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Meeting Learning Needs of Children With Autism Spectrum Disorder in Elementary Education

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Sally Partlo

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Abstract

Meeting Learning Needs of Children with Autism Spectrum Disorder in Elementary

Education

by

Sally Partlo

Project Study Submitted

for the Requirements for the Degree of

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Abstract

In a southeast school district, students with autism spectrum disorder (ASD) are taught by elementary general education teachers despite their lack of training to meet the needs of such students. To provide effective education that supports the learning needs of students with ASD, exploration of the problem was needed. The intended outcome of this qualitative case study was to provide information to district administrators that could be used to develop interventions to help general education teachers meet the learning needs of students with ASD. The Iovannone, Dunlap, Huber, and Kincaid model of effective educational practices for students with ASD grounded the study. Research questions explored how general education teachers met students' individual support and service needs, academic needs, structured learning environment needs, communication and language needs, and disciplinary needs, as well as what supports and resources teachers perceived they needed to meet student needs. Ten elementary general education teachers participated in the study. Data were collected through interviews and analyzed using provisional coding and pattern coding. Six themes emerged from the analysis: (a) individual support and service, (b) academic needs, (c) structured environment needs, (d) communication and language needs, (e) disciplinary needs, and (f) teachers' perceptions of needed supports and resources. The results were used to create a professional development 3-day program from which teachers could strengthen their knowledge and skills in providing quality instruction to students with ASD. Such training may result in social change by improving the quality of education provided to students with ASD that will enhance their opportunities to live valued lives.

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Section 1: The Problem

Introduction

In the U.S., Before the 1990s, students with disabilities were educated in classrooms among other students with disabilities where they received little to no interaction with typical peers (Jung, Cho, & Ambrosetti, 2011). The Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004) mandated that all students receive their instruction in the least restrictive environment (LRE) and increased efforts improve access for students with disabilities to typical peers by including them in the general education classroom. Since 2004, many teachers have been unprepared to work with students with disabilities, including students with autism spectrum disorder (ASD) (Ross-Hill, 2009). Teachers' lack of preparation influences the effectiveness of the instruction that students with disabilities receive (Ross-Hill, 2009).

ASD is rapidly increasing in the nation and is ranked as the sixth most common disability in the United States (Hart & Malian, 2013). The Centers for Disease Control and Prevention (2014a) reported that the number of children diagnosed with ASD has risen from 1 in 110 children in 2012 to 1 in every 68 children in 2014. An increase in the prevalence of ASD has placed more demands on schools, staff, and teachers to create an inclusive educational environment that meets the needs of students with ASD (Brock, Huber, Carter, Juarez, & Warren, 2014). Despite the increased efforts in educating students with ASD in the general education classroom, many teachers are not prepared to teach these students (Busby, Ingram, Bowron, Oliver, & Lyons, 2012). This may have implications for achievement among students with ASD.

Students with ASD require a specialized education to meet their complex and unique learning needs (Morrier, Hess, & Heflin, 2011). Students with ASD often exhibit characteristics such as social communication impairments, the presence of restrictive interests, and repetitive behaviors (American Psychiatric Association, 2013). Students with ASD often require instruction through the use of specific interventions such as behavior intervention plans, picture schedules, and visual supports (Hill & Sukbunpant, 2013). Busby et al. (2012) noted that students with ASD often exhibit behaviors that are disruptive within the classroom. King-Sears, Carran, Dammann, and Arter (2012) recommended specialized training for teachers to prepare them for teaching students with ASD. However, many teachers have not received such training (Hart & Malian, 2013).

The Local Problem

As in most school districts across the United States, a northwestern school district in Georgia includes students with ASD in general education classrooms (Lindsay & Edwards, 2013) despite that the general education teachers have little or no preparation in how to effectively meet the unique learning needs of students with ASD (Hart & Malian, 2013). More specifically, the special education coordinator for the district stated that many of the general education teachers have not received pre-service' training adequate to meet the unique needs of students with ASD (personal communication, December 2, 2014). Although students with ASD benefit when they are included in the general education classroom, especially in the areas of positive social interactions and peer modeling (Von Der Embse, Brown, & Fortain, 2011), teachers are often not able to meet the learning needs of these students' needs within the general education classroom (Hart

& Malian, 2013). To provide effective teacher preparation that supports the learning needs of students with ASD, further exploration is needed (Lindsay et al., 2013); therefore, the purpose of this study was to explore how general education teachers meet the learning needs of students with ASD and the resources and supports that teachers need. The school district may use the findings of this study to design interventions that will help general education teachers improve their instruction for students with ASD.

Rationale

Stakeholders in a northwestern school district in Georgia have voiced concerns about the instruction of students with ASD within the general education classroom for several years. In 2010, the district partnered with Emory Autism Center for 5 consecutive years to assist teachers within the district in addressing the many challenges they encountered when trying to meet the learning needs of students with ASD (Holloway, 2013). Despite this partnership, the district's staff still voiced concerns about their ability to meet the needs of students with ASD in the general education classroom.

After several conversations with various staff members in the district, the rationale for the study was unmistakably apparent. The special education coordinator for the district stated that the abilities of general education teachers to instruct students with ASD in the areas of academic, social, communication, and behavioral needs are at a basic level and they often are not adequately trained to meet the unique needs of students with ASD (personal communication, December 2, 2014). A general education teacher of students with special needs in the district (personal communication, December 6, 2014) stated that unprepared elementary general education teachers have been serving students

with ASD for years. The teacher also described frustration with personal attempts to support students with ASD in the general education classroom with little preparation. Another general education teacher expressed increased anxiety before the school year because a student with ASD was on the class roster. The teacher was anxious because she did not have the skills and knowledge to effectively provide instruction to the student with ASD (personal communication, August 3, 2015).

Teachers have voiced concerns within the district to peers and supervising faculty about the many challenges they encounter when teaching students with ASD (general education teacher, personal communication, December 6, 2014). For example, the special education coordinator (personal communication, December 2, 2014) stated that several teachers have stated that they believe the more support they provide to students with ASD, the more they are not giving the other students in the class adequate attention. Others have reported that they did not have the resources to design the instruction that students with ASD needed (general education teachers, personal communications, December 1, 2014). A coaching specialist for teachers within the district at an elementary school recalled a number of teachers who had commented on their lack of ability to effectively meet the needs of their students with ASD (Personal Communication, September 16, 2015). The coach additionally stated how a lack of training on effective teaching strategies may be the reason why teachers perceive that they have difficulty teaching students with ASD.

The following table provides the demographics of the students with ASD in the district. It shows that 21 students with ASD were taught by general education teachers in the 2016-2017 school year.

Table 1

*Elementary School Students With ASD in Northwestern School District of Georgia
Receiving Instruction in General Education Classrooms*

	Number of students in 2015-2016	Number of students in 2016-2017
Total number of elementary school students with ASD	28	21
General education classroom for a segment of the school day	16	13
General education classroom for 80% or more of the school day	10	8
In a separate, special education classroom for entire school day	2	0

Note. Numbers gathered from full-time equivalent (FTE) data reported in the cycle FTE 2016-1 and FTE 2017-1. ASD, autism spectrum disorder.

Definition of Terms

Autism spectrum disorder (ASD): ASD is a developmental disorder marked by impairments in social skills, language, and repetitive and perseverative behaviors (Dimopoulou, 2012).

Behavior intervention plan: This is a plan used by a teacher for managing a student's behavior (Positive Behavioral Intervention & Supports World, 2015). The plan provides individualized support for students who have specific behaviors and issues that interfere with their education.

Least restrictive environment (LRE): The LRE should be the general education classroom unless a student's disability impedes his or her learning within the setting, at

which time the student may be educated in a more restrictive environment (Park & Chitiyo, 2009).

Picture schedule: These are sets of pictures and words that provide cues for students with a disability to perform a task or engage in an activity (Positive Behavioral Intervention & Supports World, 2015). Picture schedules are visual supports that provide students the ability to understand and predict transitions throughout the day in a concrete representation.

Visual supports: These are supports used to increase language usage and understanding of environmental expectations for students with disabilities (Cohen & Gerhardt, 2015). They are often used to attract students' attention, provide a communication system for nonverbal students, and make abstract concepts more concrete.

Significance of the Study

The teachers within the northwestern school district of Georgia may benefit from the results of the study should the district use the study to create interventions to help teachers better meet the learning needs of students with ASD. Ultimately, the results from the study may provide information that can be used to guide a more effective education that brings about positive social change by giving students with ASD opportunities that may enhance their opportunities to live valued lives.

Research Questions

The main problem that I addressed in this study is that general education teachers are not adequately prepared to provide effective educational practices to meet the unique

learning needs of students with ASD. The purpose of this qualitative research study was to explore how general education teachers meet the learning needs of students with ASD. The results of my study will provide information to the local school district that will inform their development of interventions for teachers who teach students with ASD. In the study, I sought to answer the following research questions:

RQ1. How do general education teachers meet the individual support and service needs of students with ASD?

RQ2. How do general education teachers meet the academic needs of students with ASD?

RQ3. How do general education teachers meet the need for a structured learning environment for students with ASD?

RQ4. How do teachers meet the communication and language needs of students with ASD?

RQ5: How do general education teachers meet the disciplinary needs of students with ASD?

RQ6: What supports and resources do general education teachers perceive they need to meet the needs of students with ASD?

Review of the Literature

I conducted a literature search using Walden University's research databases: ERIC, Sage Premier, Google Scholar, and Education Research Complete. Terms that I used to guide the search of literature included *Asperger's disorder*, *inclusion*, *inclusion for students with ASD*, *general education teachers*, *inclusion for students with*

disabilities, self-efficacy of teachers of students with ASD, training for teachers of students with ASD, challenges of teaching students with ASD, challenges of inclusion, teacher attitudes of students with ASD, effective practices for inclusion of students with ASD, and characteristics of ASD. Saturation of the literature was achieved when no additional literature was found relevant to the study within the last 5 years of publication. The literature review includes a discussion of the ASD history and symptoms, the history of the educational models for students with ASD, teacher related factors that affect the education of students with ASD, and the conceptual framework on which this study was based.

ASD History and Characteristics

ASD has evolved into being recognized as a complex disability in the last century. In 1910, Bleuler first used the Latin word *autismus* when he was identifying the characteristics of schizophrenia (Vatanoglu-Lutz, Atamn, & Bicer, 2014). During the early 1900s, many clinicians described the symptoms in individuals with ASD as schizophrenic psychosis (Vatanoglu-Lutz et al., 2014). Years later, Kanner (1943) described autism as a separate syndrome when the researcher began studying individuals with characteristics similar to attention-deficit hyperactivity disorder, schizophrenia, depression, and bipolar disorder (Kanner, 1943). In addition, Kanner (1943) specifically stated the following:

The combination of extreme autism, obsessiveness, stereotypies, and echolalia brings the total picture into relationship with some of the basic schizophrenic phenomena. Some of the children have indeed been diagnosed as of this type at

one time or another. But in spite of the remarkable similarities, the condition differs in many respects from all other known instances of childhood schizophrenia. (p. 248)

Later in the 1960s, physicians began diagnosing individuals with autism using Kanner's description of the disability (Vatanoglu-Lutz et al., 2014). The American Psychiatric Association (2013) generated the term *ASD* to encompass a spectrum of autism disabilities including Asperger's disorder, pervasive developmental disorders, Rett's syndrome, and childhood disintegrative disorder.

The most common method of diagnosing ASD in individuals is through clinical observations and psychological assessments (Mahajnah, Sharkia, Shalabe, Dawer, Akawi, & Zelnik, 2015). The Centers for Disease Control and Prevention (2014a) indicated that 1 in 68 children in the United States have ASD, which is a significant rise from the 1 in 110 children diagnosed with ASD in 2012. Males are at greater risk for ASD; the disability affects five times as many males as it does females (Centers for Disease Control and Prevention, 2014b). Sansosti and Sansosti (2012) reported that one of the reasons for increasing numbers of students receiving special education services in school is the rising numbers of children diagnosed with ASD.

Individuals with ASD have common characteristics such as difficulties in communication and language, lack of socialization, and repetitive and ritualistic behaviors (Brock et al., 2014). ASD is a developmental neurological disorder that can affect an entire life span with behavioral characteristics presenting themselves earlier than the age of 3 years (American Psychiatric Association, 2013; Dimopoulou, 2012;

Vatanoglu-Lutz et al., 2014). This disability affects individuals of varying ethnicities, race, and social status (Busby et al., 2012). The American Psychiatric Association (2013) stated, “The symptoms of people with ASD will fall on a continuum, with some individuals showing mild symptoms and others having much more severe symptoms” (p. 1). ASD affects individuals differently and in varying degrees.

Socialization. A lack of social skills is a common characteristic of individuals with ASD that negatively influences their quality of life (Liu, Moore, & Anderson, 2015). Some examples of deficits in social functioning may include poor eye contact, problems with initiating and responding to social interactions, and a lack of body orientation towards a communication partner (Alzourdi, Sartawi, & Almuhi, 2015). Camargo et al. (2014) described how these deficits “interfere with social, emotional and cognitive development, thereby impeding the establishment of meaningful relationships and contributing to detrimental outcome such as poor academic performance, peer rejection, social isolation, and social anxiety” (p. 2097). Some interventions used with students struggling with socialization strategies include video-modeling (Alzourdi et al., 2015), social stories (Leaf et al., 2015), and self-management (Liu et al., 2015). Video modeling involves using videotape to show a student a desired behavior in hopes that they will reproduce or imitate that behavior. Social stories are short narratives that describe a target behavior and when, why, and how the student should display that behavior (Leaf et al., 2015). Liu et al. (2015) described self-management as “the use of operant techniques to produce socially desired change in one’s own behavior” (p. 174). It includes setting goals and self-monitoring, recording, evaluating, and reinforcing of those goals. Using

strategies such as video modeling, social stories, and self-management may improve the skills needed for students with ASD to create and maintain relationships with peers.

Communication and language. Deficits in communication and language usage are seen at varied levels in students with ASD. Early childhood diagnoses of ASD are often results of regression in expressive language of children at the age of 2 years (Tager-Flusberg, 2016). Many of these children spend several months using words to communicate and, then, unexpectedly stop speaking completely. Some children regain the use of language, but others do not. Echolalia is a common behavior of students with ASD in which they meaninglessly repeat the words of another person (Grossi, Marcone, Cinquegrana, & Galluccik, 2013). Other communication problem areas for students with ASD involve pronoun reversals and difficulty understanding literal language such as jokes and common expressions (Tager-Flusberg, 2016). Many students with communication and language deficits receive speech and language therapy (Batoool & Ijaz, 2015). Therapy addresses the verbal and nonverbal communication difficulties, speech, and vocabulary development for students with ASD.

Repetitive and restrictive behaviors. Other characteristics commonly seen in students with ASD are repetitive and restrictive behaviors. Gunn and Delafield-Butt (2014) described how individuals with ASD often have restricted interests that involve a specific object or topic on which the students may intensely focus their attention. In addition, students with ASD often insist on similar routines and schedules (Lidstone et al., 2014). Students with ASD commonly have repetitive behaviors such as hand or finger movements or spinning objects (Lidstone et al., 2014). Change in routine, items

rearranged, pattern disrupted, and things broken or incomplete often increases the repetition in behaviors (Rodriguez, Thompson, Stocco, & Schlichenmeyer, 2013).

