learning. Ahmad shared that the major difference in a teacher-directed and student-directed learning strategy was the position the teacher takes in the classroom. According to Frazier (2018), in a teacher centered classroom, the teacher is the leader and the main authoritative figure in the class. The teacher also chooses the lessons, designs the course plan, and during group assignments, the teacher selects the groups for the students (Frazier, 2018). In a student-directed learning environment, instead of the teacher acting as an authoritative figure in the classroom, the teacher assumes the role of a facilitator. Frazier (2018) explained, the teacher, in a student-directed classroom, assures the students have the proper support as they make choices in their learning experience.

Bambi shared that she could not imagine having a classroom where the students were in charge. She stated that this type of setup seemed wrong. She continued by suggesting that in her opinion, teachers should always maintain control of the classroom because if or when control is lost, it is hard to regain. Barbara and Ahmad agreed with Bambi, and Candi added, “Remember control is an illusion.” Candi went on to say, “As a teacher, we do not necessarily lose control when or if we assume the role of a facilitator. The control we have just looks different.”

### *Principles of Inclusive Education*

The third and final subtheme that emerged within the theme, classroom oriented instructional design was principles of inclusive education. Hockings (2010) insisted that inclusive learning refers to ways pedagogy, curriculum, and assessment are introduced to students in higher education that is meaningful, relevant, and accessible to all levels of learners. Hornby (2015) stated that the aim of inclusive education is to provide an environment where students with SEND can be encouraged to interact socially with their TD peers. As students with SEND interact with their TD peers, research suggest, the communication and social interactions skills of youth with ASD, will improve (Koegel et al., 2012).

Hornby also identified four key principles that influenced a guide for the philosophy of inclusion. The principles identified were, first the importance of providing learners with a challenging, engaging, and flexible curriculum through general education; second, learning how to embrace diversity and how to respond to individual strengths and challenges; third was utilizing reflective practices with differentiated instruction; and the last principle was learning how to establish collaboration efforts where students, teachers, families, and other professionals come together to effectively influence and enhance learning in IE (Hornby, 2015).

In their own unique way, each of the participants discussed, in some detail during their personal interviews or during the group discussion, concepts from the four key principles of the philosophy of inclusion that they wanted to implement in their delivery to influence and challenge their students. Ahmad, during the group discussion, provided some good insight by sharing the following,

During my time teaching, I have found that students learn best when they are provided a challenge and they can engage in the learning process through games or in group

discussions. Students that I was told could not or had a hard time reading based off their disability, I found when challenged to read literature they were interested in reading, their reading and comprehension improved dramatically. The same is true in mathematics. I found that working in a group or on teams and having some type of competition in the class not only improved the students' understanding of mathematical concepts but also provided a means to improve their social and community-based skills.

Bambi brought closure to the discussion by summarizing her thoughts regarding the benefits of establishing a community based on collaboration within IE. She explained how her experience has taught her that without the collaborative efforts of the parents working with the students once the school day ends, makes it harder on the teacher the following day or when trying to move from one lesson to the next. Bambi continued by explaining that repetition is the key to learning, explaining the importance of going over the homework assignments and class notes from the lesson that day. Bambi shared,

I think just as important as it is to ensure the students are coming together in the class to work as a community, the teachers, parents, and school administration must come together if we are going to make a difference in the lives of our students in the class. I think being in one accord with the parents will help to ensure lessons that are taught in class are reiterated at home. Taking time to go over homework assignments or discussing class notes provided by the teacher can make a world of a difference as students work to learn the information.

### **Outlier Data and Finding**

This section contains the unexpected theme, understanding inclusion. During the individual interviews and the focus group discussion, the participants provided individual



definitions for inclusion and inclusive education. Depending on their level of experience, while working in IE, what was identified was the vast difference in opinion of IE and what was meant by inclusion. The difference of opinion in the views surrounding inclusion and IE, could have a negative effect on the learning environment in an inclusive classroom and could disrupt the teacher's ability to improve the education of students with SEND. Hornby (2015) suggested that full inclusion of a classroom is not something that can be achieved nor is it a clearly defined concept. He went on to say, full inclusion, which is the goal of inclusive education, is impossible to achieve in practice (Hornby, 2015). Within the theme, understanding inclusive education, there were three subthemes that emerged, defining IE, principles of inclusion, and practicing inclusion.

Table 5

*Understanding Inclusion*

Subtheme	Code
Defining Inclusive Education	Special Needs and Typically Developed Students (30), General Education Curriculum (30), Diversity (25), Different Strengths and Weaknesses (19), Community Based (17),
Principles of Inclusion	Planning (36), Community (34), Reflect and Evaluate (33), Embrace Diverse Abilities in Students (33), Develop a Learning Environment (29), Flexible Learning (26), Curriculum Diversity (25), Complex and Challenging Learning Experience (19), Feedback (17)
Practicing Inclusion	Confidence (in Implementing Practice) (36), Recognizing Individual Differences (32), Curriculum Challenges (31), (Teacher Beliefs in) the Importance of IE (30), Peer Support (27), Assessing Learners with Disabilities (25), Learner-Centered Instruction (15), (Identifying) Emotions are Essential to Learning (12), Co-Constructed Learning Goals (12)

*Note.* Numbers in parentheses indicate the number of times specific responses were provided.

### *Defining Inclusive Education*

The first subtheme that emerged within the theme, understanding inclusion was defining IE. Sharma et al. (2017) defined inclusive education as creating an opportunity in regular schools, for students with disabilities to participate. Whereas Jokinen (2018) define inclusive education as an educational system that fits all students, accessible with reasonable accommodations with individual support in a nondiscriminatory learning environment that meets the diverse needs of students (Jokinen, 2018). According to the American with Disabilities Act and Section 504 of the Rehabilitation Act (Sec. 504) inclusion is identified as the principle that supports the education of children with disabilities alongside their non-disabled peers. *Brown vs. Board of Education* held that separate was not equal, thus making inclusion the catalyst for providing equal educational opportunities; however, inclusion is not specifically defined by law, it is merely an idea that is supported through various federal mandates and policies).

Kendall (2019) insisted that defining the terms, inclusion and inclusive education are important but at the same time because the term inclusion is used so broadly in the field of education, defining the terms are problematic for researchers and educators alike. Wilde and Avramidis (2011) suggested that because of the lack of a common definition for the term inclusion, there is a large range of differing practices amongst educators who teach in IE. Participants during this research each shared a difference in opinion when defining the terms inclusion and inclusive education. During the group discussion, Bambi defined IE as being in a safe environment where youth with special needs can learn and grow. She further believed that special schools are much safer for youth with special needs than mainstream schools. In Bambi's opinion, she did not include the idea of TD students learning in the same classroom, but Bambi

did believe that students with SEND, and TD students could be taught together if the teacher was properly trained.

Ahmad had a different opinion about the definition for IE and shared the following,

I honestly believe IE works when students with special educational needs have one-on-one support. I think, to be successful in an inclusive classroom there must be an assistant teacher who can monitor the class and identify when students are struggling and may need additional support. However, I do not believe that all special needs students should be included in mainstream classrooms. There are some disabilities that students have which suggest specialized training to provide a quality education. Just having students in a classroom for the sake of having students in a classroom does not guarantee a quality education.

Abdul agreed that all students could not be educated together and there are special cases where students with disabilities need teachers with specialized training. Abdul suggested, in some instances special education teachers should be present in inclusive classrooms to properly assess students with disabilities to ensure they are following lesson plans and receiving a quality education. With the various definitions of IE, Kendall (2019) insist that inclusion is not merely about enrolling students with SEND into mainstream schools but is more about mainstream schools providing an opportunity for youth with various special needs and disabilities to receive a quality education. Opoku et al. (2021) suggested that teachers are instrumental in the successful inclusion of students with SEND in IE. In fact, Opoku et. al. insisted that teachers are key agents who are responsible for transforming policies on inclusion into practice in the classroom.

### *Principles of Inclusion*

The second subtheme that emerged within the theme, understanding inclusion was the principles of inclusion. Once it is understood what inclusion is, understanding how to operate or manage an inclusive environment is imperative to the overall educational success of the students. Tiernan et al. (2020) suggested that the underlying principle of inclusive education is the right of all children, regardless of special needs or disabilities, to receive a quality education. Tiernan et al. also inferred that an effective inclusive practice should include capable and functional leadership in the classroom, a positive attitude toward teaching students with SEND, and quality teaching with a focus on student achievement.

Each of the study participants shared that they believed teachers teaching in IE should demonstrate leadership, a positive attitude, provide quality teaching, and encourage academic and social success in the classroom. Other principles of inclusion identified by the participants were building a collaborative community shared with the students, parents, school administration, and other supporting agencies; developing curriculum that challenges the students to grow; and learning how to assess learners with disabilities. Abdul, during the group discussion, stated, “Based on my teaching experience, leadership in IE is paramount in establishing an environment conducive to the academic success of the class.” Abdul further stated,

Principles of inclusion must be trained and then put into action in the classroom.

Teachers must learn what works best for them and for their students. This also means, school administration must allow teachers room enough to make mistakes and provide a forum where they can discuss those mistakes to ensure growth. Mistakes and failure

being a part of life, teachers in IE must allow themselves the opportunity to make those mistakes, meaning teachers cannot be afraid to try.