According to Harrop, McConachie, Emsley, Leadbitter, and Green (2014), repetitive and restricted behaviors are commonly the first signs of ASD in children before communication and language impairments.

The History of the Educational Model for Students With ASD

Before 1975, most students with disabilities were educated at home or in specialized schools separated from their peers without disabilities (Jung et al., 2011). The idea of a right to public education for students with disabilities was introduced in the Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, 89 Stat. 773 (1975) and the Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004), which required schools to provide individualized special education for students with certain disabilities and stated that students with special needs were expected to participate in general education classrooms alongside their general education peers. *Mainstreaming* of students with special needs continued into the 1980s and is still a term used by educators today to describe the participation of students with disabilities in a general education setting (Jung et al., 2011). Additional legislation has led to even more students with ASD being taught in general education classrooms. The reauthorization of the Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004) specifically stated that procedures must be set up to ensure that students with disabilities are taught in the general education classroom if it is the LRE. According to U.S. Department of Education, National Center for Education Statistics (2015), more than 90% of students with ASD are

being educated in the general education classroom for a percentage of the school day.

Before the legislation, children with disabilities received most of their education in special education classrooms; however, these children are now receiving their education alongside their typically developing peers.

Teacher Related Factors That Affect the Education of Students With ASD

Several issues affect the education of students with ASD in the general education classroom. Several of these issues include teaching and addressing the specialized needs of students with ASD, lack of training of general education teachers, general education teachers' attitudes, lack of research-based instructional practices, and general education teachers' self-efficacy. Lindsay et al. (2013) described that little research relates to the challenges that general education teachers face in teaching students with ASD. In addition, the authors noted that it is important to understand these obstacles that teachers encounter so students with ASD may receive an effective education.

Teaching and addressing specialized needs. General education teachers should note the importance of socialization, communication and language, and behavioral needs for students with ASD in the general education classroom (Prizant, Wetherby, Rubin, Laurent, & Rydell, 2005). Reed, Osborne, and Waddington (2012) stated that "the main benefit of placing children with ASD in mainstream settings is the potential for social gains through modeling from their typically developing peers" (p.750). However, Jones and Frederickson (2010) discovered that students with ASD are generally less accepted by their peers in the classroom, especially in social communication situations, owing to the lack of support the teacher provides the students with ASD. General education

teachers must be prepared to address the manifestations from the behavioral characteristics of ASD for students (Lindsay, Proulx, Thomson, & Scott, 2014). Emam and Farrel (2009) observed and interviewed teachers, teacher assistants, and special educational needs coordinators of 17 students with ASD educated in general education classrooms and reported that these staff members experienced increased frustrations caused by the needs of students with ASD often related to the students' social and emotional understanding. Teachers often experienced tensions, such as anxiety, when needing to meet the specialized needs of students with ASD while also meeting the needs of the other students in the general education classroom.

Lack of training of general education teachers. General education teacher training on ASD is important for teaching and addressing the needs of students with ASD in the general education classroom. Teacher training is a “critical component with profound implications for the education of ASD children” (Syriopoulou-Delli, Cassimos, Tripsianis, & Polychronopoulou, 2012, p. 755). Hart and Malian (2013) reported that teachers need training regarding the basic knowledge of the characteristics of ASD. Siu and Ho (2010) studied 115 teachers of students with ASD in relation to the effectiveness of two research based programs to address the needs of students with ASD. The researchers noted that general education teachers' knowledge of ASD is key to effectively providing education for children with ASD, and without a general knowledge of the disability and how the disability affects a student's learning, teachers are unable to provide effective instruction. Teachers of students with ASD need supports such as a

foundational knowledge of ASD to provide meaningful instruction using ASD-specific practices.

Rarely do colleges provide an ASD-specific class for preservice teachers and many teachers receive little to no training after they graduate from college. Brock et al. (2014) studied the professional development (PD) needs of general education teachers of students with ASD through a survey of 456 teachers and administrators in a southern state. The researchers found that when preservice teachers are provided with a course on special education, some teachers still feel unable to meet the specialized needs of students with ASD because the preservice course was generalized to all disabilities. Barnhill, Polloway, and Sumutka (2011) investigated colleges across the United States and found that less than half of their total sample of 191 colleges offered an ASD-specific course for their preservice general education teachers.

Busby et al. (2012) reported that although training programs has evolved in recent years to include more courses that provide specialized training about ASD for teachers, such courses do not address the needs of a general education classroom teacher who teaches students with ASD. The inadequate training causes general education teachers to have “little confidence in teaching students with special needs in regular settings” (Gao & Mager, 2011, p. 92). Teachers believe that they are not providing effective instruction when a student with ASD is in their classroom; they do not believe that they can successfully teach a group of students without disabilities along with students with ASD because of the lack of skills and needs for high levels of support for the students with ASD (Cassady, 2011). Hess, Morrier, Heflin, and Ivey (2008) used the Autism Treatment

Survey to determine the strategies used for students with ASD in schools in the state of Georgia. The researchers found through the survey of 185 teachers that rarely do general education teachers use evidence-based instructional strategies to teach students with ASD owing to a lack of training in such strategies. Those educators who were using strategies often determined which strategy to use “based upon variables unrelated to the scientific basis for particular strategies” (Hess et al., 2008, p. 968). Unfortunately, a lack of ASD training has implications for general education teachers’ effectiveness in providing instruction to students with ASD.

General education teachers’ attitudes about students with ASD. Teacher attitudes about including students with ASD in the general education classroom affect outcomes for students with ASD socially and academically (Chung et al., 2015; Rodriguez, Saldana, & Moreno, 2012). Chung et al. (2015) surveyed 234 teachers in a metropolitan city. They found that teachers without previous special education training viewed students with ASD as more difficult to teach than their typically developing peers; furthermore, their attitudes were more negative toward students with ASD. In addition, the study revealed that these teachers were likely to dislike and avoid students with ASD. Negative teacher attitudes may result in the unfair treatment of students with ASD in a general education classroom (Chung et al., 2015).

Park and Chitiyo’s (2011) study of a smaller number of teachers ($n = 127$) indicated teachers with certification in special education had positive attitudes toward students with ASD. The researchers used a Likert-type scale instrument to collect their data and from their results they concluded that “teachers’ attitudes can play a critical role

in the inclusion of children with autism into the mainstream of regular education settings” (Park and Chitiyo, 2011, p. 70). The negative attitudes of teachers towards children with ASD may seriously impact those children’s self-images and academic performances (Park & Chitiyo, 2011). Segall and Campbell (2012) investigated the attitudes of 108 teachers in the state of Georgia regarding inclusion of students with ASD. They found similar results to Park and Chitiyo (2011) in that teachers with certification in special education were likely to agree that students with ASD should be allowed to attend general education classrooms, whereas general education teachers held stronger views such as excluding students from the general education classroom. General education teachers’ attitudes may play a large role in the success and effectiveness of the education for a student with ASD.

Conceptual Framework

My study was guided by the findings of Iovannone et al. (2003) who stated that schools have the responsibility to ensure students with ASD have an effective education. After reviewing several studies regarding effective practices, interventions, and treatments, Iovannone et al. (2003) compiled a list of six core components for what this effective programing should entail:

1. Individualized supports and services for students and families.
2. Systematic instruction.
3. Comprehensible and/or structured environments.
4. Specialized curriculum content.
5. A functional approach to problem behaviors.

6. Family involvement.

As noted previously, students with ASD present a wide variety of characteristics that also vary in severity. Therefore, the manner for which supports and services are provided to them should be individualized to meet their unique needs by utilizing a student's individualized education program (IEP) (Iovannone et al., 2003). For example, the setting in which a student receives his or her education should be considered based upon the individual's needs. One student may participate in the general education classroom needing only minor modifications and accommodations to the curriculum; however, another student may need a separate special education classroom to receive services that are more specially designed. Iovannone et al. (2003) described how the most important idea to consider for individualization is the level of engagement among students with ASD. As Iovannone et al. noted, engagement requires the educator to design and plan based upon the student's interests, learning styles, and needs.

The second core component Iovannone et al. (2003) listed is systematic instruction. This type of instruction requires a procedure for planning, using, and evaluating the instruction provided to students with ASD. Teachers carefully select goals to teach and plan instruction based on individualized needs of students. The procedure is then guided by frequently gathered data that reflects the students' present levels of performance. Teachers may also use the data to determine if the methods of instruction were effective.

Another component of effective educational programs for students with ASD involves the structure of the learning environment. Iovannone et al. (2003) described a

comprehensible and structured learning environment as “one that is arranged in such a way as to elicit, facilitate, enhance, or support the acquisition of specific skills such as language acquisition, appropriate behavior, social interactions, and targeted academic goals” (p. 158). The purpose of a comprehensible learning environment is to provide students with ASD an understanding of their environment and a support to foster communication and independence.

Specific curriculum content is important for students with ASD who often have deficits in communication and socialization. An effective practice for students with ASD is for teachers to focus instruction on areas based on students’ individual weaknesses determined by individualized assessment (Ivoannone et al., 2003). The communication and socialization skills that are selected for instruction should also be chosen based on the effect they will have for the students beyond the school environment or childhood.

Behavior problems for students with ASD often improves their learning. Therefore, Ivoannone et al. (2003) described how a functional approach to problem behavior is an important educational practice. Ivoannone et al. argued that most problem behaviors from students with ASD serve as a purpose to communicate. Interventions should be used to replace the problem behavior with a behavior that serves a similar result instead of focusing on eliminating the problem behavior. Positive behavior support (PBS) uses the functional approach to problem behaviors in that the environment and purpose of the behavior must be considered to understand why the behavior is occurring and how to address it. PBS has been effective in addressing the behaviors of students with ASD for many years (Ivoannone et al., 2003). When teachers use interventions such

as PBS, they will understand the purpose for the student's behavior and will then be able to replace the behavior.

Family involvement is the final component Iovannone et al. (2003) described for effective educational practice. The family of a student with ASD is a valuable partner for the development of successful instruction. According to this framework, the family should be a part of the collaboration process to determine the most effective interventions, strategies, and programs used for students with ASD.

Five of the six components of the Iovannone's et al. (2003) framework have a direct relation my study. The problem statement, research questions, and interview (Appendix E) questions were informed by Iovannone's et al. components of effective educational practices. The following table shows how the research questions and interview questions related to Iovannone's et al. (2003) work.

Table 2

Relationship Components of Effective Educational Practices and Development of Research and Interview Protocol

Core component	Research questions	Interview questions
Individualized supports and services for students and families.	1, 6	3, 4
Systematic instruction.	2, 6	5, 6
Comprehensible and/or structured environments.	3, 6	7
Specialized curriculum content.	4, 6	8
A functional approach to problem behaviors.	5, 6	9

Note. Adapted from Iovannone et al. (2003).

In addition to the relationship between the framework to the research questions and interview questions, the manner in which I analyzed the data was guided by the framework. I analyzed the data that I collected from the interviews using provisional codes to determine whether any evidence of the components was found within the district's approach for educating students with ASD. The five components were also the basis for the project development.

Literature Review Summary

Qualitative and quantitative studies were included within the research that I reviewed for this study. Researchers described similar descriptions of individuals with ASD revolving around three common characteristics: difficulties in communication and language, lack of socialization, and repetitive and ritualistic behaviors. The research that I reviewed showed an increase in the number of students in the general education classroom since the passing of legislation. Current research shows several issues that affect the effectiveness of the education students with ASD receive in the general education classroom, including (a) the difficulties that teachers may experience in teaching and addressing the specialized needs of students with ASD, (b) the lack of training of general education teachers, and (c) general education teachers' attitudes about students with ASD. Research has shown that general education teachers are not adequately prepared to provide effective educational practices to meet the learning needs of students with ASD. My study was based upon Iovannone's et al. (2003) framework of effective educational practices for students with ASD.

Implications

Based on the findings of the data collection and analysis, I developed a project to provide a 3-day professional development (PD) program for general education teachers. The PD will teach elementary general education teachers how to meet the individual support and service needs, academic needs, structured learning environment needs, communication and language needs, and disciplinary needs of students with ASD. By providing teachers with this support, the findings of the study will positively influence social change by increasing student academic achievement. Findings from this study may also be used to educate parents about how to support their child's teachers in meeting their children's individual needs.

Summary

In Section 1, I described the local problem, rationale, and significance of the study which investigated how elementary general education teachers met the learning needs of children with ASD and the supports and resources that teachers perceived that they needed to meet the learning needs of students with ASD. Students with ASD require specialized instruction to meet their individualized needs; however, general education teachers lack training in teaching students with ASD (Busby et al., 2012). Data showed that 21 students were taught by elementary general education teachers in a northwestern school district in Georgia. Iovannone's et al. (2003) effective educational practices for students with ASD was the conceptual framework that I used to guide the study. I reviewed pertinent research literature and I concluded by discussing the implications for the project and for social change.

In Section 2, I present the qualitative case study design for this study and the reason for choosing this methodology and design. In addition, I describe the setting and sample of the study, the process by which I collected the data using interviews, and how I analyzed the data. I present my role as researcher and how I addressed my personal bias. I then present the results of the data collection with a presentation of the codes and themes, discrepant cases, and evidence of research quality.

Section 2: The Methodology

Introduction

The purpose of this qualitative case study was to explore how general education teachers meet the learning needs of students with ASD and the support and resources they need to do this. I collected data by conducting interviews with 10 general education teachers. I discuss specific information pertaining to the choice of research design, selection of participants, ethical issues, data collection, and analysis and the results in the section. I also explain the researcher's role and how I addressed bias.

Research Methodology and Design

A qualitative case study research design was appropriate for my study. According to Creswell (2012), "In qualitative inquiry, the intent is not to generalize to a population, but to develop an in-depth exploration of a central phenomenon" (p. 206). I chose a qualitative research methodology over a quantitative methodology so that I could explore the participants' views through rich, descriptive data. A case study design was fitting for this study to collect and present detailed data about a small number of participants and draw conclusions about this specific group. The emphasis was on exploring how general education teachers meet the learning needs of students with ASD.

Other qualitative research designs exist, such as narrative, grounded theory, phenomenology, and ethnography; however, these designs did not fit the nature of my research. Narrative designs focus on stories told by people about a specific phenomenon; however, the data for this study included an in-depth collection of teachers' practices and needs when teaching students with ASD in the general education classroom rather than

stories about teacher experiences. Grounded theory designs are used to develop a theory that is grounded in the data (Merriam, 2002), which was not my intent in the current study. Phenomenology designs focus on a small sample of participants and their experiences in the world and how the participants understand those experiences (Rumrill, Cook, & Wiley, 2011). Although I considered a phenomenology design for this research study, I selected a case study because I was not interested in studying the lived experiences of general education teachers who teach students with ASD. Ethnography attempts to understand the culture of its members. Because I did not attempt to understand the culture of general education teachers, I did not choose ethnography as the design.

Setting and Sample

A rural school district in northwest Georgia was the setting for this study. This district is small in size, having a student population of only 7,802 at the end of the 2014-2015 school year (P. Holloway, personal communication, 2015). The district consists of two high schools, one middle school, and six elementary schools. The student population was 20% white (non-Hispanic), 5% black, and 70% Hispanic in the 2014-2015 school year. I selected this district because 33 general education teachers taught students with ASD in the general education classroom during the 2016-2017 school year.