Ahmad agreed with Abdul and shared,

I have made several mistakes in my career as a teacher and as a parent. I can only hope that I learned and grew from those mistakes. I think one thing I was missing, at least in the classroom, was the opportunity to discuss those mistakes amongst peers. Ultimately, in the classroom, the students will let you know when you have made a mistake or messed up. I allow and even coach my students to speak up and let me know what I am doing right and what I may be doing wrong. This is also a good leadership quality.

IE is creating a community in the classroom where students with and without disabilities can learn and grow together. Additional support from special education teachers, schoolhouse administrators, and the parents of both students with SEND and TD students is needed to ensure the academic success of students in the classroom (Roche, 2016; Taneja-Johansson & Singal, 2021). Therefore, to make IE a reality, the education system and its processes that encourage inequality must be transformed (Roche, 2016).

Each of the participants in this study were teachers who taught TD students and students with SEND, to include ASD, in IE. Throughout the study, each of the participants were personally invested in the information discussed during the personal interviews and group discussion. Due to the current pandemic, I was not able to interview all the participants who originally volunteered.

### ***Practicing inclusion***

The third subtheme that emerged within the theme, understanding inclusion was the practice of inclusion. Berry (2011) suggests, “Inclusion represents a basic change in who does

what, to whom it is done, where it is done, and how resources support what is done.” In the United States, it is not special education teachers, (those who are specifically trained to teach students with SEND to include ASD), who are teaching students with disabilities, but it is general education teachers, (who may lack specified training in teaching students with disabilities), who are responsible for teaching students with disabilities in a general education classroom (Berry, 2011). The aim of inclusion, according to Mangope, Otukile-Mongwaketse, Dinama, and Kuyini (2018) is to ensure no child is excluded from receiving an education.

Each of the study participants shared their experiences, their understanding of inclusion, and how their understanding of inclusion played into their overall practice of inclusion in a general education classroom. Most of the participants expressed concern practicing inclusion in IE because of their lack of understanding of inclusion or because they lacked the knowledge needed to implement strategies specifically designed to address the educational needs of students with ASD. Adolfo, during the group discussion, provided some good insight by sharing the following,

Going into an inclusive classroom with students who had a variety of disabilities and maybe two or three who were diagnosed with ASD, was nerve wracking at first. I did not know anything about IE let alone how to educate students who were autistic. In a lot of ways, I was frustrated, overwhelmed, vulnerable, anxious, and mostly fearful of the unknown. The most important thing when it comes to practicing inclusion is acknowledging you (as the teacher) need help.

Candi continued the conversation by further sharing,

Like Adolfo shared, I was intimidated when I first went into a classroom with special needs students and students without special needs (TD students). I was not sure how to

create an inclusive environment and I really was not sure how I would go about teaching special needs students. Any success I had in the classroom, I owe it to one of the more senior teachers in IE who took the time to provide me the mentorship I needed.

Abdul brought closure to the discussion by providing further insight to the practice of inclusion by general education teachers who teach students with ASD in IE. Abdul shared,

I personally think general education teachers, especially teachers who are working toward their initial teaching license, should have a mentor when assigned to teach students with ASD or other special educational needs in IE. I further believe, providing general education teachers with general information outlining the characteristics of the disabilities displayed in their classroom and how to accommodate these students will add to the overall management of the classroom and thus will help teachers with student expectations.

### **Research Question Responses**

Information gleaned from three data sources was used to answer the central research question and the three research sub-questions. Understanding how general education high school teachers describe their experiences teaching high school students with ASD in IE is outlined in the following sections.

#### **Central Research Question**

The central research question of this research study was: What are the perspectives and experiences of general education high school teachers with teaching students diagnosed with autism spectrum disorder in inclusive education? Through the individual interviews and the focus group session, insight was gained regarding the participants' experiences teaching high school students with ASD in IE considering the challenges, strategies and interventions, and the collaborative efforts of general education high school teachers in IE.

Based on the data provided by the participants, general education high school teachers described their experience teaching students with ASD in IE as positive, noting their ability to provide for the needs of the students in IE (Theme 1), their continued development as teachers in IE (Theme 2), strategies they developed to better manage the inclusive classroom (Theme 3), and their understanding of inclusion in education (Theme 4). However, the participants collectively indicated specific areas that could be improved to increase their ability to understand and meet the needs of their students in IE (Theme 1), increase opportunities for continued education and training (Theme 2), improve their ability to be able to develop and organize learner-centered course curriculum (Theme 3), and to have a consensus for the definition of inclusion in education (Theme 4).

### **Sub-Question One**

The first research sub-question was: How do general education high school teachers in IE describe challenges they experience in the classroom while teaching students with ASD?

Although the participants provided unique, individual responses to the inquiry, surprisingly, there was little variation in each individual teacher's experience. During the individual interviews, several teachers shared that a challenge they faced in IE while teaching students with ASD was understanding how to effectively communicate to students with ASD ensuring they understood daily lesson plans and course work, supporting Theme 1 and Theme 2. Specifically, Bambi highlighted how difficult it was to communicate with one of her students who has ASD,

There are times when I will provide the class with an assignment and when I ask if the assignment was understood, my student with ASD appear to agree that they understood the instructions; however, when they get home, their parent(s) contact me to tell me their



child, my student, did not understand the assignment. In the end, the student is frustrated; the parent is frustrated; and as the teacher, I feel like I failed everyone involved.

Abdul expounded on Bambi's thought and provided his perception for how teachers' self-efficacy can be negatively affected when parents complain that their student was allowed to leave the classroom without a complete understanding of the coursework. Abdul stated, "Because general education teachers may not have an understanding of how to communicate with students with ASD, they (general education teachers) are unable to determine if their student(s) with ASD are leaving the classroom understanding the coursework." Abdul continued by sharing the following,

Once the student returns home, parents, who probably worked all day, are stuck with trying to understand an assignment and explain it in a way where the student will understand and be able to complete it to turn it in. Furthermore, the parent becomes frustrated, must call the teacher, and the frustration does nothing but grow and turns into anger. Meanwhile, the teacher is stuck feeling like they failed in their responsibilities, and this ultimately affects their self-efficacy.

According to Paul (2008) one of the core symptoms of ASD is deficits in communication. In fact, in early developmental stages, youth with ASD are slow to begin talking, or may not learn to talk at all; while others may learn to talk but have difficulty using speech effectively to socially interact (Paul, 2008). Communication plays a large role in IE. Teachers must be able to communicate with their students as well as create an environment for students with ASD to learn how to communicate with their TD peers.

Aside from the challenge of communicating with students with ASD in IE, participants also agreed, establishing a working relationship with the parents of students with ASD was

challenging, providing support for Theme 1 and Theme 4. Specifically, Ahmad, during the group session, expressed some concerns he had dealing with the parents of students with ASD in his class. Ahmad stated, “There are times when I feel like the parents do not want to know how their students are doing in the class. It is almost like they are in denial.”

Abdul, a special education teacher, added to the discussion by sharing his thoughts on building healthy relationships with parents of students with ASD. Abdul provided three key points to building a healthy relationship,

Parents tend to feel that they only hear from the school or the teacher when their student has an issue or when there is a problem. As we look at building healthy relationships with parents, the first key point is to ensure we are communicating with our parents as often as possible. We want to contact them when their student is doing good in the class as well as when they need support. I think we should also contact our parents just to pass helpful information pertaining to different events taking place at the school or in the classroom. Second, we need to develop multiple means or methods of communication. The best way to develop multiple means of communication is to ask parents how they prefer to communicate at different times throughout the day. The last key point and maybe the most important is to build a mutual level of respect for each other’s position in the student’s life. Often, parents feel like teachers overstep their boundaries and try to take the place of the parent in the student’s life, while teachers feel like parents do not respect their position as teachers. I think approaching this matter in a non-threatening and humble manner will allow for each party involved in the student’s life to feel respected.

Several of the participants were receptive to Abdul’s key points; however, some of the participants insisted that this approach appeared to place the responsibility of developing a

collaborative relationship with the parents solely on the teachers. Abdul concluded the discussion by encouraging the other participants to consider the parent's position. Abdul shared,

An initial phone call from a teacher or a note home from a teacher about their student can be intimidating for parents and cause concern. Parents seem to think the worse when they initially hear from the school or teachers about their student, especially when there is only negative information shared from the school or the teacher. Considering those key points could change the parent's perception and ultimately create an avenue for a lasting relationship that will also include the student.

The overarching perception of the participants as they shared their experiences and their challenges in IE was that they felt comfortable sharing their personal views and opinions.

Participants described their experience teaching students with ASD in IE as positive; however, they expressed a general concern about their level of training and overall preparedness entering IE, directly addressing Theme 2 and Theme 4. Data also indicated overall that participants were concerned that they did not know enough about ASD to be able to effectively communicate, which had a negative affected on their self-efficacy, supporting Theme 1, Theme 2, and Theme 4.

This data suggests that it is critical for schools to design programs for general education teachers in IE to receive continued education and mentorship. Participants particularly enjoyed the group discussion and stated orchestrating group discussions more frequently in the school setting could foster better relationships between general education teachers, special education teachers, and school administrators. It was also stated that hosting group discussions in the school would also help foster an environment conducive to a positive attitude toward professional growth and mentorship.

## **Sub-Question Two**

The second research sub-question was: What are general education high school teachers' descriptions of the strategies and intervention techniques they implement to assist students with ASD in IE? This question led to the development of Theme 2, Theme 3, and Theme 4. Specifically, participants described their experience managing an inclusive classroom while teaching students with ASD. Participants discussed the anxiety and depression students with ASD experienced because of social isolation and how these issues affected the learning environment. Participants insisted that students with ASD in IE normally experience negative emotions such as anger, fear, anxiety, and depression, which has a drastic effect on their behavior and their cognitive ability in the class.