Selection of Participants

I selected participants using purposeful sampling techniques. I gathered the sample based on specific criteria that are central to the topic of the study. Purposeful sampling is an effective technique often used in case study research designs (Creswell,

2012). For this proposed study, eligible participants from the school district had to meet the following criteria: (a) be an elementary school teacher, (b) be a general education teacher, and (c) have taught a student with ASD within the last 2 years. A total of 33 participants were eligible to participate in the study.

I secured permission to conduct the study from the district by providing Walden's IRB approval documents and the proposal to a formal review committee (Appendix C). After approval, I sought access to potential participants by working with the administrators from each of the six elementary schools. I asked these administrators to provide a list of general education teachers who met the criteria to participate and their corresponding email addresses. I received 33 names and email addresses of general education teachers who met the criteria. I then emailed these teachers an invitation to participate in the study along with an informed consent to participate document. I asked them to reply through email that they consented to participate in the study (Appendix D).

In qualitative research, it is important to ensure a sample size and representation of the population that will provide a sufficient amount of data to answer the research questions. The chosen sample size provided a saturation of the data. Saturation occurs when additional data collection will not provide additional insight into the problem (Creswell, 2012). A sample of 10 to 15 general education teachers who met the criteria for the data collection was my goal. This sample size met the qualifications of a case study according to Creswell (2012). I randomly selected ten participants from the 18 who submitted an informed consent document.

Protection of Participants

Throughout the study, I took measures to protect participants' rights. The participation for the proposed study was voluntary. In following the Protection of Human Subjects Code of Federal Regulations (Department of Health and Human Services, 2009), I provided participants an informed consent document. The informed consent form (Appendix D) included an explanation of the purpose of the study and the known risks to participants. All participants had the right to withdraw at any point of the study. However, none of the participants asked to withdraw. I have protected all the interview transcriptions by securing the data in a locked filing cabinet in my home and on a secure password-protected computer for the next 5 years after which I will destroy the data. To protect participant confidentiality, I used aliases as identifiers for participants on all on data documents instead of using the participants' names.

Researcher Participant Relationship

I am employed in the district. Owing to the relative small number of employees, I knew a few of the participants, so it was easy to build a relationship with them. However, I have not been in a supervisory position for any of the participants. As a member of the district's ASD support team, I have a working relationship with a few of the general education teachers who were participants. However, I assured participants that the study is separate from my position in the district and their involvement would not affect their employment at the district or on our working relationship aside from the study. To maintain a researcher role throughout the study, I refrained from working on or discussing the study with colleagues during employment hours.

Data Collection

In-depth, semi structured interviews were used for the data collection. A time was set up for each interview at a location determined by the participants that ensured confidentiality and a quiet atmosphere. The interviews took place face-to-face and did not interfere with the work responsibilities of the general education teachers within the district. The interviews were not longer than one hour and were audio recorded.

I developed a protocol to guide the interviews (Appendix E). To determine whether the interview questions adequately addressed the research questions, a panel of expert educators was used to review the questions and directions. This five-person panel included individuals with doctorate degrees in education, expertise knowledge of ASD, university level teaching experience, and knowledge about developing interview questions. I took note of the suggestions of the panel and I revised and edited the questions. One example of the panel's suggestions included phrasing the questions in a less biased manner without the assumption that all the participants would have challenges addressing the academic, communication and language needs, and behavior problems. Therefore, I removed the word challenges from all research questions. An additional suggestion provided by one of the panel members regarded adding a question that allowed the participants the opportunity to provide any other information that they deemed relevant that was not asked in the previous interview questions. The interview questions can be found within the interview protocol in Appendix E. The following table shows how the interview questions and the research questions are aligned.

Table 3

Relationship of Research Questions to Interview Questions

Research question	Alignment of protocol questions to research questions
RQ1. How do general education teachers meet the individual support and service needs of students with ASD?	PQ3. In what ways have you provided individualized supports and services for a child with ASD in your classroom? PQ4. What types of supports and resources do you have to determine and address individualized needs of children with ASD in your general education classroom? Can you give examples and describe how you used them?
RQ2. How do general education teachers meet the academic needs of students with ASD?	PQ5. In what ways have you provided systematic instruction for a child with ASD in your classroom? PQ6. What supports and resources have you used to provide systematic instruction for your students with ASD in your general education classroom?
RQ3. How do general education teachers meet the need for a structured learning environment for students with ASD?	PQ7. In what ways have you provided comprehensives and/or structured environments for your students with ASD in your general education classroom? Can you give examples of any supports or resources you used to address these needs?
RQ4. How do teachers meet the communication and language needs of students with ASD?	PQ8. In what ways have you provided specialized curriculum content for your students with ASD in your classroom? Please describe them. Please describe any supports or resources you used to address these needs.
RQ5. How do general education teachers meet the disciplinary needs of students with ASD?	PQ9. In what ways have you addressed problem behaviors of students with ASD in your general education classroom? Please describe any supports or resources you used to address these needs.

(table continues)

RQ6. What supports and resources do general education teachers perceive they need to meet the needs of students with ASD?

PQ4. What types of supports and resources do you have to determine and address individualized needs of children with ASD in your general education classroom? Can you give examples and describe how you used them?

PQ6. What supports and resources have you used to provide systematic instruction for your students with ASD in your general education classroom?

PQ8. In what ways have you provided specialized curriculum content for your students with ASD in your classroom? Please describe them. Please describe any supports or resources you used to address these needs.

PQ9. In what ways have you addressed problem behaviors of students with ASD in your general education classroom? Please describe any supports or resources you used to address these needs

Note. ASD, autism spectrum disorder.

Additional questions regarding the pre-service training and types of children the teachers have taught were asked. Probing questions were used to gather additional information after a participants' initial response.

Data Analysis Procedures

After the collection of data through interviews, I began data analysis.

Transcription of the interviews was completed using Microsoft Word. Information regarding background in education, pre-service experience, and types of ASD children the participants have had experience teaching was collected. The data was organized by interview question using multiple pages within an Excel document for easier analysis. The analysis of the data began with reading each interview transcript several times to examine patterns and trends using provisional codes. Iovannone's et al. (2003) six core

components of effective educational practices for teaching students with ASD were used as provisional codes during the initial examination of the data: individual supports and services, systematic instruction, comprehensible and/or structured environment, specialized curriculum content, and functional approach to problem behaviors. After reading the responses to each interview question, I used pattern coding to represent the data beyond Iovannone's et al. (2003) components. I reviewed the patterns across the codes of the data and determined 21 pattern codes (Table 4). Six major themes emerged from the data: individual support and service needs, academic needs, structured environment needs, communication and language needs, disciplinary needs, and needed supports and resources for general education teachers. Fereday and Muir-Cochrane (2006) defined coding as a process of marking phrases within a passage that are similar in meaning. I pattern coded each spreadsheet using codes that related to my research questions. Then I analyzed the codes to determine how groupings of codes related to the research questions for my categories. I identified six categories: individualized supports and services, systematic instruction, comprehensible and/or structured environment, specialized curriculum content, function approach to problem behavior, and supports and resources needed. I identified my six themes from these codes. Without identifying themes, researchers do not have anything to compare, contrast, or explain (Ryan and Bernard, 2003). The following table shows the provisional codes, pattern codes, and themes from the data.

Table 4

Provisional Codes, Pattern Codes, & Themes from the Data

<u>Provisional Codes</u>	<u>Pattern Codes</u>	<u>Themes</u>
Individualized Supports & Services	IEP Special interests Engagement Picture Schedules Reinforcement Special Education Staff Support	How teachers provide individual supports and services to students
Systematic Instruction	On-task Accommodations and Modifications One-on-one or Small Group Instruction	How teachers meet the academic needs of students
Comprehensible and/or Structured Environment	Visual Supports Timers Room Arrangement	How teachers provide a structured environment
Specialized Curriculum Content	Communication Support Peer Support	How teachers meet the communication and language needs of students
Functional Approach to Problem Behaviors	Behavior Plans Restraint Isolation Calm Down Break	How teachers meet the disciplinary needs of students
	Teacher Training Needs PD	Supports and resources that teachers need

Transcript and Bias Checking

Transcript checking was used with the participants. I participated their transcriptions for their reviews. I made personal contact with each participant to discuss the accuracy of the transcriptions. Only one participant responded with a concern. The participant had used improper English and wanted to correct the structure of a sentence that was transcribed.

After the analysis of the interviews, I asked an expert educator from the expert panel to check the analysis for bias. When a researcher has a high degree of similarity to his or her study's participants, it is important for that researcher to take action to address researcher bias (Mehra, 2002). "Researcher bias tends to result from selective observation and selective recording of information, and from allowing one's personal views and perspectives to affect how data are interpreted and how the research is conducted" (Johnson, 1997, p.284). The expert educator from the panel provided feedback stating that my analysis was conducted without noticeable bias. Using someone to check for researcher bias provided more valid reports of the interview analysis.

Results of Data Analysis

I investigated how general education teachers meet the learning needs of students with ASD at elementary schools in a northwestern Georgia school district and what additional supports and resources these teachers perceived they needed to meet the needs of students with ASD. The purpose of the qualitative case study was to explore how general education teachers meet the learning needs of students with ASD to provide effective teacher preparation that supports the learning needs of students with ASD.

Description of the Sample

The participants were all elementary general education teachers who had taught a student or students with ASD within the last two years. The years of experience of the two male and eight female participants were between 5 years and 20 years. To keep all participants' identities anonymous, I gave each participant an alias to identify one transcript from another and to use for data reporting. The following table provides

characteristics of the sample regarding alias name, number of years the teacher has taught, the highest educational degree the teacher had, and whether the teacher had training regarding special education.

Table 5

Characteristics of the Study's Sample

<u>Alias Names</u>	<u>Number of Years Experienced Teaching</u>	<u>Highest Degree in Education</u>	<u>Training Regarding Special Education</u>
Katie	5	Master's	Yes
Mary	9	Master's	No
Sarah	20	Master's	No
Carol	15	Master's	
Mark	4	Bachelor's	
Amy	10	Educational Specialist	Yes
Jamie	6	Bachelor's	No
Jessica	15	Bachelor's	Yes
Lily	10	Bachelor's	No
Daniel	6	Educational Specialist	Yes

Using a recording device, I recorded each interview. At the beginning of each interview, I informed each participant about the purpose of the study and informed him or her that I would ask them to provide information about how they as general education teachers meet the learning needs of children with ASD and what resources and supports they utilized in meeting those specific needs. During the interviews, which lasted between 13 minutes and 35 minutes, I asked each participant interview questions and additional probing questions. I also asked the participants to provide a description of the types of ASD children they had experience teaching and the amount of time these students were in their classrooms. The ten participants for the sample of this study represented general education teachers with varying years of experience and backgrounds in teaching. I learned that the participants had taught students with ASD with a range of

functioning levels representing the complexity of the disability described by current research. Given the varied experiences and backgrounds of the participants, the data showed varied responses to the interview questions.

Theme 1: How Teachers Provide Individual Supports and Services to Students

Research Question 1: How do general education teachers meet the individual support and service needs of students with ASD?

The first theme was formed from participants' responses about how they meet the individual support and service needs of students with ASD. The coded data revealed that the general education teachers had a very limited understanding of how to meet the individual supports and services needs of students with ASD. The participants' responses revealed that they relied on students' IEPs and the special education staff to meet these needs of their students with ASD. Additionally, three participants reported use of students' interests and engagement techniques to meet the individual support and service needs of students with ASD (see Table 6).

Table 6

Frequency of Responses to Research Question 1

Participant responses: Meeting the individual support and service needs of students with ASD	No. of participants	% of participants
Utilizing student's IEP	6	60%
Relying on special education staff	7	70%
Student Interest/ Engagement	4	40%

Utilizing student IEPs to meet individual supports and services. Individual supports and services are built on the foundation of a student's IEP (Iovannone et al., 2003). Six participants (Katie, Amy, Jamie, Carol, Sarah, & Mary) identified utilizing their students' IEPs to assist them in meeting individual support and service needs of

their students with ASD in their general education classrooms. Although Katie initially stated that she relied on the students' IEPs to know how to meet the individual support and service needs of their students, upon further probing, she revealed that she was not sure how to read the IEP and no one had reviewed the IEP document with her prior to having her students with ASD in her classroom. Amy's description of the use of her students' IEP to meet individual support and service needs of her students included the statement "those (IEPs) lack a little bit of luster to know exactly what they (students with ASD) need" thus raising the question of whether she utilized the IEP like the other four participants. For example, Sarah described how she used her student's IEP to determine what accommodations and modifications her student should receive and the amount of time the student received support from a special education teacher. Jamie, Mary, and Carol described how they utilized the IEP to meet the individual support and service needs of their students by using it as a guideline to lead their instruction to address their students' goals.

Relying on special education staff. Seven of the ten participants (Amy, Lily, Jessica, Sarah, Mark, Mary, & Carol) described how they rely on the special education staff to meet the individual support and service needs of their students. Amy, Jessica, Sarah, and Mark described how they relied on daily communication and collaboration with their special education staff to know how to meet the individual needs of their students. Lily depended on the special education staff to be the one who provided the individual support and service needs for her students with ASD since someone from the special education department was assisting her in the general education classroom the

entire day. Mary also described using the special education teacher who was in her room full time as a resource to meet individual needs of her students. She recalled learning about materials to use within her classroom to support their sensory and behavior needs. Carol described her reliance on a committee of special education staff to make decisions about how to meet individual support and service needs of her students.

Student interest and engagement. Iovannone et al. (2003) stated “A key aspect of individualization for students with ASD involves approaches for supporting high rates of engagement” (p.157). Teachers who incorporate student interest into their lessons increase the engagement of their students with ASD in the general education classroom (Gena & Kymissis, 2001). Four participants (Katie, Mary, Jessica, & Carol) described different approaches to achieving student engagement for their students with ASD. Katie recalled using her students’ special interest of a specific kids’ television character as a reward for her students’ participation and engagement in tasks. Carol and Jessica recalled similar reinforcement for work completion and on task behaviors. Specifically, Jessica provided with extra time on the iPad as a reward for engagement for her students with ASD since playing on the iPad was a preferred interest. Mary incorporated manipulatives and movement activities in her lessons to provide her students with the individual supports and services they needed to stay engaged.

Theme 2: How Teachers Meet the Academic Needs of Students

Research Question 2: How do general education teachers meet the academic needs of their students with ASD?

Theme 2 was generated from the participants' responses to the interview questions about the ways they had provided systematic instruction for their students with ASD in their classrooms. From the analysis of the data, I learned that several teachers utilized varied groupings of students when providing instruction to their students such as whole group, large group, small group, and one-on-one instruction. The teachers also utilized accommodations and modifications of the instructional content to meet the academic needs of their students with ASD (See table 7).

Table 7

Frequency of Responses to Research Question 2

Participant responses: Meeting the academic needs of students with ASD	No. of participants	% of participants
One-on-one/Small Group Instruction	5	50%
Accommodations and Modifications to Content	6	60%

One-on-one and small group instruction. Fifty percent of the participants (Daniel, Jessica, Sarah, Katie, & Mary) described that they utilize varied groupings of students to meet the academic needs of their students. Mary, Katie, and Jessica stated that they used small group instruction to meet the academic needs of their students with ASD. Years of studies have indicated a positive effect of using small group instruction with students with ASD (Kamps, Dugan, Leonard, & Daoust, 1994). Mary further described her use of small group instruction to include using playdough for a tangible way for her students to stay on task. Daniel, Jessica, Sarah, Katie, and Mary stated that they use one-on-one instruction in their classrooms to meet the academic needs of their students with ASD. Daniel specifically recalled his nonverbal student receiving one-on-one support from a paraprofessional to assist the student with all the work while he was in the room.

Jessica utilized one-on-one instruction for guided reading, math, and conferencing in writing. Sarah also utilized one-on-one instruction for her student who struggled to focus on writing. When Katie described using one-on-one instruction, she stated it was because of her student's reading abilities and he required a text level that was higher than his peers.

Accommodations and Modifications to Content. Sixty percent of the participants (Mary, Mark, Carol, Lily, Amy, & Sarah) stated their use of accommodations and modifications of content to meet the academic needs of their students. Mark, Carol, and Lily specifically recalled utilizing accommodations when they provided tests to their students with ASD. Amy and Mary made accommodations to assignments and academic tasks to make them accessible to their students with ASD. Specifically, Mary made accommodations for one of her students by allowing him to use a dry-erase board instead of a pencil when writing. She also described making accommodations to her instruction by incorporating play items during group activities. Sarah stated that she provided a specific place for her student with ASD to sit during whole group activities and that she also provided modifications to his tests. She described modifying his independent work because the work the student's peers were doing was not on his academic level.

Theme 3: How Teachers Provide a Structured Environment Need

Research Question 3: How do general education teachers meet the need for a structured learning environment for students with ASD?

Theme 3 was generated by participants' responses to the interview question regarding the ways participants had provided comprehensive and/or structured

environments for their students with ASD in their classroom. From the analysis of Theme 3, I learned that teachers met the structured environment needs of their students with ASD by utilizing visuals, providing alternative seating, and purposefully arranging furniture within the classroom (See Table 8).

Table 8

Frequency of Responses to Research Question 3

Participant responses: Meeting the structured environment needs of students with ASD	No. of participants	% of participants
Utilizing Visuals	4	40%
Providing Alternative Seating	3	30%
Purposefully Arranging Furniture	8	80%

Utilizing visuals. Four participants (Daniel, Jamie, Mark, & Mary) recognized the importance of utilizing visuals in a classroom to support the structured environment needs of their students with ASD. As Meadan, Ostrosky, Triplett, Michna, and Fettig (2011) emphasized, “Using visuals to structure the environment can help children with ASD function more independently in the natural environment” (p.30). Daniel, Jamie, Mark, and Mary described utilizing a visual schedule to provide a more structured environment for their students with ASD. Jamie further described how she individualized the schedule to make it personalized for one of her students. Jamie also recalled utilizing visual tape to identify a structured space for one of her students during lunch. Providing a visual boundary for him decreased inappropriate physical behaviors the student was exhibiting toward his peers. Another visual Mary described was her use of visual timers in her classroom that provided her students with a visual to determine when an activity was going to be completed. Additionally, Mary utilized visuals such as picture of feet and stop signs to signal students how and where to line up at the classroom door.

Providing alternative seating. Three participants (Katie, Lily, & Mary) stated that they provide alternative seating to their students with ASD. Instead of sitting directly on the floor or in a school chair, they provided more sensory friendly seating such as a ball, bean bags, and rocking chairs. Schilling and Schwartz (2004) found providing alternative seating for students with ASD in the classroom increases the students' engagement. Lily described providing her students a corner with a variety of seating options to make it "cozy." The three teachers found that providing alternative seating provided the support their students needed within the environment to be successful.

Purposefully arranging furniture. Eighty percent of the participants (Katie, Daniel, Lily, Jessica, Jamie, Sarah, Mark, & Mary) identified purposefully arranging the furniture within their general education classroom to support the structured environment needs of their students with ASD. As Vogel (2008) described, classroom arrangement should provide structure and order for the student with ASD. For Katie, this meant utilizing less furniture, providing specific seating assignments, and providing a space in the back of her room to utilize as a place where her students could sit or lay down to take a break from the academic tasks. Lily, Jessica, and Mary also described the arrangement of their room to include an area where their students could go to calm down. Teacher-student-proximity was described by Lily, Mary, and Sarah as a way to provide structure to their environment. They specifically located students' desks or spots on a rug where the student could be easily seen or reached by the teacher in the room. Mark arranged desks within his classroom in order for his student with ASD to sit next to a specific peer.

Daniel also described arranging the desks in his classroom a specific manner to support his student with ASD.

Theme 4: How Teachers Meet the Specialized Curriculum Needs of Students

Research Question 4: How do teachers meet the communication and language needs of students with ASD?

Theme 4 was generated from participants' responses to the interview question regarding the ways the participants had provided specialized curriculum content for their students with ASD in their general education classrooms. Through the analysis of Theme 4, I learned that few of the teachers addressed the specialized curriculum needs regarding their student's communication and socialization skills. Iovannone et al. (2003) stressed the importance of curriculum content that focuses on communication and social interaction skills as these will be used beyond the school environment.

Despite communication impairments being a part of the major characteristics of students with ASD (American Psychiatric Association, 2013), few participants discussed meeting these specialized needs of their students. Mary and Jessica were the only two participants who described how they met their students' communication needs by utilizing alternative communication systems. Mary said she was working on using the Picture Exchange Communication System (PECS) (Frost & Bondy, 1994) with one of her nonverbal students. She also mentioned use of Go Talk (Mayer-Johnson, 2016), another type of communication support. Jessica used sign language with a nonverbal student in her general education classroom. She described use of a few signs she utilized with her student to communicate the need to toilet and other self-help actions.

Social communication is seen as another important area for which students with ASD require specialized instruction. Social Stories (Gray, 2017) were recommended for use by Iovannone et al. (2003) as an intervention to facilitate social communication interactions. Amy was the only participant to describe Social Stories (Gray, 2017) as a tool for meeting specialized curriculum needs, however, she mentioned her inexperience using them. She had only seen them used by a colleague. Peer-mediated strategies were also described as an intervention tool to support social communication by Iovannone et al. (2003). Katie, Mark, and Jessica used peers to support their students with ASD for social communication purposes.

Theme 5: How Teachers Meet the Disciplinary Needs of Students

Research Question 5: How do general education teachers meet the disciplinary needs of students with ASD?

Theme 5 was generated from participants' responses to the interview question regarding the ways in which they addressed problem behaviors of students with ASD in their general education classroom. After analysis of Theme 5, I learned that participants utilized four different types of techniques/ strategies for meeting the disciplinary needs of students with ASD: behavior plans, restraint, isolation, and calming down breaks (See Table 9).

Table 9

Frequency of Responses to Research Question 5

Participant responses: Meeting the disciplinary needs of students with ASD	No. of participants	% of participants
Behavior Plans	5	50%
Restraint	3	30%
Isolation	4	40%
Calm Down Breaks	4	40%

Behavior plans. Fifty percent of the participants (Daniel, Amy, Lily, Mary, & Mark) indicated they used a behavior plan with their students with ASD to meet their disciplinary needs. Using PBS such as behavior plans individualize the approach of focusing on the antecedents and replacement behaviors rather than focusing solely on eliminating the problem behavior (Crone, Hawken, & Horner, 2015). Daniel described a chart that was created by a special education teacher for his student that listed appropriate behaviors that needed to be reinforced for the student while in the general education classroom. Amy's students earned puzzle pieces and tokens to receive a prize at the end of the school day. Lily's students had charts where they earned stickers and disks for doing their job in her room. Mary described utilizing a behavior plan that included a chart that went home to her student's parents. She communicated with her student at the end of each day to discuss whether he had earned a smiley face, frowning face, or mediocre face. Mark described a behavior plan for his student that included a chart that a special education teacher managed.

Restraint. Three participants (Mary, Mark, & Katie) mentioned restraint as a way in which they may meet the disciplinary needs of their students with ASD. Although Mark had not ever utilized restraint, he described how he had been trained for two years

to know how to properly perform a restraint following de-escalation techniques. Mary, trained in utilizing the same de-escalation and restraint techniques as Mark, described how she had to use restraint with her student. She described the purpose of the restraint as a prevention of the child harming himself or someone else. Unlike Mary and Mark, Katie had not received training regarding how to properly restrain a student but described her use of restraint on one occasion when her student was injuring himself.

Isolation. Mark, Mary, Jessica, and Jamie described different types of isolation of their students to meet their disciplinary needs within their general education classrooms. When Mark's student would become upset and there was not a special education staff member present to assist in de-escalation, Mark had his student step outside the classroom into the hallway to calm down and think about his actions. Mary stated that if her student is not redirected to appropriate on-task behaviors, he is removed from the classroom. Jessica utilized a similar isolation approach to meeting her student's disciplinary needs by providing him a confined area where his desk is pulled away from his peers. She described her use of rewards for appropriate behaviors but then mentioned her use of time out for students who were not behaving appropriately. Jamie provided her student with his own work stations, isolated from his peers who work together in groups.

Calm down breaks. Teaching a student with ASD to request the need for a break decreases problem behaviors within the classroom (Kreibich, Chen, & Reichle, 2015). Forty percent of participants (Jamie, Katie, Lily, & Mark) used calm down breaks for their students to meet their disciplinary needs. For Jamie this included a space within her room where she provided a sensory bucket of beans and rice for her students to play with.

She also described calming down strategies she has her students utilize within their break such as “squeeze your fist, count to 20, and take deep breaths.” Katie provided a place within her classroom for her students to calm down that included balls, books, and special interest items. Lily’s calm down break space included a bean bag and chart to indicate to the child about how to relax, calm down, and choices. Mark utilized a different approach by having his student go to a different classroom when his behavior escalated in order for him to calm down.

Theme 6: Supports and Resources that Teachers Need

Research Question 6: What supports and resources do general education teachers perceive they need to meet the needs of students with ASD?

Theme 6 was generated from responses to the interview questions and specifically the final interview question regarding any additional information the participants would like to discuss regarding. After analysis of Theme 6, I learned that teachers reported they needed additional training. Brock et al. (2014) found that many general education teachers voiced concerns about their preparation for teaching students with ASD and request further training.

Sixty percent of the participants (Katie, Mary, Carol, Amy, Lily & Daniel) indicated their desire to have training that would provide them the additional resources to better support the needs of their students with ASD. Katie mentioned her desire for training because she felt students with ASD require more specialized instruction that she had tried to inform herself about. However, she felt she still didn’t have enough knowledge to know how to teach students with ASD. Mary and Lily described their

desire to have training to help meet their students' needs. Carol also stated that training would benefit her and other teachers. Amy stated, "I think that in our school, people assume that because you have the special ed kids every year, you know what to do or you have had training and that is not the case." She further stated that she felt general education teachers lacked training about how to work with students with ASD. Daniel, a veteran teacher, described his desire for training regarding students with ASD. He further stated, "Whether it is to learn about the disability, IEPs and how to use them, or how to work collaboratively with the special education teacher, I think it (professional development) would be beneficial to everyone."

Summary of the Findings

In summary, six themes were derived from closely analyzing the data collected through the interviews of the 10 participants. The data showed that teachers utilized several strategies to meet the individualized needs of their students with ASD regarding individualized supports and services, academic needs, structured environment needs, specialized curriculum needs, and disciplinary needs. Participants also indicated they lack the support and resources to effectively help their students achieve and would like to have further training to strengthen their skills as effective teachers of students with ASD.

Discrepant Data

The participants in this case study utilized procedures, tools, and techniques to meet the needs of their students with ASD. Throughout the analysis of the data, I was aware that there may be discrepant data that did not support the themes or patterns of the study. Upon careful review, I did not encounter any discrepant data during the study. If a case

was found, I would have presented the information as it would have added credibility of the study (Creswell, 2012).

Evidence of Quality

I used in-depth and accurate descriptions by providing direct quotations and by providing an analysis that addresses the research questions and describes the relationships between the codes and themes, in this case study to establish trustworthiness in the study. I also established trustworthiness by discussing the findings as informed by the conceptual framework. The reader will be able to decide whether or not the findings can be generalized to a population of general education teachers given the information provided that pertained to each participant (Creswell, 2012). I analyzed the data until theoretical saturation was achieved, this is, when no new themes or issues arose regarding a category of data and when the categories were well established and validated.

In addition, I utilized transcript and bias checking in this case study to ensure reliability. Participants were provided a document containing the transcripts of the interview in which they participated (Appendix F). I checked with each participant regarding the accuracy of the interview transcripts. Participants did not report any discrepancies within the transcripts to me. I also asked an expert educator from the panel used to create the interview questions to review the themes and the analysis of the data used to create these themes for bias. The individual provided feedback regarding the information as needed.

Summary

Data acquired from the interviews for this study provided information regarding how general education teachers meet the needs of students with ASD. Participants indicated that they utilize students' IEPs, rely on special education staff, and utilize student interests and engagement techniques to meet the individual support and service needs of their students with ASD. To meet the academic needs of their students, participants used one-on-one instruction and small group instruction in addition to accommodations and modifications to the content for their students with ASD. Visuals, alternative seating, and purposefully arranged furniture were used to meet the structured environment needs of the participants' students with ASD. It was discovered that few teachers used specialized curriculum content that focused on communication and language needs of their students with ASD. Behavior plans, restraint, isolation, and calm down breaks were used by participants to meet the disciplinary needs of students with ASD. Additionally, participants expressed desire for additional support and resources to assist in preparing them to teach students with ASD in their general education classrooms. Often, this support was described as further training. Therefore, after the approval of my committee members, the project deliverable as an outcome of these results was a 3-day PD program for general education teachers who teach students with ASD. This PD will provide further understanding to participants regarding the core components of effective programming for students with ASD (Iovannone et al., 2003). Section 3 will include further information regarding the project in terms of rationale,

literature supporting PD courses, the detailed description of the project, the evaluation plan for the project, and the project implications.

Section 3: The Project

Introduction

Data that I gathered from interviews with general education teachers of students with ASD in a northwest Georgia school district indicated a need for further training for general education teachers in how to effectively meet students with ASD unique learning needs. Therefore, I created a 3-day PD course. The creation of this PD was guided by Iovannone's et al. (2003) core components of effective programming for students with ASD. The goals for this PD include participants being able to identify the following: individualized supports and services for students with ASD, systematic instruction techniques for students with ASD, ways to create a comprehensible and structured environment for students with ASD, ways to create specialized curriculum content for students with ASD, and ways to use a functional approach to address problem behaviors for students with ASD. In this section, I provide a rationale for this project. I also provide a literature review of PD regarding the purposes of PD in schools, PD on ASD, and effective and ineffective PD. Following the literature review, I provide a description of the project including its evaluation plan and implications.

Rationale

I chose a PD course as the project genre to increase general education teachers' understanding of how to meet the learning needs of students with ASD and to address their needs that they expressed during the interviews. Specialized training regarding effective, research-based strategies and interventions is paramount for general education teachers of students with ASD (Maddox & Marvin, 2012). Brock et al. (2014) described

how training regarding effective practices for teaching students with ASD is “sorely needed” (p. 77). Through the use of PD, teachers become more knowledgeable about such practices and more intentional about implementing them in their classroom (White, 2016). The content of the project will provide a PD course that will provide effective teacher training to increase the preparation of general education teachers who teach students with ASD within the northwest Georgia school district.

Review of the Literature

The genre of PD is appropriate to address the problem that I addressed within the data analysis in Section 2. Participants revealed a limited understanding and limited resources to implement effective, research-based strategies and interventions regarding students with ASD. As Rakap, Jones, and Emery (2015) noted, there is a need to address the lack of understanding and inability to implement these practices given that teachers are one of the most important factors in skill acquisition for students with ASD.