Barbara appreciated this question during the group discussion and was open to share her experience managing students with ASD in IE. Barbara shared her concern about a student with ASD who at times displayed an ability to read and comprehend grade level content; however, the same student in other times struggled reading and comprehending the same text. Barbara stated that she was perplexed and did not know how to assist this student. She continued by insisting that she grew more and more despondent, realizing that she not only could not assist her student, but she also did not know who she needed to speak with to get the help she needed. Bambi agreed and shared, "Situations where her students need assistance and as a teacher, not knowing how to help or who to turn to for support, is depressing."

As indicated from Theme 2, Theme 3, and Theme 4, participants were concerned that they did not have enough training in developing strategies and interventions to effectively manage inclusive classrooms with TD students and students with SEND to include students with ASD. Specifically, participants shared how their lack of understanding of an inclusive

environment and ASD negatively affected their self-efficacy. Participants were concerned that strategies they had learned for general education classrooms were not beneficial in IE and especially teaching students with ASD.

In an individual interview, Bambi insisted that in her experience, student-directed learning was strategy teachers were implementing during classroom instruction; however, Bambi stated that she did not know if this social skill intervention technique was beneficial when teaching students with ASD in IE. In a study conducted by Garrels (2019), students with ASD have a desire to be involved in decisions concerning their lives. Garrels also points out that there is no student-directed learning and the benefits of this intervention method used with students diagnosed with ASD (Garrels, 2019).

Aside from concerns general education teachers experienced when implementing student-directed learning for students with ASD, participants also expressed an uncertainty when addressing behavior issues in students with ASD. Nuske et al. (2019) considered the stress placed on students with ASD due to the continued transitions experienced in high school. Nuske et al. believed that issues students with ASD have with social communication, building relationships with peers, and continual changes in their environment may cause a negative shift in their behavior that is resistant to certain strategies and interventions (Nuske et. al., 2019).

Candi shared a similar concern as she discussed her experience implementing strategies to challenge unwelcome behavior in students with ASD. Candi continued to explain that she often hesitated confronting students with ASD who misbehaved in her class. Candi stated, “My TD students would recognize my refusal to address unwanted behavior from students with ASD and challenge me, stating that I was biased against students who did not have a special need.” Ahmad, during the personal interview, shared a similar insight as Candi. Ahmad believed that a

lack of understanding of ASD and the inclusive environment can affect the judgement of teachers as they seek to implement strategies to address unwelcomed behavior.

Participants explained their experience implementing strategies to help manage an inclusive classroom as challenging. These challenges were contributed to the difficulties students with ASD experienced with social communication, building relationships with their peers, and the continued changes brought on as students transition to high school and within the school, moving from class to class. Participants during the group discussion stated students with ASD because of the continual changes they face, experience different teachers and classroom management strategies. Participants insisted that these changes are frustrating and can be worrisome to students with ASD. Participants suggested using positive behavior interventions as described by Tillery et al. (2010). Positive behavior interventions teach expectation management and provide incentives while using evidence-based classroom management strategies. Participants also suggested learning strategies and invention techniques from special education teachers through peer mentorship and professional development, supporting Theme 2.

### **Sub-Question Three**

The third research sub-question was: How do general education high school teachers in IE describe their interactions with parents of students with ASD, their peers in special education, and the school administrative staff? This question prompted conversations that lead to the development of theme 2. Of the 12 participants, nine provided similar responses to describe their experience interacting with parents of students with ASD. Specifically, nine of the participants indicated that the parents of students with ASD were active in their students' academic development and responsive to teachers when or if they were contacted. Barbara explained that the parents of students with ASD in her class would often contact her once or twice a week to

ensure their student was still progressing in the class. Barbara stated, “The parents of the students in my class with SEND to include those with ASD, continue to show their support. I believe the parents involvement has a positive impact on the academic success of the student.”

Ahmad agreed with Barbara and shared that the parents of students with ASD in his class continually filled the classroom during Parent and Teacher Association (PTA) meetings. Ahmad continued by stating,

Having the parents’ support makes teaching easier and assures academic success. My parents (parents of the students with ASD) desperately want to feel included in the decision-making process. To assure them that their opinion matters, I make it a point to engage them on some of the most critical matters.

Research suggests that the partnership between parents and teachers are strained because parents do not feel like they are heard or included in making decisions for their student’s academic success (Mann & Gilmore, 2021). Mann and Gilmore continue by insisting, parents’ unhappiness with their student’s provisions in school was due to the school’s unwillingness to listen or accept the views of the parents. Three of the 12 participants had similar experiences when attempting to contact parents of students with ASD. Adaline, in a personal interview said that he rarely spoke with the parents of the students with ASD in his class. He continued by stating, “It seems that some of the parents of the students with ASD appear to be hesitant to engage in communication about their student. When I approach them with issues or general concerns, these same parents seem to be disinterested.”

For teachers, classroom management is traditionally accepted as the responsibility of the teacher assigned to that classroom. However, participants agreed, with the change of policy and regulations governing classroom mechanics and assigning more than one teacher to a class, the

responsibility of managing the classroom is now the responsibility of both teachers assigned to the classroom. Participants stated, the biggest challenge when sharing their classroom is committing to the idea of shared goals, decisions, classroom instruction, and sharing the responsibility for students' assessments and problem solving. Participants stated they felt uneasy when confronted with sharing their classrooms with special education teachers. Participants continued by insisting, they realized the benefits of having special education teachers in their classrooms, it was still challenging to share in their responsibilities'; claiming they felt like they lost more control, or they felt of inadequate. Abdul, a special education teacher shared,

Special education teachers have a different perspective on teaching students with ASD based off their training and experience working with students with SEND to include ASD. Working with a general education teacher will in a way balance their knowledge and be a greater benefit to their students and in IE. A combination of their experiences, training, and their unique skills could work to improve the learning environment in IE.

Gebhardt et al. (2015) concluded that the only way collaboration between general education teachers and special education teachers will work is dependent upon the teacher's perspective on collaboration. Gebhardt et al. further noted that collaboration can be the common factor that helps to improve special education, but it will only be effective if the teachers want it to work and are willing to work together to cause it to work. Casey (2019) also identifies the importance of general and special education teachers working together. Casey suggested, general and special education teachers must make time to get to know each other's strengths; build cooperative trust; understand the vision of the school or develop a vision for the classroom they are sharing; commit to professional development opportunities; identify and differentiate



between learning targets; and create a space for students with SEND to include ASD can get dedicated instruction when or if it is ever necessary.

A collaborative relationship between general education teachers, policymakers, and schoolhouse administrators, according to participants, are challenging relationships to form. Oftentimes systemic change involving large scale initiatives, for instance changes to curriculum or instructional material, how teachers assess their students, and changes that affect standardize testing can benefit from the collaborative efforts of educators and policymakers. However, instead of educators and policy makers coming together to implement changes that are needed for the best interests of the students, systemic change is often accomplished by policy makers who know little to nothing concerning academia.

Most of the participants stated that they did not have a working relationship with their school administrator, nor was their opinion considered when decisions were made concerning policies that affect classroom management or student performance assessments. During her personal interview, Bambi insisted she desired to see a board formed in her school that included the principal, assistant principal, school counselor, school social worker, and the teachers. Bambi continued by insisting that her experience in the classroom and her experience working with the students, gives her insight into how procedures, policies, and regulations will affect the learning environment.

Friction caused by debates concerning systematic reform in public schools on how to improve the quality of teaching and learning for students threatens to further damage the relationship between teachers, administrators, parents, and policymakers (Rubinstein & McCarthy, 2014). Several challenges make collaboration difficult, however, it is the principal beliefs of the parties involved that hinder agreement within the group on systematic reform in

public education (Rubinstein & McCarthy, 2014). When school administrators, policymakers, and educators come together in a collaborative effort and focus on teaching quality, students' education is improved.

### **Summary**

The purpose of Chapter Four was to present the data collected and provide a synthesis and summary. Data was collected using the survey instrument (see Appendix D) and individual and focus group interviews (see Appendix D). Information gathered from the three data sources was used to understand teachers' experiences teaching high school students with ASD in IE, identifying their challenges, strategies and interventions implemented in IE, and the relationships they build to create an environment where students with ASD can learn and grow. The analysis revealed four overarching themes: (a) understanding the needs of the students, (b) continued education and training, (c) classroom oriented instructional design, and (d) understanding inclusive education.

Findings from this study align with previous research that focused on general education teachers, the inclusive environment, and their experiences teaching students with ASD. Specifically, findings from this research provided data that supports general education teachers' need for continued professional development and mentorship; the impact of an effective learning strategy on the learning environment in IE; and the benefits of healthy collaborative relationships on the learning environment in IE.

## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this case study was to understand teachers' perspectives and experiences teaching high school students with ASD in IE with respect to challenges teachers face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow. Chapter Five consists of five discussion subsections: (a) Interpretation of Findings, (b) Implications for Policy and Practice, (c) Theoretical and Methodological Implications, (d) Limitations and Delimitations, and (e) Recommendations for Future Research. Finally, this chapter concludes with a summary to review the important conclusions drawn from the study.

### **Discussion**

The findings in this study support the theoretical and empirical literature pertaining to general education high school teachers' perspectives and experiences in IE while teaching students with ASD. Previous research suggested that challenges, strategies and interventions, and collaborative relationships are significant concerns addressed amongst general education teachers in IE. The theoretical framework for this study was based on Adom et al.'s (2018) ToM model, and Mergel's (1998) theory of behaviorism. Data from this study were pattern-matched and themes that impacted the learning environment in IE were identified. The following section includes a discussion of the link between the findings of this study and the theoretical and empirical framework of literature.

### **Interpretation of Findings**

After analyzing the data responses of the survey, the individual interviews, and the focus group, I identified four overarching themes: (a) understanding the needs of students with ASD,

(b) continued education and training for general education teachers, (c) classroom management, and (d) understanding the inclusive environment. The central research question used to guide the study served to understand teachers' descriptions of their experiences teaching high school students with ASD in IE.

The participants provided responses to the survey questions, individual interview questions, and questions posed during the focus group discussion. General education high school teachers in IE revealed that they desired professional development, mentorship, and the opportunity to learn strategies to create the ideal learning environment in IE where students with ASD could learn and grow. Participants also shared that teaching in IE without administrative support was problematic and needed to be addressed. Participants insisted that the collaborative relationship with school administrators played a key role in establishing a professional community with a shared aim to provide a quality learning experience for students with ASD in IE.

The first research sub-question addressed how general education high school teachers in IE described the challenges they experienced in the classroom while teaching students with ASD in IE. Most of the participants insisted that because general education teachers did not receive continued education or mentorship, their understanding of the inclusive environment and ASD as a neurodevelopmental disorder was deficient. Their lack of knowledge about ASD revealed a strong sense of anxiety, a fear of failure, and confusion as general education teachers attempted to address issues and needs of students with ASD in an inclusive classroom.

The second research sub-question addressed general education high school teachers' descriptions of the strategies and intervention techniques used to assist students with ASD in IE. The participants agreed that general education teachers faced challenges in developing and

putting into practice teaching strategies that supported the learning process for TD students and students with ASD. Participants insisted that general education teachers who taught students with ASD also dealt with challenges associated with encouraging participation and social involvement in students with ASD. Kasari et al. (2021) suggested that deficits in social communication affected the social understanding of students with ASD and their ability to implement the appropriate social skills in social settings.

Participants believed that general education teachers were expected to develop and implement teaching strategies to aid in teaching students with ASD in IE. However, according to participants, negative issues affecting instructional strategies and the quality of instruction in IE were lacking due to inadequate collaboration efforts between general and special education teachers. Participants also believed that general education teachers received insufficient training before going into an inclusive classroom. Hamman et al. (2013) stated, “Teacher education programs frequently prepare new, general-education teachers to instruct students with disabilities, but instead often leave special education preparation to general education faculty who have no expertise” (p. 245).

The final sub-question was, how do general education high school teachers in IE describe their interactions with parents of students with ASD, special education teachers, and school administrators? The participants provided insightful descriptions of their collaborative relationships and the effects of those relationships on the learning environment in IE. Participants insisted that collaboration with all parties allowed the exchange of ideas and resources, provided a means for teachers to discuss student learning goals and outcomes, and allowed collaborative learning activities. Collaboration plays a key role in education, providing general education

teachers with an enhanced understanding of the inclusive environment and positively affecting the learning environment in IE.

### ***Summary of Thematic Findings***

Interpretations of the data from the survey, individual interviews, and the focus group discussion were grouped into five sections: meeting the needs of students with ASD, professional development, peer-mentorship relationships, self-efficacy, and collaborative relationships. The theme of teacher continued education and training was not included in the list of interpretations to allow for discussion on the interpretation of suggestions made by participants concerning professional development and peer mentorship. Participants made several comments in which they alluded to professional development and peer mentorship as a desired means of continued education and training. Classroom management was another theme that was not included in the list of interpretations because it was logical to discuss the self-efficacy of general education teachers who were responsible for the management and establishment of the learning environment in IE.

**Meeting the Needs of Students with ASD.** participants, during their individual interviews, insisted that understanding the needs of students with ASD was of the utmost importance. Students diagnosed with ASD have deficits in their social-emotional reciprocity, display nonverbal communicative behaviors, and deficits in developing, maintaining, and understanding how to maintain or develop lasting relationships with their TD peers (American Psychological Association, 2022). In a structured environment with a conventional consistent routine, students with ASD can adapt to the new structure, gain an understanding of the curriculum being taught, and succeed academically and socially in an inclusive environment (Beghin, 2021; Gavin, 2018;).

Gavin (2018) insisted that youth with ASD in IE have a need for instructional support. They will learn better when general education teachers use pictures or projects and presentations to determine by means of what degree this population of students have achieved the expected learning goals. The idea is to limit the number of distractions and verbal instructions and replace it with visual prompts or written instructions (Gavin, 2018). During an individual interview, Bambi provided insight into her experience as a newly assigned teacher in IE. Bambi insisted that she was intimidated when she was first introduced to her students with ASD. She further noted that “when her students needed assistance completing an assignment, she did not know how to help.” Understanding how to assist students with ASD is paramount to their academic and social success in IE.

**Professional Development.** According to Waitoller and Artiles (2013), IE is a contentious global concept. The definition of IE varies among researchers and educators the nation (Hornby 2015; Waitoller & Artiles, 2013). Developing a professional development program will provide administrators and educators with the foundation for developing policies to improve the learning environment for students with ASD in IE.

Several participants commented about their desire to see more professional development programs supported and enforced by school administrators or policymakers. Professional development programs are a type of continuing education designed to provide educators with a way to expand or deepen their skills through formal classes, seminars, and workshops. Professional development for educators can also include informal efforts such as independent research, peer learning activities, or collaboration with other teachers. Several participants noted their disappointment in the school system for not having a standardized professional development program that would have a positive impact on the learning environment in IE.

Waitoller and Artiles (2013) insisted that professional development is an avenue for implementing policies that facilitate educational reform.

**Peer-Mentorship Relationships.** Participants expressed a desire to see policies put into place that would formally assign mentors to mentees. Participants suggested that developing the mentor-mentee relationship would further empower mentors as guides. A few participants suggested that mentorship relationships they were a part of often created misconceptions among mentees resulting in the mentor being seen as an evaluator and assuming a leadership role over the mentee. Participants suggested that the mentorship relationship resulted in newly hired teachers becoming frustrated. Participants agreed that despite the challenges associated with mentoring, the mentorship program could provide teachers with benefits such as instructional practices, help inexperienced teachers learn how to organize their time, provide mutual support, and provide a support system where newly hired teachers can learn various classroom disciplinary styles.

**Self-Efficacy.** According to Werner et al. (2021), teacher self-efficacy beliefs are teachers' confidence in their ability to provide academic instruction and create a positive learning environment for students with ASD in an inclusive environment. In their discussion of Bandura's theory, Chao et al. (2017) suggested that perceived self-efficacy relates to individuals' beliefs in their abilities to organize and implement the task required to achieve a specific outcome. Teachers with a low sense of self-efficacy are normally depressed and have feelings of helplessness while teachers with a high sense of self-efficacy have a positive self-awareness of themselves (Chao et al., 2017).

During his individual interview, Ahmad admitted to feeling anxious and a little intimidated and being under a tremendous amount of pressure when considering the academic



success of his students who were diagnosed with ASD. Some participants insisted that if afforded more opportunities for peer mentorship and professional development, they would feel more confident entering an inclusive environment, thereby increasing their self-efficacy. Other participants considered other stakeholders and the relationships they could form to aid them in improving the learning environment and reaching their students with ASD. Mofield (2019) stated, “Whether in the form of co-planning, co-teaching, coaching, or consultation, collaboration between the general education teacher and gifted education teacher can be a valuable way to plan and deliver differentiated instruction” (p. 20). Mofield suggested that collaboration is another means of mentoring through which the self-efficacy of general education teachers can be positively affected.

**Collaborative Relationships.** Collaboration involves two or more people effectively working together toward a shared goal. When educating students with disabilities, collaboration must include a variety of professionals. During the individual interviews and the focus group session, participants shared the need to build relationships with parents of students with ASD, special education teachers, and school administrators. Participants admitted the difficulty they experienced while trying to gain a working relationship with parents of students with ASD and how to incorporate their parents in the decision-making process in the classroom. When parents of students with ASD are involved in their children’s education, research has shown that there is an improvement in the children’s educational engagement and academic success (Schultz, Sreckovic, Able, White, 2016).

### ***Implications for Policy or Practice***

Because of various policy initiatives and the increased rate of students with ASD increased enrollment in public schools, general education classrooms have become increasingly

diverse. General education teachers bear the responsibility of creating an inclusive environment where students with ASD and TD students can learn together in social environments. However, as policymakers are continuing to encourage inclusion, general education teachers are struggling to implement inclusive teaching techniques because they lack the knowledge and skills to meet the diverse learning needs of students with ASD.

### ***Implications for Policy***

Individuals who want to become general education teachers in the state wherein this study occurred only need to obtain a bachelor's degree, select a preferred subject to teach, apply to a teacher licensure program, meet the state requirements, and apply for their teaching license. Within their teacher licensure programs, aspiring general education teachers do not take a course in which they learn to teach students with SEND in IE. Since many general education teachers complete only the basic requirements during their undergraduate studies, they are not afforded the opportunity to learn about neurodevelopmental disorders and how those disorders can negatively affect school-aged youth in the classroom. Incorporating a course that provides general education teachers with a basic understanding of various neurodevelopmental disorders could provide educators with a better understanding of the needs associated with students in this population.