I conducted a search for literature regarding this project using Walden University’s research databases: ERIC, Sage Premier, Google Scholar, and Education Research Complete. Terms that I used to guide the search of literature included *professional development*, *professional learning*, *professional development for teachers*, *professional development for teachers of students with ASD*, *professional development in schools*, and *professional development for teachers*. I achieved saturation of the literature when I did not find any additional literature relevant to the study within the last 5 years of publication. The literature review includes a discussion of the purposes of PD in schools and characteristics of effective PD.

Purposes of PD in Schools

PD is an important tool used for school reform that strengthens the quality of teachers to raise student achievement (Green & Allen, 2015). Colwell, MacIsaac, Tiuchenor, Heins, and Piechura (2015) stated that PD improves teaching, which directly results in improved learning in schools. A teacher's ability to effectively teach students is the most important factor for improving student achievement (Green & Allen, 2015). Unfortunately, the preparation teachers typically receive during their preservice teacher certification programs is only at a basic level (Maddox & Marvin, 2012). White (2016) stated that PD results in teachers who are more prepared to teach students effectively using research-based practices and strategies.

Although PD is estimated to cost between \$1 billion and \$4 billion each year (Wilson, 2013), training is needed to ensure teachers are prepared to use research-based, effective practices and strategies in the classroom (Maddox & Marvin, 2012). Whitworth and Chiu (2014) researched the relationship between PD and effective teaching, and they discovered that not only does PD result in more effective teaching, but also that the use of PD results in increased student achievement. According to DeMonte (2013), PD is "the link between the design and implementation of education reforms and the ultimate success of reform efforts in schools" (p. 2). Therefore, PD provides schools with a tool to effectively address teacher quality to raise student achievement.

PD on ASD. Specifically, PD is needed to enhance the knowledge and skills of teachers who work with students with ASD (Maddox & Marvin, 2012). Maddox and Marvin (2012) stated, "Specialized training is required for education professionals to

have the breadth of understanding and skill to implement effective intervention and educational programs for students with ASD” (p. 37). Brock et al. (2014) investigated the PD needs of 456 teachers and administrators in a southern state who worked with students with ASD. Brock et al. found that many participants expressed their lack of preparation to meet the needs of students with ASD and were interested in PD to raise their understanding and knowledge of the disability and how to best address the needs of the students.

A similar study was conducted by Corkum, Bryson, Smith, Giffin, and Hume (2014) who also investigated the PD needs of teachers who work with students with ASD in general education settings. The data of the study were gathered from surveys of 225 teachers and revealed that the participants felt unprepared to meet the needs of students with ASD in their classrooms. The researchers found that several teachers described their desires for training that would better prepare them for working with students with ASD. Corkum et al. (2014) also found that the teachers’ beliefs of their abilities to teach students with ASD effectively were positively correlated with their experience of PD or other trainings regarding the disability: “Given that teachers are one of the most critical factors accounting for development of skills in children with ASDs, the need to ensure availability of highly qualified teaching staff is vital” (Rakap et al., 2015, p. 221). PD relating to ASD must provide teachers with the research-based practices and strategies to meet the unique needs of students with ASD.

Characteristics of Effective PD

Researchers have discovered many factors that lead to effective PD which results in improved teaching practices and school improvement (Koellner & Jacobs, 2014; Wieczorek, 2017). Koellner and Jacobs (2014) stated that effective PD impacts teachers' knowledge and instruction and student achievement. The researchers also stated this type of PD is "expected to be finite in nature, often based on published materials with stated learning goals, explicit design characteristics, and extensive supports for facilitators" (p.1). Teacher need should lead the process of developing the PD content (Wieczorek, 2017). No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002) prescribed "high-quality" PD for teachers to improve schools and increase student achievement. NCLB required that this high-quality PD should be research-based, sustainable, intensive, content focus, and aligned with content standards. Koellner and Jacobs' (2014) description of effective PD echoed this requirement set which purpose was to reform schools to increase student achievement.

Researchers suggest PD be an extended-duration learning experience for participants (Bayar, 2014; DeMonte, 2013; Glover et al., 2016; White, 2016; Whitworth & Chiu, 2014). Specifically, DeMonte (2013) stated 14 or more hours of PD is required for student achievement to be impacted. PD should also be "sustained and supported over time" (White, 2016, p. 28). One manner of supporting the content implementation and learning over a period of time is through the use of coaching (Mueller & Brewer, 2013). Coaches "bridge the gap between PD knowledge gained and implementation" (Mueller & Brewer, 2013, p.13) by guiding participants through an extended period of time.

Providing an on-going supportive PD experience proves to be more effective than PD that occurs within one day (Smylie, 2014).

An additional quality of effective PD is the opportunity for collaboration and meaningful discussions among participants. Providing PD that allows teachers to work with colleagues with similar teaching experiences over an extended timeline provides peer-support and higher levels of engagement (Glover et al., 2016; Keuvelaar, Ros, & Beijaard, 2015; Owen, 2015; White, 2016; Wieczorek, 2017; Youngs, 2013). Tam (2015) described the collaboration process as a need for PD participants to communicate through questioning and reflection of newly discovered practices and strategies. Teachers who collaborate as a community of learners embody an “individual and collective responsibility” to increase their knowledge and abilities as teachers (Wells, 2014, p. 488). Opportunities for colleagues to collaborate and discuss common experiences and participate as a learning community is an important factor of effective PD.

Supportive leadership is another important characteristic of effective PD. Evans (2014) provided his conceptual analysis of PD and began his discussion by describing how “educational leaders should promote and facilitate professional learning and development in their schools” (p. 179). Evans (2015) and Zwart, Korthagen, and Attema-Noordewier (2015) recognized supportive leadership as one of the most important characteristics of effective PD and other researchers have also discovered its value. Desimone and Garet (2015) stated that when PD is supported by effective leadership, teachers are more willing and motivated to use the practices and strategies presented. Wieczorek (2017) studied principals’ perceptions of PD and found that principals had the

greatest influence on the participation and engagement of teachers within PD and also impacted the teachers' implementation of new practices and strategies. Therefore, ensuring effective leadership that supports and encourages the participation in PD and also the implementation of the knowledge and skills gained from the PD is important.

Connection Between Research and the Project

The project for this study is a PD regarding the knowledge, practices, and strategies needed to meet the learning needs of students with ASD. Maddox and Marvin (2012) described how many teachers need additional specialized training aside from their pre-service training to implement effective services for students with ASD. Brock et al. (2014) studied the PD needs of teachers related to students with ASD and stated, "Preparing practitioners to implement evidence-based practices confidently and effectively requires strategic PD" (p. 75). Therefore, a PD was created for the study's project.

The project was guided by DeMonte's (2013) recommendations for characteristics that would ensure high-quality PD. First, the PD was developed to extend over three consecutive days of sessions, which is more than the 14 hours of PD that DeMonte (2013) recommended for effective PD. Additionally, DeMonte (2013) recommended the following characteristics for effective PD:

1. Aligns with school goals, state district standards and assessments, and other professional-learning activities.
2. Focuses on core content and modeling of teaching strategies for the content.
3. Includes opportunities for active learning of new teaching strategies.

4. Provides opportunities for teachers to collaborate.
5. Includes follow-up and continuous feedback.

By including these characteristics within the PD project, I ensure that the participants will gain knowledge regarding research-based practices and strategies for effective instruction for students with ASD and utilize that knowledge through implementation of practices and strategies in the participants' classrooms to meet the students' learning needs.

Project Description

The PD created for this project consists of three days of presentations, activities, discussions, and a question and answer panel. The purpose of this 3-day PD course is to provide a comprehensive overview of ASD and the strategies and practices effective for instruction students with ASD. Individuals who participate in this course will learn how to effectively include a student with ASD in a general education classroom. The target audience for the PD course should be elementary general education teachers who teach or will teach students with ASD. The material was selected to align with the study district's goals and other curriculum framework in use. The content contains an introduction to the topic using an overview of the characteristics of students with ASD and the history of the disorder to provide all teachers with a common understanding of ASD. In addition, the content contains specific research-based practices and strategies related to teaching students with ASD in a general education classroom. Learning outcomes include the following:

1. Participants will know the definitions of ASD.

2. Participants will know some of the common characteristics on the autism spectrum and participants will learn some of the history of ASD as a disability.
3. Participants will know some of the different evidenced-based instructional methods/interventions that are available for working with students with ASD to create and utilize such instructional practices.
4. Participants will have an understanding of how language and communication is affected by ASD.
5. Participants will have an understanding of an IEP and how it relates to their responsibilities as a general education teacher.
6. Participants will have an understanding of specific behavioral challenges and positive interventions for students with ASD.
7. Participants will increase their understanding of the experiences and challenges of parents of students with ASD and the suggestions these individuals have regarding their children's education.

Multiple opportunities are provided to participants to collaborate and discuss with their colleagues about the related topic as well as opportunities for active learning of new strategies. Although it is not outlined within the PD presented in this project, it is recommended that continuous mentoring or coaching be provided in addition to the three day sessions to facilitate implementation of the skills obtained in the PD and allow for continuous feedback relating to challenges teachers may experience that are not addressed in the PD.

Needed Resources

To implement to PD within the study district there are resources that are required. A facilitator is needed to present the material to the participants. This individual should be selected based on previous experience working with students with ASD, experience and understanding of the district's procedures and guidelines regarding special education services and IEPs, and have a firm knowledge and understanding of how to implement the given practices and strategies within the presentations.

In addition to a knowledgeable facilitator, a setting should be selected that allows for individuals to collaborate and individually create a variety of projects. This space should also have Internet access that allows participants to use their devices to explore various websites throughout the presentations and a large projector with audio access to view the presentations and videos. Activities that were developed for the PD will require participants to create resources to utilize within their classroom. The creation of these resources will require access to colored printing and a laminator. Other consumable materials are listed in the notes section within the presentations.

The last resource needed for the implementation of the PD is a panel of parents of students with ASD for a question and answer session. This was included in the PD to allow participants to hear the experiences and challenges of parents of students with ASD and the suggestions these individuals have regarding their desires for their children's education. The facilitator will need to select, invite, and schedule for the parents to come in for this session of the PD in advance. He or she will also need to guide the question and answer session to include information that will be relevant to the participants and the

related topic. It is suggested that the facilitator work closely with the district's parent coordinator for the special education department to select parents that will lead to this session's effectiveness.

Existing Supports

There are several existing supports provided for the PD. The presentations for the PD are provided using PowerPoint for which notes for the facilitator are provided (Appendix A). These notes will support the facilitator in presenting the content and facilitating collaboration and discussion among the participants. A list of references for each section of the presentations is provided in order for the facilitator to inform him or herself more about the content. In addition to the PowerPoints, a syllabus is provided which outlines the purpose, goals, learning outcomes, target audience, an outline of components, timeline, activities, trainer notes, and module formats (Appendix A). This is to be provided to the participants on the first session day and discussed to ensure the participants understand the expectations and content within the PD.

Potential Barriers and Solutions to Barriers

There are a few potential barriers that must be addressed. The project consists of a PD that includes three consecutive days of sessions. This may not be feasible to implement during the school year and therefore careful consideration of scheduling for the PD is advised. An additional barrier may present itself for the facilitator in composing a panel of parents of students with ASD. It is suggested that the parents be contacted in advance and prepared for the questions the participants of the PD may ask. Another suggestion to prepare for short-notice cancellations is to schedule more parents than

needed to attend. In the case of technological malfunctions or Internet unavailability, printing the PowerPoint slides and having an alternate Internet source is suggested. The facilitator may want to coordinate with technology personnel to be present at the beginning of each day to ensure devices and equipment is working properly.

Proposal for Implementation

As described previously, district leaders should implement the PD over three consecutive days; however, district leaders should strive to provide further mentoring and coaching beyond the PD that resulted from this study. On the first day, the facilitator for the PD should create norms in order for all participants to know what is expected from them during their time within the sessions. In order for participants to feel comfortable sharing and form a learning community, the facilitator should utilize ice-breakers each day for them to get to know their colleagues. Each day, the facilitator should also include a question and answer time for the participants to clarify any material presented on the previous day. The sessions are organized within the PD to include time for the participants communicate and discuss topics related to ASD with colleagues to promote a community of learners.

The PD sessions include a general overview of ASD and the characteristics exhibited by students with the disability, a history of the disability, and then effective educational practices supported by research by Iovannone et al. (2003). Videos, which include *Through Our Eyes: Living with Asperger's Documentary* (Huber, 2015) and *Sounding the Alarm Documentary* (Block, 2015), and activities promote engagement and active participation. The facilitator should schedule these activities to be shared by the

participants during one of the following day's sessions. The final session for facilitators to implement is a question and answer panel of parents of students with ASD.

The timetable for each session is as follows:

Table 10

Timetable for PD Sessions

<u>Day 1</u>	<u>Session</u>
8:00-9:00	Class introductions, course objectives and expectations, creation of class norms
9:00-10:00	Characteristics of ASD
10:00-10:30	History and Related Disorders
10:30-11:15	Video & Discussion: <i>Through Our Eyes: Living with Asperger's Documentary</i>
11:15-11:30	Participant Share time about student characteristics
11:30-12:30	Lunch Break
12:30-2:00	What's an IEP?
2:00-3:00	Individual Supports- Special Interests
3:00-4:00	Special Interest Activity
<u>Day 2</u>	
8:00-8:30	Ice-breaker, Question and answer time relating to Day 1 material
8:30-9:00	Share special interest lesson plans created on Day 1
9:00-10:00	Systematic Instruction
10:00-11:00	Token Board/ Self-Management Activity
11:00-12:00	Lunch Break
012:00-1:30	Video & Discussion: <i>Sounding the Alarm Documentary</i>
1:30-3:00	Comprehensible & Structured Environments
3:00-4:00	Schedule Activity
<u>Day 3</u>	
8:00-8:30	Ice-breaker, Question and answer time relating to Day 2 material
8:30-9:00	Share Social Stories and Schedules created on Day 2
9:00-10:00	Communication and Socialization
10:00-11:00	Social Story Activity
11:00-12:00	Lunch Break
12:00-1:00	Functional approach to problem behaviors
1:00-2:45	Parent Question and Answer Panel
2:45-3:30	Question and answer time relating to Day 3 material and Evaluation

Note. 15-minute breaks should be provided as needed or as suggested in the facilitator's notes.

Roles and Responsibilities of Participants

The roles and responsibilities of the participants in the PD include being active learners as they take part in multiple discussions regarding the presentations and videos.

Participants in the PD will be expected to communicate with colleagues to share their experiences teaching students with ASD and to share the resources they create throughout the PD activities. Prior to the first day's sessions, participants in the PD are responsible for bringing an electronic device, their next week's lesson plans, and a copy of their student's IEP. These items will be used during the first day's sessions. Participants in the PD will be responsible for bringing their device for the last two days to access online material and utilize the device for their activities. It will also be the participants' responsibility to come prepared with completed resources they created during the previous day's activity sessions.

The roles and responsibilities of the facilitator of the PD include leading and directing learners as they take part in multiple discussions regarding the PD material. The facilitator should prepare for ice-breakers for each day of the PD. Additionally the facilitator should create norms in order for all participants to know what is expected from them and prepare for a question and answer time for the participants to clarify material presented within the PD. The facilitator must become familiar with the slides and notes for each day's sessions to properly facilitate the PD.