### ***Implications for Practice***

Implementing new or revised policies may be prudent in IE; however, if those policies do not include changes in common practices and classroom management strategies, students with SEND in IE will not be successful. Developing a mentorship or professional development program is a practical approach to shaping the learning environment and impacting the academic success of students with SEND to include those with ASD in IE. School districts could

incorporate a professional development program designed to provide insight into various disabilities including ASD. In this regard, the North Carolina Board of Education could consider authorizing funds for schools to invest in continuing education for general education teachers through online professional development courses. School principals could erect formal peer-to-peer mentorship programs for general education teachers on topics such as youth neurodevelopmental disabilities, and classroom management strategies and techniques. They could also provide educators with an opportunity to discuss the benefits associated with developing healthy collaborative relationships with parents, special education teachers, and the school administrators.

When developing a mentorship or professional development program, senior teachers could mentor novice teachers, leaving administrators with the task of making the necessary adjustments to course schedules to ensure the program's success (Weinberg, 2022). During the personal interview, Abdul shared his thoughts about how much senior and novice teachers would benefit from a mentorship program. Abdul believed that mentorship and professional development could improve teaching practice and provide the support teachers need to influence learning and create an inclusive learning environment in IE. Abdul continued by sharing,

The school administrative staff should strongly consider which avenue to go when deciding upon creating a mentorship program. Mentorship can be unofficial or official. Unofficial mentorship programs are beneficial, but the relationship between participants is formed informally through a casual acquaintance or social interaction. Formal or official mentorship programs require more thought and planning by participants and school administrators. Formal or official mentorship programs have a greater chance to

develop a higher level of job proficiency and allows for meaningful feedback and practice.

During the focus group discussion, participants agreed with Abdul's comments, and a review of the related literature revealed that researchers underscored the benefits of mentorship programs on teachers' job performance (Hightower et al., 2020; Hobbs & Putnam, 2016; Willis et al., 2019). Participants agreed that an effort needed to be made to implement a professional development or mentorship program for general education teachers who teach students with ASD in IE. During the early stages of the COVID-19 pandemic, teachers taught remotely to protect their students and themselves. Participants shared that having a training program, perhaps an online training program, would be beneficial. Folostina et al. (2022) suggested that the best practices to address teachers' learning needs were online training programs because they offer teachers the opportunity to learn how to navigate through specific information and communicate technology-based instruction. Teachers who may feel uncomfortable providing instruction utilizing online technology can be certain that learning online will provide teachers a hands-on, learner-centered, and collaborative learning experience. Through this learning experience, general education and special education teachers have an opportunity to develop a richer understanding of the content as they engage in focused interactions within their small groups.

Another strategic component that could be implemented to address the academic success of students with ASD in IE is differentiation or differentiated instruction. Differentiated instruction, considered a didactic approach to teaching, can be implemented in the areas of course content, instruction, and assessment. Differentiated instruction allows general education teachers to respond individually to the academic and social needs of students with SEND to include students with ASD in IE (Lindner et al., 2021). However, it is critical for general

education teachers to receive additional training to implement differentiated instruction effectively because it is a complex approach to implement. Lindner et al. (2021) suggested that educators implement differentiated instruction without adequate training may struggle and inadvertently apply corresponding didactic techniques improperly.

Students diagnosed with ASD have common social communication challenges. Despite their shared challenges, educators must understand that a single form of intervention may not work for an individual student's ASD diagnosis (Kasari et al., 2021). Kasari et al. (2021) stated, "Children's strengths and needs vary substantially, and therefore, it is unlikely that a single intervention will be effective for all children" (p. 27). Kasari et al. further noted that implementing adaptive interventions will provide multiple interventions and increase the development of academic and social engagement while maintaining the ability for teachers to change curriculum instruction based on the individual needs of students with ASD and TD students in an inclusive environment. Adaptive interventions provide educators with guidelines to make logical decisions for interventions based on when and how the intervention needs to be applied and who will receive the intervention (Kasari et al., 2021). Using adaptive interventions will prevent experimenting on various intervention techniques without determining what intervention is appropriate for improving outcomes for students with ASD in IE.

### **Theoretical and Empirical Implications**

General education teachers who serve as primary educators in IE have a unique insight into the benefits and challenges associated with IE. Specifically, they understand the challenges experienced in IE, the strategies implemented to assist in managing an inclusive classroom and the efforts needed to build healthy relationships with other stakeholders associated with IE. Researchers suggests, some of the benefits of IE for students with ASD include social,

behavioral, and cognitive skill development (Gomez-Mari et al., 2021; Kroesch & Peeples, 2021; Nistor & Dumitru, 2021; Savolainen et al., 2012).

Savolainen et al. (2012) insisted that IE promotes an atmosphere of belonging and nurturing and ensures all students receive a free and appropriate education regardless of their gender, class, or cognitive and physical abilities. However, because students with ASD have deficits in communication and social interaction, IE may prove to be more of a challenge to them in comparison to their TD peers. According to Kasari et al. (2021), some of the challenges students with ASD experience are isolation and rejection that play a major role in their inability to form lasting friendships.

Social and communication impairments are often associated with deficits in ToM. Lantz (2017) suggested that ToM is a key component in understanding unwritten social rules that are prominent in social settings and individual conversations. Translating body language, understanding the pitch or tone of a person's voice, and understanding facial expressions play a major role in understanding the deeper meaning of conversations (Able et al., 2015; Gomez-Mari et al., 2021; Van Hees et al., 2015). Students with ASD find it difficult to understand non-verbal cues or fluctuations in a person's voice when communicating with TD peers or during class when teachers are presenting curriculum using these forms of communication to convey the meaning of a particular lesson. Researchers have found that deficits in ToM are directly related to difficulties youth with ASD experience when communicating with TD peers, listening to classroom instruction, or communicating with their teachers in IE (Able et al., 2015; Lantz, 2017; Van Hees et al., 2015). Providing general education teachers with the general understanding of how deficits in ToM affect the classroom performance and academic success of

students with ASD would equip those teachers with the constructive knowledge they need to teach in an inclusive environment.

Participants provided insight into the experiences of general education teachers in IE that aligned with the theoretical framework for this study. Specifically, general education teachers described socio-pragmatic dysfunctions displayed by students with ASD. General education teachers insisted that students with ASD displayed difficulties perceiving social cues and using language to make request or refusals, and students with ASD displayed difficulties conforming to conversational rules used daily by their TD peers. During the focus group interview, Bambi shared,

When I was first assigned to IE, I believe I had three students who were autistic. What I immediately noticed was how difficult it was to hold a conversation with them or simply ask if they needed assistance. It seemed like my autistic students would shy away from looking at me in my eyes and I felt like they may have thought I could not help them. Perhaps they believed I would not understand them because their speech may be slurred, or they mumble. I also felt like they may not understand me. I may talk too fast or not fast enough or perhaps I may not understand their non-verbal cues where they would need me to repeat whatever I was trying to state. This became discouraging.

Adolfo supported Bambi's statement by sharing,

Aside from my autistic students not requesting assistance, it was challenging for me to have them communicate with their peers and remain on topic. I hate cutting off students who were engaged in a conversation, especially if it was during class. But there were times when I would ask a question, encourage full participation, and when my autistic

students would respond, I had to learn how to guide them to answer the question and stay on topic all while encouraging them to continue to participate.

In their responses, the participants addressed their lack of training and the challenge they experienced when attempting to communicate with students diagnosed with ASD. Participants suggested they felt unprepared to enter an inclusive classroom with students with SEND including those with ASD. Furthermore, participants' attitudes toward inclusion differed. Some participants acknowledged the importance of inclusion while others insisted that IE was problematic, thereby suggesting that students with SEND, to include those diagnosed with ASD, needed to be separated from mainstream classrooms and placed in special education. Those participants who opposed IE suggested that general education teachers experienced challenges such as being limited in their abilities to teach in an inclusive classroom and having insufficient resources. Those challenges contributed to the low self-efficacy experienced by general education teachers in IE. Low self-efficacy and relatable challenges in IE were identified in the first three themes that emerged in this study: (a) understanding the needs of students with ASD, (b) teacher continued education and training, and (c) classroom management.

During the focus group discussion, Ahmad insisted that he wished he would have had training that could have provided him with the fundamental understanding for teaching students with SEND to include students diagnosed with ASD. Abdul, a special education teacher, agreed with Ahmad and stated, "General education teachers going into an inclusive classroom, should receive some type of foundational training in the inclusive environment, students with ASD, and some additional follow-on training throughout their time as general education teachers."

An additional theme was discovered during the data analysis process that impacted the participants' perception of inclusion: understanding inclusion. The theme, understanding



inclusion emerged because of responses by participants during the focus group discussion. Each participant provided their own definition of inclusion based on their experiences, thereby suggesting there may be some confusion or a lack of understanding concerning IE. The varied definitions for IE can make it difficult for general education teachers to manage an inclusive classroom. It could also be the catalyst for confusion and miscommunication among general education teachers, students with ASD, and TD students in IE. However, it was obvious from the discussion that participants desired to have a clear understanding of IE with a definitive definition of inclusion. Understanding IE and having a conclusive definition can have a positive impact on educators' understanding of the inclusive environment.