Project Evaluation Plan

The evaluation of PD is important to provide information regarding the improvement needs and impact on teachers to be effective (Green & Allen, 2015). PD should be created with clear and concise goals that are clearly aligned with increasing the knowledge and skills of teachers (Desimone & Garet, 2015). The PD created for the study's project was guided by five goals aligned with Iovannone et al. (2003) effective

educational practices for students with ASD. The goals for the project and the sessions that will achieve these goals are as follows:

Table 11

Project Goals and Sessions Designed to Achieve Goals

<u>Goal</u>	<u>Sessions Designed to Achieve Goals</u>
After the 3-day professional learning course, given a course feedback form, participants will be able to identify individualized supports and services for students with ASD.	Characteristics of ASD, History and Related Disorders, Video & Discussion: Through Our Eyes: Living with Asperger's Documentary, What's an IEP?, Individual Supports- Special Interest, Special Interest Activity, & Parent Question and Answer Panel
After the 3-day professional learning course, given a course feedback form, participants will be able to identify systematic instruction techniques for students with ASD.	Systematic Instruction, Token Board/ Self-Management Activity, & Parent Question and Answer Panel
After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to create a comprehensible and structured environment for students with ASD.	Video & Discussion: Sounding the Alarm Documentary, Comprehensible & Structured Environments, Schedule Activity, & Parent Question and Answer Panel
After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to create specialized curriculum content for students with ASD.	Communication and Socialization, Social Story Activity, & Parent Question and Answer Panel
After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to use a functional approach to address problem behaviors students with ASD.	Functional approach to problem behaviors, & Parent Question and Answer Panel

The evaluation for the PD will be a summative goal-based evaluation in which participants will complete a feedback form at the end of the PD course describing their knowledge about effective educational practices for students with ASD and their evaluation of the PD facilitation (Appendix B). Examples of the summative questions regarding the PD include the following: (1) Identify recommendations to make this PD course more effective in the future; (2) Identify what you benefited from the most from

this PD course. The justification for using this type of evaluation was in using the information to evaluate the PD at the conclusion in order for it to be revised and edited to address the responses participants provide for future implementation. An additional goal of the evaluation includes its use to provide further insight for district office personnel and principals as to the knowledge and skills the teachers possess after the completion of the 3-day PD.

Project Implications

From participation in the PD, general education teachers may gain a deeper knowledge of ASD and the effective educational practices to support students with ASD in their classroom. This knowledge may increase their abilities and skills in implementing more effective practices and strategies for students with ASD that may lead to higher student achievement. Ultimately, the participation in the PD may address the challenges many participants from the study stated they experience when teaching students with ASD in their classroom. The PD may provide the support for general education teachers to make them more successful in providing inclusive classrooms for students with and without disabilities. Administrators within the study's site district may find the content of the project to be important for all teachers in order for the district to be prepared for students with ASD to be placed in any general education classroom within their school.

In Section 4, I discuss the project strengths and limitations and recommendations for alternative approaches to the study of general education teachers' experiences teaching students with ASD. I also describe the personal learning and growth I experienced through the process of this study. I reflect and discuss on the importance of

the study and what was learned from the data. I also provide implications, applications, and directions for future research.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

My project has strengths and limitations in addressing the problem. One strength is how I created the PD using the findings of my study: individual support and service needs, academic needs, structured environment needs, communication and language needs, disciplinary needs, and needed supports and resources for general education teachers. Wieczorek (2017) stated that the most effective PD is created based on existing teacher need. Therefore, I developed the PD specifically to address the need for teachers within the study's site district to further understand how to meet the needs of students with ASD. The PD did not include a coaching component, which could be a limitation because research indicates that coaching and mentoring are more effective models of PD than workshop approaches (Brock et al., 2014; Mueller & Brewer, 2013). Using coaching and mentoring could be an alternative or additive approach to the project.

Recommendations for Alternative Approaches

An increased number of general education teachers are teaching students with ASD in their classrooms despite having little to no preparation on how to effectively meet their individualized needs (Hart & Malian, 2013). To explore how general education teachers met the learning needs of students with ASD, alternative approaches to the study could have been chosen. Given an extended period of time to gather data, an observational case study may have been equally informative about the local problem. Through observations of general education teachers' classroom experiences, I might have

obtained further information relating to their use of effective educational practices to determine the project need.

Adding an additional component of coaching and mentoring to the study's project also is a recommendation for an alternative or additive approach to the traditional PD course. Mueller and Brewer (2013) found that the incorporation of coaching into a PD course provided an enhancement of skills for participants. The researchers described how coaching was a "pivotal component" to the success of PD. Incorporating this component into the project may increase its effectiveness in improving how general education teachers meet the learning needs of students with ASD.

An alternative project genre would be a curriculum plan to provide effective practices for general education teachers to utilize when teaching students with ASD, such as systematic instruction and specialized curriculum content. My study revealed that few general education teachers addressed the communication and language needs of their students with ASD. Providing a curriculum plan to instruct students with ASD regarding their specialized needs may have also been an appropriate choice of project.

Scholarship, Project Development and Evaluation, and Leadership and Change

As a special education teacher employed by the study's site district, I learned about how I may support my colleagues who are general education teachers of students with ASD using the research and development of the study's project. I increased my knowledge regarding characteristics of effective PD and purposes of PD. Through the creation of the project, I strengthened the knowledge and skills I possessed regarding effective educational practices for students with ASD. I also learned how to develop an

effective PD program. I plan to use my knowledge and skills in supporting other teachers in my school who work with ASD students.

Throughout this process, I experienced personal growth as a scholar and project developer. I increased my knowledge relating to the understanding of research articles. I often struggled to understand the methods and analysis of research studies; however, through the completion of my own study, I have a stronger ability to decipher research that is relevant to a problem and research that also can be generalized to a larger setting given reliability and validity of its results. Creating a project for another individual to facilitate strengthened my growth as a project developer. I will be a stronger leader within the study district because I have gained knowledge and skills through this process.

Reflection on Importance of the Work

The study district has struggled for several years to effectively include students with ASD in the general education classroom; yet it has not conducted any research to determine how to address the problem. Therefore, the work and results that I gathered from this study are important as the district strengthens the educational services it provides to students with ASD. I learned that general education teachers use a variety of techniques and strategies to meet the needs of their students with ASD. I also found that teachers desire further support and resources in the form of teacher training to better their instruction for students with ASD.

Implications, Applications, and Directions for Future Research

Through the implementation of the project, this research study will achieve positive social change for the teachers and students within the study's site district.

Teachers may improve their teaching practices due to the participation in the project, which may lead to improved student achievement for students with ASD. Students with ASD may grow to be more independent and productive citizens when they receive effective educational practices.

Possibilities for future research relate to the need to further investigate the experiences of general education teachers who teach students with ASD. The current study relied on interviews from ten teachers within the study's site district. Future studies should incorporate observational data to document the fidelity for which general education teachers of students with ASD utilize effective educational practices. Additionally, follow up interviews after the participants take part in the PD may be informative to determine how the teachers implement the effective educational practices presented in the PD. Also, the findings are too local to be generalized to the larger population. However, other districts may draw on these findings to implement a similar project to address the challenges of teachers within their district face when teaching students with ASD.

Conclusion

This study explored how elementary general education teachers met the learning needs of students with ASD within a northwestern Georgia school district. The purpose was to learn how to strengthen their preparation and ensure more effective instruction of students with ASD. Training to further prepare general education teachers to meet the needs of students with ASD is needed. Leaders in the local school district and school districts nationwide must take immediate steps to improve the knowledge and skills of

general education teachers to improve the achievement of students with ASD. General education teachers experience many challenges such as managing inappropriate behaviors, understanding and utilizing the contents of an IEP, and addressing the individualized needs and supports of students with ASD; therefore, they must receive adequate supports and training to address these challenges.

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Appendix A: The Project

Syllabus

Purpose

The purpose of this 3-day professional learning course is to provide a comprehensive overview of autism spectrum disorders (ASD). Individuals who participate in this course will learn how to effectively include a student with ASD in a general education classroom.

Goals

After the 3-day professional learning course, given a course feedback form, participants will be able to identify individualized supports and services for students with autism spectrum disorder.

After the 3-day professional learning course, given a course feedback form, participants will be able to identify systematic instruction techniques for students with autism spectrum disorder.

After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to create a comprehensible and structured environment for students with autism spectrum disorder.

After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to create specialized curriculum content for students with autism spectrum disorder.

After the 3-day professional learning course, given a course feedback form, participants will be able to identify ways to use a functional approach to address problem behaviors students with autism spectrum disorder.

Learning Outcomes

Participants will know the definitions of autism.

Participants will know some of the common characteristics on the autism spectrum

Participants will recognize the history of autism

Participants will know some of the different evidenced-based instructional methods/interventions that are available for working with students with autism.

Participants will have an understanding of how autism affects communication along the spectrum.

Participants will have an understanding of an IEP and how it relates to their responsibilities of a general education teacher.

Participants will have an understanding of specific behavioral challenges and positive interventions for students with ASD.

Participants will familiarize themselves with the creation of a variety of resources that are researched-based strategies and practices for supporting students with ASD.

Participants will increase their understanding of the experiences and challenges of parents of students with ASD and the suggestions these individuals have regarding their desires for their children's education.

Target Audience

Elementary General Education Teachers

Component Outline

Topics to be covered include the following

- Characteristics of ASD
- History and Related Disorders
- Individualized Supports and Services
 - Understanding the IEP
- Systematic Instruction
- Comprehensible and Structured Environments
- Specialized Curriculum Content
 - Communication
 - Social Skills
- Functional Approach to Problem Behaviors

Timeline

<u>Day 1</u>	<u>Session</u>
8:00-9:00	Class introductions, course objectives and expectations, creation of class norms
9:00-10:00	Characteristics of ASD
10:00-10:30	History and Related Disorders
10:30-11:15	Video & Discussion: Through Our Eyes: Living with Asperger's Documentary
11:15-11:30	Participant Share time about student characteristics
11:30-12:30	Lunch Break
12:30-2:00	What's an IEP?
2:00-3:00	Individual Supports- Special Interests
3:00-4:00	Special Interest Activity
<u>Day 2</u>	
8:00-8:30	Ice-breaker, Question and answer time relating to Day 1 material
8:30-9:00	Share special interest lesson plans created on Day 1
9:00-10:00	Systematic Instruction
10:00-11:00	Token Board/ Self-Management Activity
11:00-12:00	Lunch Break
12:00-1:30	Video & Discussion: Sounding the Alarm Documentary
1:30-3:00	Comprehensible & Structured Environments

3:00-4:00	Schedule Activity
<u>Day 3</u>	
8:00-8:30	Ice-breaker, Question and answer time relating to Day 2 material
8:30-9:00	Share Social Stories and Schedules created on Day 2
9:00-10:00	Communication and Socialization
10:00-11:00	Social Story Activity
11:00-12:00	Lunch Break
12:00-1:00	Functional approach to problem behaviors
1:00-2:45	Parent Question and Answer Panel
2:45-3:30	Question and answer time relating to Day 3 material and Evaluation

Activities

Participants will analyze one of his/her student's individualized education plans in order to understand each section of the document.

Participants will individualize a lesson plan to support the engagement needs of his/her student with ASD.

Participants will create a token/point board or a self-management point sheet for a student in his/her classroom to support their individualized needs.

Participants will create a visual schedule for a student in his/her classroom to support their individualized needs.

Participants will explore premade social stories and then create a social story for his/her student to support their social needs.

Participants will explore functional behavior assessments and behavior intervention plans in order to better familiarize him/herself with these tools.

Participants will have the opportunity to ask questions to a panel of parents of students with ASD.

Participants will watch and discuss a variety of videos documenting the lives of individuals with ASD.

Trainer Notes

Trainer will need to prepare ahead of time for course's activities that require a variety of materials and technology resources.

Trainer will need to familiarize themselves with PowerPoints and the notes within the PowerPoints prior to the course.

Trainer will need to schedule for 5-6 parents of students with ASD to be a part of the parent panel on the last day of the course. Parents should be chosen that are willing to support the participants by providing advice, points of view about students with ASD, and any other input about the education of students with ASD.

Module Formats

Each day consists of one PowerPoint document that is broken up into several smaller PowerPoint presentations, activities, and videos. 15 minutes breaks and 90 minute lunches are built into each day.

Implementation Plan

This course will be implemented toward the beginning of a school year after the district has identified general education teachers for students with ASD. The course will be implemented on three consecutive days in order to maintain consistent contact and feedback regarding the content. A facility that can accommodate the presentation format, workspace, and capacity for 20-30 participants will be necessary.

Evaluation Plan

At the end of the course, participants will be asked to complete an End of Course Feedback Form on which they will be asked a number of questions regarding the content presented within the 3 days. This form will also ask for feedback regarding suggestions for improving the course for future participants as well as the most valuable take-away from the course. Evaluation of the course will be based on these completed forms.

Evaluation:

1. Identify individualized supports and services for students with autism spectrum disorder.
2. Identify systematic instruction techniques for students with autism spectrum disorder.
3. Identify ways to create a comprehensible and structured environments for students with autism spectrum disorder.
4. Identify ways to create specialized curriculum content for students with autism spectrum disorder.
5. Identify ways to use a functional approach to address problem behaviors students with autism spectrum disorder.
6. Identify recommendations to make this professional development course more effective in the future.
7. Identify what you benefited from the most from this professional development course.

Day 1 PowerPoint Slides and Notes

Slide 1



An Introduction to Autism Spectrum Disorder

Slide 2

A PowerPoint slide with a white background and green geometric shapes on the left and right sides. The title "Your Experiences What We Know" is in green. Below it is a list of two bullet points. To the right of the list is a cartoon yellow smiley face with a white thought bubble above its head.

**Your Experiences
What We Know**

- ▶ Think for a minute about your experiences with individuals with autism spectrum disorder? What do you know about them? What makes them different?
- ▶ Write down 3 things you know about students with ASD



Provide participants with 3 sticky notes to record what they know about students with ASD and ask them to place the sticky notes on a large chart paper titled “What We Know.” After all notes are placed, read several of them aloud.

Slide 3

What We Want to Know

- ▶ Write down 1 thing that you would like to know/learn after this 3 day course.



Provide participants another colored sticky note and ask them to record 1 thing that they would like to know/learn and place on a chart paper titled “What We Want to Know.” After all notes are added, read a few of them aloud.

Slide 4

Autism Spectrum Disorder (ASD)

- ▶ Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication and behavioral challenges.



(Centers for Disease Control and Prevention, 2016)

Read definition of ASD provided by CDC

Slide 5

RED FLAGS

- ▶ A person with ASD might:
 - ▶ Not respond to their name by 12 months of age
 - ▶ Not point at objects to show interest (point at an airplane flying over) by 14 months
 - ▶ Not play "pretend" games (pretend to "feed" a doll) by 18 months
 - ▶ Avoid eye contact and want to be alone
 - ▶ Have trouble understanding other people's feelings or talking about their own feelings
 - ▶ Have delayed speech and language skills
 - ▶ Repeat words or phrases over and over (echolalia)
 - ▶ Give unrelated answers to questions
 - ▶ Get upset by minor changes
 - ▶ Have obsessive interests
 - ▶ Flap their hands, rock their body, or spin in circles
 - ▶ Have unusual reactions to the way things sound, smell, taste, look, or feel

(Centers for Disease Control and Prevention, 2016)

Have participants turn and talk with another person about what they see as the red flags of a student with ASD. Allow 2-3 minutes for discussion with partners. Discuss the signs of ASD (Red Flags) as a whole group using the slide's content.