Within the theme understanding inclusion emerged, the following three subthemes emerged: (a) defining inclusive education, (b) principles of inclusion, and (c) practicing inclusion. Based on participants' responses, each of the three subthemes addressed variables that appeared to have an impact on general education teachers' perceptions and experiences while teaching students with ASD in IE. Specifically, nine participants had a different understanding of inclusion, and three participants could not define inclusion. According to Ryndak et al. (2000) the differing definitions of inclusion over the years has led to a misunderstanding of the inclusive environment amongst educators, researchers, and policymakers. Incorporating varying components to the inclusive definition also shapes the definition of inclusion for teachers, policy makers and researchers. Some of those components used to define inclusion include, attending schools in the neighborhood, the support rendered in general education classrooms to benefit students with SEND to include students with ASD, and the idea of being placed in a general education classroom (Ryndak et al., 2000). The incorporation of these terms used to infer

inclusion can explicitly or implicitly mislead general education teachers, school administrators, and educational policy makers.

During the group discussion, Barbara defined IE as “a general education classroom where students with special needs and non-disabled (TD) students are taught together.” During the same group discussion, Candi was asked to define inclusive education. Candi stated, “What makes education inclusive is bringing non-disabled (TD) students and students with special educational needs together, in the same classroom, and taught using general education curriculum.”

Most of the literature that addressed the challenges of general education teachers in IE is focused on their lack of knowledge of ASD and their lack of understanding of the inclusive environment. General education teachers’ lack of knowledge affects their confidence and their belief in their ability to provide instruction to students with ASD (Able et al., 2015; Corona et al., 2017; Werner et al., 2021). General education teachers’ lack of confidence leads to low self-efficacy, which has a drastic effect on the learning environment in IE and the academic success of students with SEND including students with ASD (Corona et al., 2017; Werner et al., 2021).

According to Woodcock et al. (2022), teacher self-efficacy is teachers’ belief in their ability to facilitate learning, student engagement, and to complete a particular teaching task. However, teachers who experience low self-efficacy find it difficult to adjust their teaching strategies to meet the needs of their students because they believe there is nothing they can do to improve students’ academic standing or change the learning environment in IE (Chao et al., 2017). Chao et al. (2017) suggested that low self-efficacy in teachers can result in low academic achievement among students with SEND to include students with ASD. Chao et al. stated,

“There is an indirect but powerful relationship between increasing teacher efficacy and increasing student achievement” (p. 361).

Several participants agreed that their low self-efficacy resulted from their lack of understanding of the inclusive environment, limited understanding of ASD, and inability to communicate effectively with students with ASD. Participants agreed that developing a professional development program that focused on increasing general education teachers’ understanding of the inclusive environment and their understanding of ASD would work to build their self-confidence, improve general education teachers’ self-efficacy, and ultimately have a positive effect not only on students’ academic achievement but also the learning environment in IE. Chao et al. (2017) insisted that teachers with a high sense of self-efficacy are open to using a wider range of teaching approaches and capable of overcoming challenges they encounter in IE.

The findings of this study have significant implications for stakeholders in IE. Specifically, stakeholders could use the data presented in this study to further address the challenges general education teachers experience in IE. Specifically, participants suggested that general education teachers who teach students with ASD in IE should have knowledge about the diagnosis and symptoms of ASD, how to address individual learning differences, the social norms of students with ASD, and how to implement strategies and techniques that positively affect learning for students with ASD.

Additionally, the findings of this study have implications regarding the importance of general education teachers’ knowledge of strategies and interventions to assist in managing the inclusive environment. The template for school management, which focuses on curriculum, instruction, and shared leadership with the school staff, is directly linked to educational practices in mainstream schools (Sakiz, 2018). The template for school management has direct

implications on the way general education teachers in IE prepare and manage their classrooms to allow for a structured inclusive environment. During the focus group discussion Adolfo shared,

It is important once the students arrive on the first day to set clear boundaries. Prior to going into an inclusive classroom. I would tell the students that we (the class) were going to set some clear boundaries for the good of the class. I would encourage all the students to participate as I wrote their ideas on the bulletin board, which we would hang for everyone to see. Entering the inclusive classroom, I tried the same thing, but it was difficult to convey my ideas to my who were diagnosed with ASD.

Abdul concluded the discussion with the following comment:

It is critical that teachers have acquired the skills to be able to organize their classrooms and manage the behavior of their students. Teachers who have difficulties with behavior management and classroom discipline are ineffective in the classroom and are often diagnosed with higher-than-normal stress levels and they seem to experience burnout before their peers who have less difficulties with classroom management.

Findings from the study also provided inferences about the collaboration efforts of general education teachers, special education teachers, parents of students with ASD, and the school administration. Data from this study provided insight into the need for teacher collaboration, specifically with respect to general education teachers who teach students with ASD in IE. Although the study's sample size was small, participants were diverse in their demographic composition and offered a unique representation of the population of general education teachers in IE in mainstream high schools. The information gained from the individual interviews and the focus group discussion collectively composed a depiction of challenges and

difficulties experienced by general education teachers, special education teachers, school administrators, and parents who work together to improve the learning environment in IE.

School administrators could design programs or opportunities for stakeholders to develop relationships as referenced by participants who found it difficult to communicate and organizing meetings with parents of students with ASD, special education teachers, and school administrators. Fonte and Barton-Arwood (2017) suggested that collaboration occurs when general education teachers, special education teachers, school administrators, and parents of students with ASD volunteer their time, come together, and establish mutual goals, and the learning environment for students in IE improves, thereby providing an opportunity for students with ASD to succeed academically.

### **Delimitations and Limitations**

Delimitations of this research study included the setting, the selection of participants, and the phenomenon examined. A large, senior high school offering inclusive classes taught by general education high school teachers who teach TD students alongside students with ASD in an inclusive environment was selected as the setting for this study. Participants had to be general education high school teachers who taught Grade 9 through Grade 12 students with SEND to include students with ASD in IE. Participants must have been general education high school teachers who taught in an inclusive classroom, as these individuals were the only persons who experienced the phenomenon within the context of the described case. The phenomenon was defined as an inclusive classroom with general education teachers who taught students with ASD.

Several limitations should be considered when interpreting the results of this study. First, only 11 general education teachers and one special education teacher, who worked previously as

a general education teacher, participated in this study. Because of the small sample size, the results of this study should be interpreted with caution. For future research, more general education teachers should be interviewed, and more general education teachers should be provided a survey with closed-ended survey questions for comparative analysis of the phenomenon. However, the use of different methods to collect data on the same phenomenon made the results of the data collected more credible. Second, the data collected is non-transferable and does not represent all teachers in IE. It is extremely hard to show that the conclusions and findings can be applied to other situations and populations because of the small sample size. Third, the participants' responses could have been biased. The participants in the group worked in the same public high school and may have had conversations preceding their interviews or the small group discussion. Additionally, participants' answers could have been influenced by personal, institutional, system-related, or policy-related factors instead of general education teachers recalling specific details from their experiences working with students with ASD in IE. Fourth, the study was based on self-reported data from the focus group and the personal interviews, which were subjective meaning there is possibility the data could have been influenced by peers or emotional stress.

Lastly, limitations were also placed on the data collection process because of the pandemic. I was not able to meet with teachers and thus had to rely on virtual meeting platforms. On several occasions, participants could not log on to the virtual meeting platforms, or they would lose internet signal in the middle of the interview; consequently, I had to start over once I regained contact with the participant. Also, general education high school teachers in IE were under tremendous pressure because of the pandemic. Face-to-face or traditional classes were restricted to online learning only, thereby extending teachers' workload as they had to manage

their traditional classrooms and the online classroom. Due to the compact schedules of teachers, schoolhouse principals limited the time I was allowed to conduct interviews.

### **Recommendations for Future Research**

A recommendation for future research is to conduct a qualitative case study with more participants to provide a representative sample of general education teachers in IE. Conducting research with a larger pool of participants will reduce the risk of accidental extreme or biased groups. Participants selected for this future research should be general education high school teachers who teach at various grade levels in IE. Selecting teachers from multiple grade levels will allow for various perspectives from different experiences as suggested by Creswell and Poth (2018). It will also be important to analyze the perspectives of special education teachers who work with general education teachers.

This study focused on the experiences and perspectives of general education teachers in IE. However, a recommendation for future research is a study examining the inclusive environment from the perspective and experiences of students with ASD. Conducting a study where students with ASD are the participants will provide a rich perspective of the inclusive environment and provide insight into how other professionals who assist general education teachers in IE would better support students with ASD to achieve academic success.

Examining the inclusive environment from the perspective and experience of students with ASD will also provide insight into how challenges associated with social interaction because of a social reciprocity defect affects the learning environment in IE. Hees et al. (2015) insisted that researchers were able to determine the challenges and support needed for students with ASD in higher education. Research suggests that a study where students with ASD were the focus prevented “the development of inadequate and stigmatizing support systems” (Hees et al.,

2015, p. 1674). A study from the perspective of students with ASD would provide a better understanding of the support needed by students with ASD in IE as well as provide insight into the development of intervention techniques tailored to their needs (Anderson et al., 2020; Hees et al., 2015).

A study examining the challenges associated with the collaborative efforts of general education teachers in IE to determine how those challenges affect the learning environment and the academic success of students with ASD may prove to be beneficial. Montgomery and Miranda (2014) concluded that cultivating an environment where general education teachers, special education teachers, parents of students with ASD, and school administrators begin to work together to make effective and lasting changes in IE has a positive effect on the self-efficacy of general education teachers. Chao et al. (2017) insisted that general education teachers' self-efficacy can impact the learning environment in IE.