Slide 6

Social Skills

- ▶ Does not respond to name by 12 months of age
- ▶ Avoids eye-contact
- ▶ Prefers to play alone
- ▶ Does not share interests with others
- ▶ Only interacts to achieve a desired goal
- ▶ Has flat or inappropriate facial expressions
- ▶ Does not understand personal space boundaries
- ▶ Avoids or resists physical contact
- ▶ Is not comforted by others during distress
- ▶ Has trouble understanding other people's feelings or talking about own feelings



(Centers for Disease Control and Prevention, 2016)

Discuss 3 areas of deficits (social skills, communication, restricted or repetitive behaviors) using the next three slides' content.

Slide 7

Communication

- ▶ Delayed speech and language skills
- ▶ Repeats words or phrases over and over (echolalia)
- ▶ Reverses pronouns (e.g., says "you" instead of "I")
- ▶ Gives unrelated answers to questions
- ▶ Does not point or respond to pointing
- ▶ Uses few or no gestures (e.g., does not wave goodbye)
- ▶ Talks in a flat, robot-like, or sing-song voice
- ▶ Does not pretend in play (e.g., does not pretend to "feed" a doll)
- ▶ Does not understand jokes, sarcasm, or teasing



(Centers for Disease Control and Prevention, 2016)

Slide 8

Restricted or Repetitive Behaviors

- ▶ Lines up toys or other objects
- ▶ Plays with toys the same way every time
- ▶ Likes parts of objects (e.g., wheels)
- ▶ Is very organized
- ▶ Gets upset by minor changes
- ▶ Has obsessive interests
- ▶ Has to follow certain routines
- ▶ Flaps hands, rocks body, or spins self in circles



(Centers for Disease Control and Prevention, 2016)

Slide 9

Temple Grandin TED Talk



http://www.ted.com/talks/temple_grandin_the_world_needs_all_kinds_of_minds

Discuss Temple Grandin and the influence/experience she has in the field of autism. Watch video of Temple Grandin's TED talk and follow the video with a discussion. Take 15 minute break before the next PowerPoint Slide.

Slide 10

References

- ▶ Centers for Disease Control and Prevention (2016). Autism Spectrum Disorder. Retrieved from <http://www.cdc.gov/ncbddd/autism/index.html>

Slide 11

History of ASD and Related Disorders

Throughout this PowerPoint presentation, discuss each individual and their impact on ASD.

Slide 12

1908 Eugen Bleuler

- ▶ Swiss psychiatrist
- ▶ The New Latin word *autismus* (English translation autism)
- ▶ Was defining symptoms of schizophrenia.
- ▶ Used it to mean morbid self-admiration
- ▶ Saw withdrawal of the patient



(Vatanoglu-Lutz, Atamn, & Bicer, 2014)

In 1908 Eugen Bleuler, a Swiss psychiatrist, used the Latin word *autismus* when he was defining the symptoms of schizophrenia. The Greek word *autos* (meaning self) was used to mean morbid self-admiration. He specifically was referring to the withdrawal his patients exhibited.

Slide 13

1943 Leo Kanner M.D.

- ▶ American child psychiatrist
- ▶ "Autistic Disturbance of Affective Contact"
- ▶ Study of 11 children
 - ▶ difficulties in social interactions,
 - ▶ difficulty in adapting to changes in routines
 - ▶ good memory
 - ▶ sensitivity to stimuli (especially sound)
 - ▶ resistance and allergies to food
 - ▶ good intellectual potential
 - ▶ echolalia or propensity to repeat words of the speaker
 - ▶ difficulties in spontaneous activity.
- ▶ Early infantile autism



(Vatanoglu-Lutz, Atamn, & Bicer, 2014)

In 1943 Leo Kanner, an American child psychiatrist, published his study, Autistic Disturbance of Affective Contact. This study was of 11 children who had several common characteristics. He identified children having early infantile autism.

Slide 14

1944 Hans Asperger

- ▶ A German scientist
- ▶ a "milder" form of autism-Asperger's Syndrome
 - ▶ did not have echolalia
 - ▶ spoke like grownups
 - ▶ clumsy
 - ▶ fine motor skills



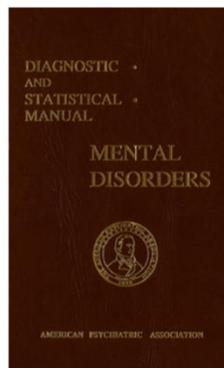
(Vatanoglu-Lutz, Atamn, & Bicer, 2014)

Discuss study of individuals with a milder form of autism that Hans Asperger, a German scientist, identified as Asperger's Syndrome in 1944.

Slide 15

1952 DSM-I

- ▶ The DSM-I was originally released in 1952. Autism was not included in the DSM. Instead, children who exhibited autistic-like symptoms were diagnosed under the schizophrenic reaction, childhood type label.



(Volkmar & McPartland, 2014)

Discuss the Diagnostic and Statistical Manual of Mental Disorders and what it stated about ASD in 1952 when the first version was published.

Slide 16

1967 Bruno Bettelheim

- ▶ Psychologist
- ▶ "refrigerator mothers"
 - ▶ caused autism by not loving their children enough



(Volkmar & McPartland, 2014)

Discuss Refrigerator mothers and the impact on society in the 1960s-1970s.

Slide 17

Refrigerator Mothers

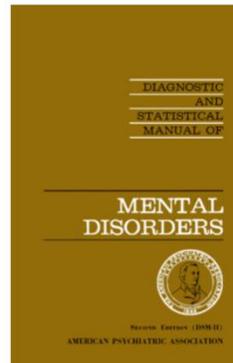
- ▶ https://www.youtube.com/watch?v=WWB_OYWE3DQ
- ▶ <https://www.youtube.com/watch?v=mgz3tvqBQ4o>

Watch videos on YouTube about the documentary, Refrigerator Mothers.

Slide 18

1968 DSM-II

- ▶ As with the first release, autism was not included as a separate diagnostic category.
- ▶ The DSM-II included the following language: “the condition may be manifested by autistic, atypical and withdrawn behavior.” Children exhibiting these behaviors were diagnosed as schizophrenic, childhood type.



(Volkmar & McPartland, 2014)

Discuss what DSM-II stated about ASD.

Slide 19

1980 Bernard Rimland

- ▶ Psychologist and parent of a child with autism
- ▶ *Infantile Autism: The Syndrome and its Implications for a Neural Theory of Behavior.*



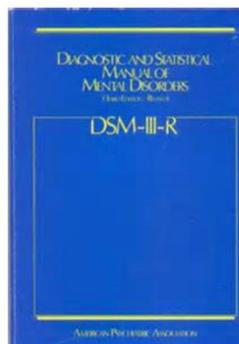
(Volkmar & McPartland, 2014)

Rimland rejected the idea that unloving mothers caused autism in children. He published the book, *Infantile Autism: The Syndrome and its Implications of Neural Theory of Behavior*.

Slide 20

DSM-III

- ▶ "Infantile autism" is listed in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* for the first time; the condition is also officially separated from childhood schizophrenia.
- ▶ There were only six characteristics listed and each of these six symptoms must be present in order for an individual to be diagnosed with infantile autism. Due to some controversy surrounding the descriptor infantile, this category was changed to autistic disorder in 1987



(Volkmar & McPartland, 2014)

Discuss DSM-III and what it stated about autism.

Slide 21

1988 Rain Man

- ▶ The movie *Rain Man* is released. It stars Dustin Hoffman as an autistic savant who has a photographic memory and can calculate huge numbers in his head.
- ▶ <https://www.youtube.com/watch?v=glK8NN4u3tw>



Watch YouTube video of Rain Man video trailer.

Slide 22

1991

- ▶ The federal government makes autism a special education category. Public schools begin identifying children on the spectrum and offering them special services.



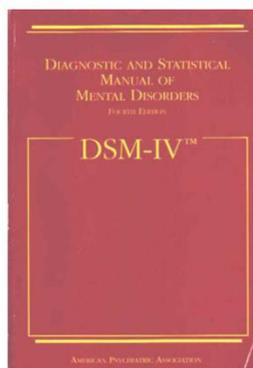
(Volkmar & McPartland, 2014)

Read slide.

Slide 23

1994 DSM-IV

- ▶ Asperger's Syndrome is added to the DSM, expanding the autism spectrum to include milder cases in which individuals tend to be more highly functioning.
 - ▶ Rett's Disorder,
 - ▶ Childhood Disintegrative Disorder, and
 - ▶ Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS).



(Volkmar & McPartland, 2014)

Discuss DSM-IV and what it states about autism.

Slide 24

2009

- ▶ The U.S. Centers for Disease Control and Prevention (CDC) estimates that 1 in 110 children have autism spectrum disorders, up from 1 in 150 in 2007, though the CDC notes that the increase stems at least in part from improved screening and diagnostic techniques.

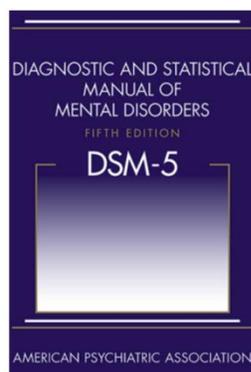


Read slide.

Slide 25

2013 DSM-V

- ▶ Folds all subcategories of the condition into one umbrella diagnosis of autism spectrum disorder (ASD).
- ▶ Asperger's Syndrome is no longer considered a separate condition.
- ▶ ASD is defined by two categories: 1) Impaired social communication and/or interaction. 2) Restricted and/or repetitive behaviors.



(Volkmar & McPartland, 2014)

Discuss current edition of DSM and what it states about ASD.

Slide 26

Today

1 in 68

Estimated number of children affected by an autism spectrum disorder. For boys, the number is 1 in 42.

2%-18%

Likelihood that a person will have a second child with autism if they already have one

1 in 10

Number of children with autism who also have Down syndrome or another chromosomal disorder

2 years

Age at which a diagnosis of autism is typically reliable. Most children are not diagnosed until they are 4 years old

120%

Increase in autism spectrum disorder prevalence between 2002 and 2010

(National Institute of Mental Health, 2016)

Read numbers related to ASD and discuss.

Slide 27

References

- ▶ National Institute of Mental Health (2016). Autism Spectrum Disorder. Retrieved from <http://www.nimh.nih.gov>.
- ▶ Centers for Disease Control and Prevention (2016). Autism Spectrum Disorder. Retrieved from <http://www.cdc.gov/ncbddd/autism/index.html>
- ▶ Vatanoglu-Lutz, E. E., Atamn, A. D., & Bicer, S. (2014). Medicine in stamps: Hisotry of autism spectrum disorder (ASD) through philately. *Journal of Neurological Sciences*, 31(2), 426-434.
- ▶ Volkmar, F. R., & McPartland, J. C. (2014). From Kanner to DSM-5: autism as an evolving diagnostic concept. *Annual review of clinical psychology*, 10, 193-212.

Slide 28

Through Our Eyes: Living with Asperger's

- ▶ <https://www.youtube.com/watch?v=2TSlti5bioQ>

Watch 32 minute documentary, Through Our Eyes: Living with Asperger's and discuss in small groups. Break for lunch after discussion.

Slide 29

Jake- Proud of his Autism

► https://www.youtube.com/watch?v=OR36jrx_L44

Watch video of child with ASD on YouTube and discuss in small groups.

Slide 30

What's an IEP?

Slide 31

Individualized Education Plan

- ▶ What does individualized mean? Take 5 minutes to discuss at your tables and be prepared to share.
- ▶ Chart- What Individualized IS vs. What Individualized IS NOT



Create a whole group T chart of what individualized is and what individualized is not.

Slide 32

Individualized

- ▶ Look at 1 child
 - ▶ Strengths and weaknesses
 - ▶ Student's interest
 - ▶ Level of support need for each task
 - ▶ Amount of work
 - ▶ Method of how to deliver instruction
 - ▶ Current level of performance



Compare whole group chart to slide's content.

Slide 33

What is an IEP?

- ▶ <https://www.youtube.com/watch?v=tGYO9XWhI2Y>

Watch video of an IEP overview and discuss what questions participants still have regarding an IEP.

Slide 34

What does an IEP contain?

- ▶ Present Levels of Academic Achievement and Functional Performance (PLAAFP)
 - ▶ Test Results from state or district assessments
 - ▶ Academic, developmental and/or functional strengths
 - ▶ Academic, developmental and/or functional weaknesses
 - ▶ Parent concerns regarding their child's education
 - ▶ Impact of the disability on involvement and progress in the general education curriculum
- ▶ Review your student's (s') PLAAFP section
- ▶ Question and Answer Time

Have participants use their student data entry program to pull up one of their student's IEPs. Review each section of the IEP given the next few slides' content and allow participants to review their student's section of their IEP and ask any questions they have regarding it. Answer questions as best as possible before moving to the next section.

Slide 35

What does an IEP contain?

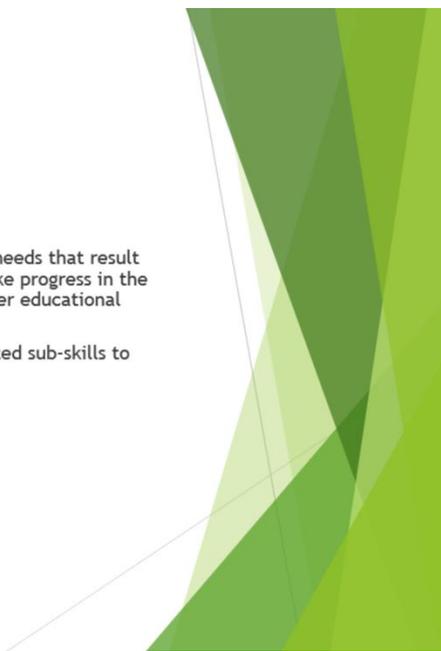
- ▶ Consideration of Special Factors
 - ▶ Behavior which impedes learning or learning of others
 - ▶ Limited English proficiency (ELL)
 - ▶ Blindness/visual impairment
 - ▶ Communication Needs (SLP)
 - ▶ Deaf or hard of hearing
 - ▶ Assistive Technology Devices or Services
 - ▶ Alternative format for instructional materials
- ▶ Review your student's (s') Special Factors section
- ▶ Question and Answer Time



Slide 36

What does an IEP contain?

- ▶ Measureable Annual Goals and Short Term Objectives
 - ▶ Academic and/or functional goals designed to meet the child's needs that result from the disability to enable the child to be involved in and make progress in the general education curriculum or to meet each of the child's other educational needs that result from the disability.
 - ▶ Short Term objectives: Measurable, intermediate steps or targeted sub-skills to enable student to reach annual goals.
 - ▶ Criteria for Mastery
 - ▶ Method of Evaluation
- ▶ Review your student's (s') Goals section
- ▶ Question and Answer Time



Slide 37

What does an IEP contain?