As general education teachers make positive attempts toward collaboration, it is important to consider the challenges they face in building supportive relationships. Mofield (2020) discussed periods of frustration and isolation experienced by teachers who took a personal interest in their students. Mofield suggested that the frustration experienced by teachers was a result of their being "set in their ways" and unwilling to change (p. 22). This frustration experienced by co-teachers in IE prevented shared ideas or suggestions made by co-teachers who wanted to improve the learning environment in IE. Understanding the various perspectives of educators regarding collaboration may provide valuable insight into how to understand the inclusive environment better and provide a detailed description of collaborative strategies general education teachers may use to strengthen relationships of potential stakeholders in IE.



## Conclusion

According to Boitumelo et al. (2020), IE is a way of recognizing and communicating unique concerns between learners of diverse abilities by working to increase their participation and minimize exclusion. Additionally, IE assures a free and appropriate public education for all students in the least restrictive environment, regardless of intellectual, physical, or emotional disabilities. The purpose of this case study was to understand teachers' perspectives and experiences teaching high school students with ASD in IE with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with ASD can learn and grow. The central research question that guided this research sought to identify the benefits and the challenges general education high school teachers experienced while teaching students with ASD in IE. The central research question also provided study participants with a platform whereby they could contribute individual feedback regarding their perspectives and experiences teaching students with ASD in IE.

The participants in this study included 11 general education high school teachers and one special education teacher. All the participants had experience teaching in IE at Johnathon Brandon High School. Further analysis of the transcriptions from the interviews and focus group discussion yielded four overarching themes: (a) understanding the needs of students with ASD, (b) teacher continued education and training, (c) classroom oriented instructional design, and (d) understanding inclusion. Information from the three data sources (i.e., the survey, individual interviews, and the focus group discussion) were used to answer the research questions regarding how general education high school teachers describe their experiences and perspectives teaching students with ASD in IE.

The findings from this study align with previous research focused on general education teachers, the inclusive environment, and their experiences teaching students with ASD. Additionally, previous research and this present study confirm that general education teachers' experiences and perspectives in IE is affected by their understanding of the inclusive environment, their understanding of students diagnosed with ASD, their understanding of strategies and techniques used in IE, and their willingness to build strong relationships with special education teachers, parents of students with ASD, and school administrators. Throughout the course of this study, it became apparent that these factors influenced the learning environment in IE. The self-efficacy of general education teachers was greatly impacted by teachers' understanding of the inclusive environment and their understanding of the effects of ASD on students' academic performance and their social interaction. Other factors were found to be outside the control of general education teachers and may be distinct to specific school districts, such as support and collaboration efforts from school administrators, parents, or special education teachers.

The findings from this study provided data identifying the need for professional development training for general education teachers who teach students with SEND to include ASD in IE. The professional development training should consist of methods to understand the inclusive environment better and to design effective strategies and techniques that will positively impact the learning environment for students with ASD in IE. Research has shown that a lack of training accounts for the negative attitudes and the low self-efficacy general education teachers have toward the inclusion of students with SEND in general education classrooms (Boitumelo et al., 2020; Montgomery & Miranda, 2014). This study solidified that general education teachers need additional training and support to be effective teaching students with ASD in IE.

The findings in this research also identified general education teachers' need to build collaborative relationships with stakeholders who also have a desire to improve the learning environment in IE. Mofield (2019) stated, "Collaboration, notably peer-coaching, gifted education teachers can share instructional strategies whereby the collaboration is a professional growth opportunity for the general education teacher to learn" (p. 21). Mofield also concluded that collaboration is normally conducted to help build individual education plans for students with SEND, solve problems identified in the classroom, and coordinate efforts to support students with SEND entering IE.

Participants' responses aligned with prior research and strongly suggested that creating a network of collaborative partnerships could reduce teacher stress, increase teacher retention, improve communications between special education and general education teachers, and positively impact the learning environment in IE. During the group discussion, Abdul stated, "Collaboration amongst teachers could have a positive effect on the learning environment in IE." Adolfo agreed with Abdul and insisted that when he had the opportunity to work alongside his co-teacher and the parents of students with ASD, the students diagnosed with ASD in his class improved academically and in their social interactions with their TD peers.

Additionally, findings from this research are applicable to general education high school teachers teaching students with ASD in IE at all grade levels in high school. Teaching students with ASD, whether in the 9<sup>th</sup> grade or 12<sup>th</sup> grade, requires continued education and training to effectively manage an inclusive classroom. Data indicated that without additional training general education teachers' self-efficacy was negatively affected because of low confidence in their ability to manage and teach students with ASD. Data also indicated that general education

teachers experienced a sense of low confidence when faced with an inability to manage or effectively teach students with ASD in IE.

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## Appendix A

### Liberty University

1971 University Blvd., Bldg. #65 Lynchburg, VA 24502

## TEACHING STUDENTS WITH AUTISM IN AN INCLUSIVE ENVIRONMENT: A CASE STUDY

### INVITATION TO PARTICIPATE IN RESEARCH

Dear Educator:

You are invited to participate in a qualitative case study about high school teachers' perspectives and experiences teaching students with autism in an inclusive environment. The title of the research is *Teaching Students with Autism in an Inclusive Environment: A Case Study*. The purpose of this case study is to understand teachers' perspectives and experiences teaching high school students with autism spectrum disorder in inclusive education with respect to challenges they face, strategies and interventions they use to manage the classroom, and relationships they build to create an environment where students with autism spectrum disorder can learn and grow.

The study will address this central research question:

What are the perspectives and experiences of general education high school teachers with teaching students diagnosed with autism spectrum disorder in inclusive education?

Additionally, the research will address the following research sub-questions:

1. How do general education high-school teachers in an inclusive environment describe challenges they experience in the classroom while teaching students with ASD?
2. What are general education high-school teachers' descriptions of the strategies and intervention techniques they implement to assist students with ASD in IE?
3. What are IE general education high-school teachers' descriptions of their relationships with special education teachers, parents of students with ASD, and the high-school administration staff?

To help answer these questions I would like you to fill out a very brief demographic information questionnaire and participate in one interview where you will provide details about your experience teaching students with special educational needs in an inclusive environment. The interview will take approximately 1 hour and be audio-taped and then manually transcribed. The interviews will take place at a time, place, and format convenient to you. You will not be identified by name when information is analyzed or in any findings that come from the study. Participation in this study is completely voluntary. You may choose not to participate at all or withdraw your participation and data from the study up to a month following your interview by emailing or calling me. Your participation will be kept confidential to the extent possible.

I have attached an information sheet that answers some of the questions that you might have. If you have any further questions about this research, you may contact me by email:

████████████████████

I look forward to your cooperation and hope you might find it an interesting experience.

Yours sincerely,  
Corey A. Brooks

This study has been reviewed for its adherence to ethical guidelines and certified by the Institutional Review Board (IRB) at Liberty University. If you wish to contact someone not associated with this study to ask questions or raise concerns about your role as a participant in this study, please contact the IRB by letter or email:

- a. Email: irb@liberty.edu
- b. Fax: (434) 522-0506
- c. Mail: IRB 1971 University Blvd. Lynchburg, VA 24515
- d. In Person: Green Hall, Suite 2845

## **INFORMATION SHEET:**

### **SOME QUESTIONS THAT YOU MIGHT HAVE ABOUT THE STUDY**

#### **Q. Who is being asked to participate?**

**A.** I want to speak to teachers with experience teaching students with special needs, particularly autism in an inclusive environment.

#### **Q. Do I have to participate?**

**A.** No, and you may withdraw from the study at any time if you do decide to participate. Let me know of your decision up to a month after your interview.

#### **Q. What exactly is involved?**

**A.** You will be asked to fill out a short demographic questionnaire with basic information about your teaching experience and participate in one interview. The focus of the interview is on your experiences and perspectives relating to special needs youth and autistic youth in an inclusive environment.

#### **Q. How long will it take?**

**A.** The questionnaire will take between 5 and 10 minutes and the interview is approximately 1 hour. The questionnaire and interview will be conducted at a time and place convenient to you.

#### **Q. What are the benefits of participating in the study?**

**A.** The study is an opportunity for you to contribute to a qualitative case study to gain a better understanding of high school teachers' perspectives and experiences teaching autistic youth in an inclusive environment. There is very little scholarly work on this topic. I hope the results from this research will provide a better understanding of general education and special needs teachers' experiences in an inclusive environment.

#### **Q. What are the benefits or risks?**

**A.** People involved in this work generally find it interesting and find it a positive experience to have their opinions and perspectives heard during an interview. However, if you do not feel

comfortable at any time, you are free to discontinue participation in the interview. You can also withdraw from the study up to a month after your interview if you change your mind.

**Q. Will my information be kept confidential?**

A. Yes. The information collected will be for research purposes only. You will not be identified by name when information is analyzed or in any findings that come from the study. The name of your school or any other identifying information will be changed and anonymized as well. All identifiable personal information about participants will be held in locked cabinets and password-protected computers. You can choose a pseudonym. Pseudonym keys will be prepared and kept separately from the data.

**Q. Who is doing the research?**

A. Corey Antione Brooks doctoral candidate at Liberty University.

**Q. Do I get to keep a copy of this information letter and the consent form?**

A. Yes, you will be provided with a copy of the information letter and the consent form. If the interview is conducted via Skype, your verbal consent to participate will be recorded on the copy I will maintain.

**IRB APPROVAL:**

This study has been reviewed for its adherence to ethical guidelines and certified by the Institutional Review Board at Liberty University. If you wish to contact someone not associated with this study to ask questions or raise concerns about your role as a participant in this study, please contact Liberty University IRB either through email, fax, or phone.

**RESEARCHER CONTACT:**

Corey A. Brooks at [REDACTED].

**Appendix B**

Liberty University  
1971 University Blvd., Bldg. #65 Lynchburg, VA 24502

**Teaching Students with Autism in an Inclusive Environment: A Case Study**

1. Gender: (please circle) Male    Female
  
2. Your age range: (please circle)  
    below 25      25-35      36-45      46-55      55+
  
3. Your educational level (please circle):  
    Bachelors  
    Bachelors + 15  
    Masters  
    Masters + 30  
    Doctoral
  
4. Current level you are teaching (please circle):  
    Elementary      Middle      High School
  
5. Number of years teaching at this level: \_\_\_\_\_
  
6. Number of years teaching in total: \_\_\_\_\_
  
7. Number of courses received in teaching children with special needs: \_\_\_\_\_
  - a. Number of years teaching children with autism spectrum disorder: \_\_\_\_\_
  
8. Amount of experience with teaching children with special needs in your classroom: \_\_\_\_\_



### Appendix C

1. How would you describe your experience as a general education high school teacher teaching youth with ASD in inclusive education? (SQ1, SQ2, SQ3)
2. What experiences went well with the inclusion of students with ASD in your class? (CRQ, SQ1)
3. What experiences did not go well with the inclusion of students with ASD in your class? (CRQ, SQ1)
4. What skills do you need as a teacher to be effective teaching students with ASD? (SQ1)
5. How would you describe the communication you have with the school administration? (SQ3)
6. How would you describe the communication you have with the parents of students with ASD? (SQ3)
7. What are some general factors that describe the communication you have with special education teachers? (SQ2, SQ3)
8. How would you describe the partnership that exists between the parents of students with ASD and the school administration? (SQ3)
9. How would you describe your relationship with the parents of students with ASD? (SQ3)
10. How would you describe your relationship with special education teachers teaching at your high school? (SQ3)
11. What additional relationships could be established that would enhance the learning environment in your classroom? (SQ3)
12. What types of interventions and strategies were you able to implement to control disruptive behavior of students with ASD? (SQ2)

## Appendix D

Liberty University  
1971 University Blvd., Bldg. #65 Lynchburg, VA 24502

### Teaching Students with Autism in an Inclusive Environment: A Case Study

**Instructions:** Please complete the following survey by circling the appropriate response corresponding to your belief. Use the following key to determine your answer.

SD=Strongly Disagree

D=Disagree

A=Agree

SA=Strongly Agree

1	My educational background has prepared me to effectively teach students with special educational needs and disabilities.	SD	D	A	SA
2	My educational background has prepared me to effectively teach students with autism spectrum disorder.	SD	D	A	SA
3	My educational background has prepared me to teach in an inclusive environment.	SD	D	A	SA
4	I need more training to appropriately teach students with special needs and disabilities.	SD	D	A	SA
5	My colleagues are willing to help me with issues that arise with students who have autism spectrum disorder when troubles arise.	SD	D	A	SA
6	I feel comfortable in working collaboratively with special education teachers when students with special needs and disabilities who are in my class.	SD	D	A	SA
7	Students who are diagnosed with autism spectrum disorder should be in a special education classroom.	SD	D	A	SA
8	I need more training to understand how to implement an IEP for students with special needs and disabilities.	SD	D	A	SA
9	I need more training to understand how to implement an IEP for students with autism spectrum disorder.	SD	D	A	SA
10	More effort is needed to train general education teachers to understand and implement IEPs in an inclusive environment.	SD	D	A	SA
11	Collaborative teaching of children with special needs and disabilities can be effective particularly when students with an IEP are placed in a regular classroom.	SD	D	A	SA
12	Special education teachers should teach students who hold an IEP.	SD	D	A	SA

13	My district provides me with sufficient out of district training opportunities for me to appropriately teach students with disabilities.	SD	D	A	SA
14	I am provided with sufficient in-service training through my school district which allows me the ability to teach students with an IEP.	SD	D	A	SA
15	I am provided with enough time to attend conferences/workshops on teaching students with autism spectrum disorder.	SD	D	A	SA
16	I can approach my colleagues for assistance when needed if I have students with autism in my classroom.	SD	D	A	SA
17	General education teachers should not be responsible for teaching children with autism spectrum disorder.	SD	D	A	SA
18	Co-teaching is more beneficial in an inclusive classroom when teaching students with special needs and disabilities and students with autism spectrum disorder.	SD	D	A	SA
19	Parents of students with autism spectrum disorder are very involved with their student's education	SD	D	A	SA
20	I feel as though I can call the parents of my students with autism spectrum disorder for any reason.	SD	D	A	SA
21	I have a strong relationship with the parents of my students with autism spectrum disorder.	SD	D	A	SA
22	I enjoy teaching in an inclusive classroom.	SD	D	A	SA
23	I feel like my education has prepared me to teach in an inclusive environment.	SD	D	A	SA
24	I feel like I have the training necessary to connect with my students who have special needs and disabilities.	SD	D	A	SA
25	I understand fully how my students with autism spectrum disorder will respond to the coursework I give them.	SD	D	A	SA
26	My colleagues are approachable when I ask for their advice when I teach students with special needs and disabilities.	SD	D	A	SA
27	Other teachers with more experience teaching students with special needs and disabilities to include autism spectrum disorder are very willing to provide advice or assistance.	SD	D	A	SA
28	General education teachers and special education teachers should teach students with special needs and disabilities to include autism spectrum disorder.	SD	D	A	SA
29	I am provided with sufficient materials to be able to make appropriate accommodations for students with special needs and disabilities and those students with autism spectrum disorder.	SD	D	A	SA
30	I am provided with monetary support to attend conferences/workshops on teaching students with special needs and disabilities to include those with autism spectrum disorder.	SD	D	A	SA

31	I struggle with implementing measures to effectively manage youth with SEND who misbehave and interrupt the class	SD	D	A	SA
32	I tend to overlook students with behavior issues because students with SENDs cannot control their emotional responses	SD	D	A	SA
33	I have successfully implemented strategies in the class to help provide structure and deal with behavior issues from students with ASD	SD	D	A	SA
34	The students with ASD in my class have a difficult time socially communicating with their TD peers	SD	D	A	SA
35	The students with ASD in my class are not performing as well as expected	SD	D	A	SA
36	My expectations for the students with ASD in my class were set to high for them to obtain	SD	D	A	SA
37	Youth with ASD in my classroom feel marginalized and devalued because of anxieties brought on by not being able to achieve state standards on high-stake state recognized test.	SD	D	A	SA
38	Curriculum delivery in my classroom meets the needs of each child to include those students with SENDs	SD	D	A	SA

What type of delivery method do you believe would benefit you most in receiving training regarding including students with autism spectrum disorder in an inclusive classroom?

(Rank from 1=most beneficial to 7=least beneficial)

District level in-service training

Out of District training

Coursework at college/university

School building level training

Article(s) provided to you

Time for consultation with school psychologist

Time for consultation with special education teachers

Please list other methods of training delivery you believe would be helpful in receiving information on inclusive education:

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Please list any other topic(s) you believe should be included in the training for inclusive education:

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Thank you for your time and input.

**Appendix E**

**Liberty University**

1971 University Blvd., Bldg. #65 Lynchburg, VA 24502

Title of Project:

**TEACHING STUDENTS WITH AUTISM IN AN INCLUSIVE ENVIRONMENT: A  
CASE STUDY**

**Informed Consent for Research Involving Human Subjects**

Principal Investigator: **Corey A. Brooks, Ed. D.**

Cell Phone: [REDACTED]

e-mail: [REDACTED]

I, \_\_\_\_\_, hereby give my consent to have my child participate in the research study entitled “Teaching Students with Autism In An Inclusive Environment: A Case Study,” details of which have been provided to me above, including anticipated benefits, risks, and potential complications.

I fully understand that my child may withdraw from this research project at any time without prejudice or effect. I also understand that I am free to ask questions about any procedures that will be undertaken.

Finally, I understand that the information about my child obtained during this study will be kept confidential unless I consent to its release. *(Return signature page to researcher; keep remaining pages for your records.)*

\_\_\_\_\_

Parent’s Signature

I hereby certify that I have given an explanation to the above individual of the contemplated study and its risks and potential complications.

\_\_\_\_\_

Researcher

**Appendix F**

February 17, 2021

Corey Brooks  
Kenneth Tierce

Re: IRB Conditional Approval - IRB-FY20-21-508 TEACHING STUDENTS WITH  
AUTISM IN AN INCLUSIVE ENVIRONMENT: A CASE STUDY

Dear Corey Brooks, Kenneth Tierce:

We are pleased to inform you that your study has been conditionally approved by the Liberty University Institutional Review Board (IRB). Conditional approval means that your complete approval is pending our receipt of certain items, which are listed below:

Documented approval from each research site you are enrolling in your study. Acceptable forms of documentation include a letter on official letterhead, or a time-and-date stamped email from a person with the authority to grant permission.

Please keep in mind that you are not permitted to begin recruiting participants or collecting data until you have submitted the above item(s) and have been granted complete approval by the Liberty University Institutional Review Board.

Thank you for your cooperation with the IRB, and we wish you well as you continue working toward complete approval.

Sincerely,

G. Michele Baker, MA, CIP  
Administrative Chair of Institutional Research  
Research Ethics Office