- ▶ Student Supports
 - ▶ Instructional Accommodations
 - ▶ Classroom Testing Accommodations
 - ▶ Supplemental Aids and Services
 - ▶ Supports for School Personnel

- ▶ Review your student's (s') Student Supports section
- ▶ Question and Answer Time

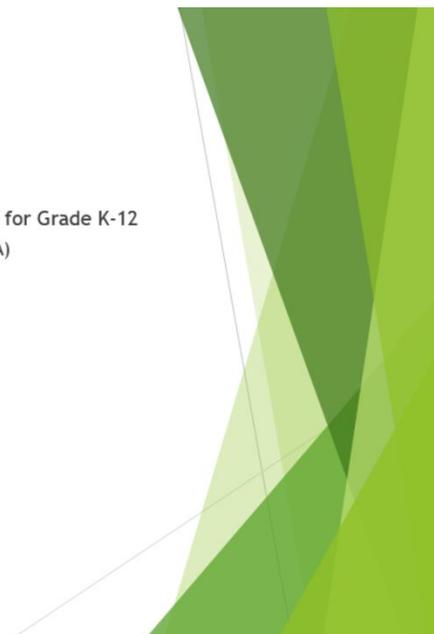


Slide 38

What does an IEP contain?

- ▶ Assessment Determination for District and Statewide Assessments for Grade K-12
 - ▶ Will the student participate in the Georgia Alternate Assessment (GAA)
 - ▶ Specific Test Accommodations
 - ▶ Test
 - ▶ Subtest
 - ▶ Setting
 - ▶ Timing/Scheduling
 - ▶ Presentation
 - ▶ Response
 - ▶ Standard, Conditional or None

- ▶ Review your student's (s') Assessment Determination section
- ▶ Question and Answer Time



Slide 39

What does an IEP contain?

- ▶ Services
 - ▶ In General Education Classroom/ Early Childhood Setting
 - ▶ Outside of the General Education Classroom
 - ▶ Related Services Outside of the General Education Classroom
 - ▶ Class-Model
 - ▶ Frequency
 - ▶ Start-End Date
 - ▶ Content/Specialty Area
 - ▶ Provider
 - ▶ Location
- ▶ Review your student's (s') Services section
- ▶ Question and Answer Time

Slide 40

Where do we (general education teachers) come in to the IEP?

- ▶ Think about what areas of the IEP are especially important to you as a general education teacher to know about and use in your classroom. Take 10 minutes to discuss at your tables and be prepared to share.

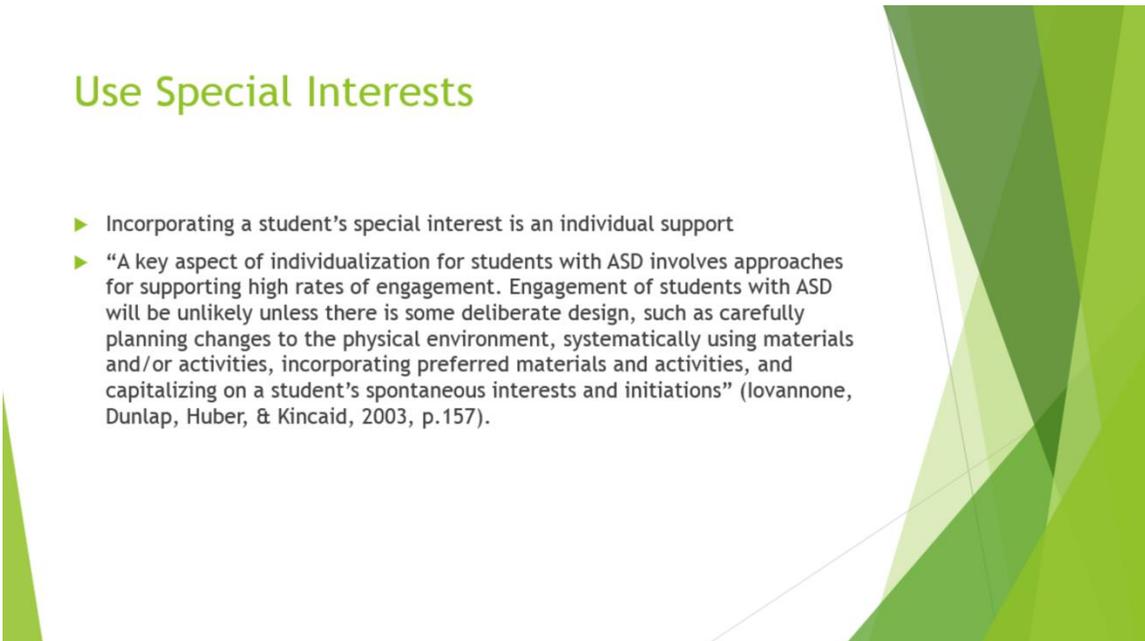
Provide 10 minutes and then have one person from each group share aloud what was discussed. Record comments on chart paper titled "The General Education Teacher and the IEP. Take 15 minute break.

Slide 41



Individualized Supports

Slide 42



Use Special Interests

- ▶ Incorporating a student's special interest is an individual support
- ▶ “A key aspect of individualization for students with ASD involves approaches for supporting high rates of engagement. Engagement of students with ASD will be unlikely unless there is some deliberate design, such as carefully planning changes to the physical environment, systematically using materials and/or activities, incorporating preferred materials and activities, and capitalizing on a student's spontaneous interests and initiations” (Iovannone, Dunlap, Huber, & Kincaid, 2003, p.157).

Read slide aloud about using special interests. Ask participants to write down what they know their student is interested in that they could use to increase engagement of participation in their classroom.

Slide 43

Math



Discuss each picture on the next few slides as a whole group and how they individualize content to increase student engagement.

Slide 44

Math



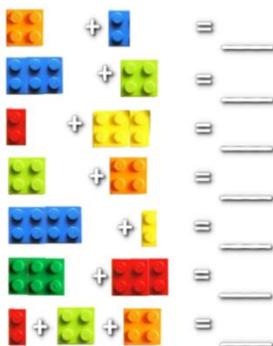
Slide 45

Math



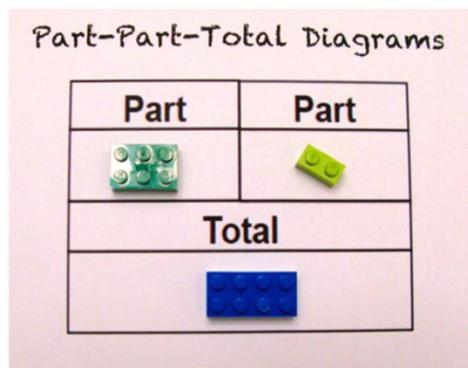
Slide 46

Math



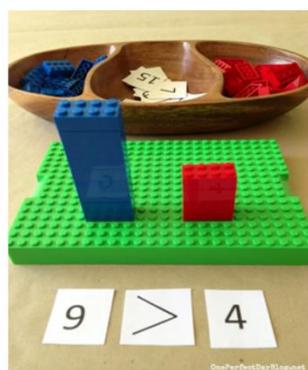
Slide 47

Math



Slide 48

Math



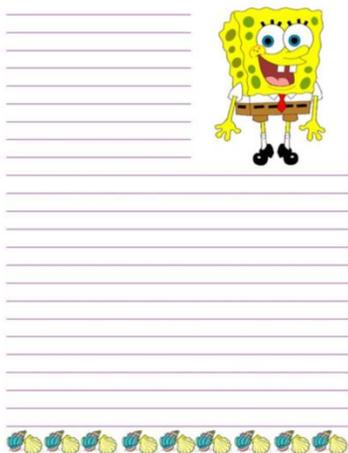
Slide 49

Coloring



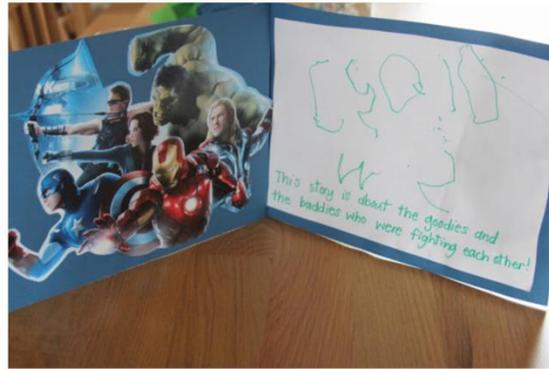
Slide 50

Writing



Slide 51

Writing



Slide 52

Writing



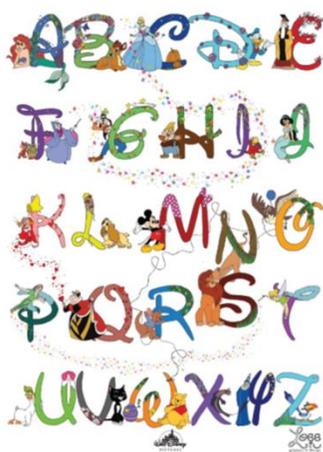
Slide 53

Independent Reading



Slide 54

Reading



Slide 55

Social Studies



Slide 56



Slide 57



Slide 58

References

- ▶ Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D. (2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 18*(3), 150-165.

Slide 59

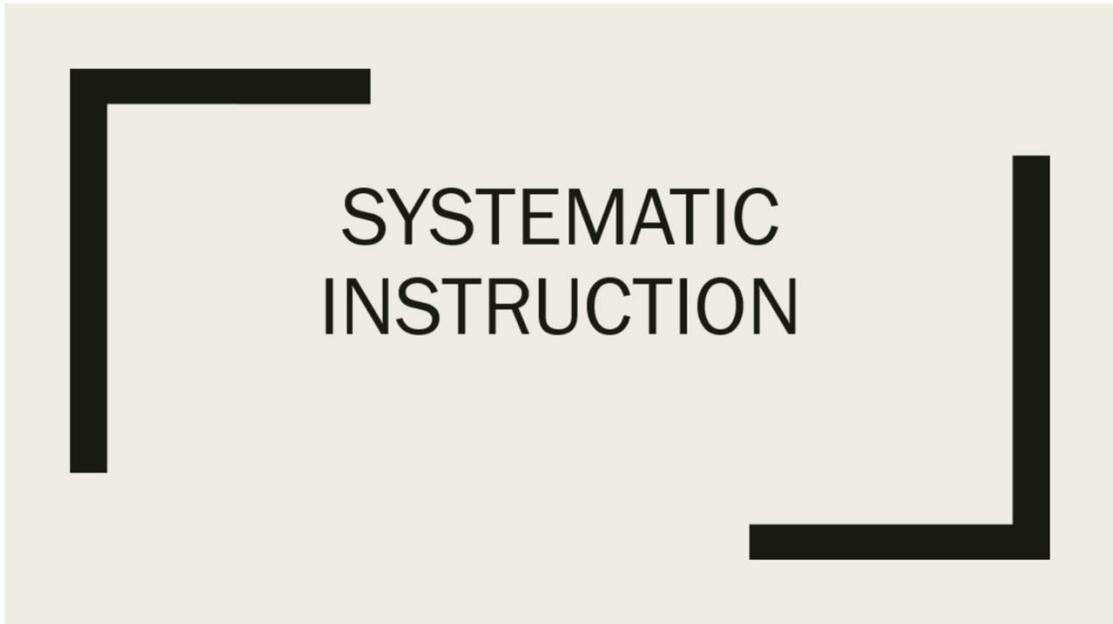
Plan

- ▶ Take the rest of today to choose one lesson you have teach in the next couple of days and plan how you can individualize it to support the engagement of your student with ASD.
- ▶ Be prepared to share tomorrow morning.

Have participants choose a lesson they plan to teach and individualize it to support student engagement of one of their students with ASD. Allow them to use the rest of the day's class time to plan this individualization so they are prepared to share tomorrow morning what that will look like, how it will be incorporated, and why they chose to do what they did.

Day 2 PowerPoint Slides and Notes

Slide 1



Slide 2

A slide with a light beige background. A thick black vertical bar is on the left side. The title "Systematic Instruction" is centered at the top in a black, sans-serif font. Below the title are two bullet points, each starting with a small black square. The first bullet point describes the process of systematic instruction, and the second bullet point refers to methods and principles from ABA.

Systematic Instruction

- Systematic instruction involves carefully planning for instruction by identifying valid educational goals, carefully outlining instructional procedures for teaching, implementing the instructional procedures, evaluating the effectiveness of the teaching procedures, and adjusting instruction based on data (Iovannone, Dunlap, Huber, & Kincaid, 2003).
- Methods and Principles from Applied Behavior Analysis (ABA)

Read slides contents about what systematic instruction involves. Discuss methods and principles from ABA.

Slide 3

Task Analysis

- Task analysis is a process by which a task is broken down into its component parts
- What skills are required to perform each strategy/part
- Take the next 15 minutes to write down the steps to make a Peanut Butter and Jelly Sandwich

Ask teachers to make a list of the steps needed to make a peanut butter and jelly sandwich. Have a few individuals share that believe they have listed all the steps involved.

Slide 4

Task Analysis for PB & J Sandwich

Strategies	Skills Required
<ul style="list-style-type: none"> • Get ingredients <ul style="list-style-type: none"> ▪ Bread ▪ Peanut Butter ▪ Jelly ▪ Knife ▪ Plate 	<ul style="list-style-type: none"> • Knowledge of Ingredients and location
<ul style="list-style-type: none"> • Open up bread bag and take out 2 slices of bread 	<ul style="list-style-type: none"> • Untwisting a twist tie • Counting two objects
<ul style="list-style-type: none"> • Place the slices side-by-side on the plate 	<ul style="list-style-type: none"> • Knowledge of "side-by-side"
<ul style="list-style-type: none"> • Open up peanut butter jar 	<ul style="list-style-type: none"> • Ability to twist off a lid
<ul style="list-style-type: none"> • Put the knife in the jar and while still holding the knife, with the other end, get out about 2Tbsp of peanut butter 	<ul style="list-style-type: none"> • How to use a knife • Knowledge of the quantity of Tbsp
<ul style="list-style-type: none"> • With the knife smear the peanut butter on one large side of the bread – not on the crust, and using all the peanut butter that is on the knife 	<ul style="list-style-type: none"> • How to smear with a knife • Knowledge of the concept of "large" • Knowledge of definition of "bread crust"
<ul style="list-style-type: none"> • Open up the jelly jar 	<ul style="list-style-type: none"> • Ability to twist off a lid
<ul style="list-style-type: none"> • Put the knife in the and get out about 2 Tbsp on jelly 	<ul style="list-style-type: none"> • How to use a knife • Knowledge of the quantity of Tbsp
<ul style="list-style-type: none"> • With the knife smear the jelly on top of the peanut butter that is on the bread 	<ul style="list-style-type: none"> • How to use a knife • Knowledge of the concept of "top"
<ul style="list-style-type: none"> • Place the plain piece of bread on top of the one with the peanut butter on it 	<ul style="list-style-type: none"> • Knowledge of the definition of "plain" • Knowledge of the concept of top

Compare teacher lists to suggested list. Discuss the skills required to perform each step and how a student would need to be taught each skill prior to performing the task.

Slide 5

Prompts



- Physical- Hand over hand
 - *How to print a letter using a pencil*
- Modeling
- Gestural- Point, looking at, gesturing
- Visual
 - *Hold a picture of a ? To prompt student to ask a question.*
- Positional- Position teaching materials
 - *Place correct response closer to the student*
- Verbal- Vocal cues, direct echo
 - *Ask the question and provide the answer for student to echo.*

(Finke, Davis, Benedict, Goga, Kelly, Palumbo, & Waters, 2017).

- Watch Examples: <https://www.youtube.com/watch?v=jfJeG2XVluQ>

Discuss the different types of prompts. Model each one briefly for an example. Watch Youtube video for examples.

Slide 6

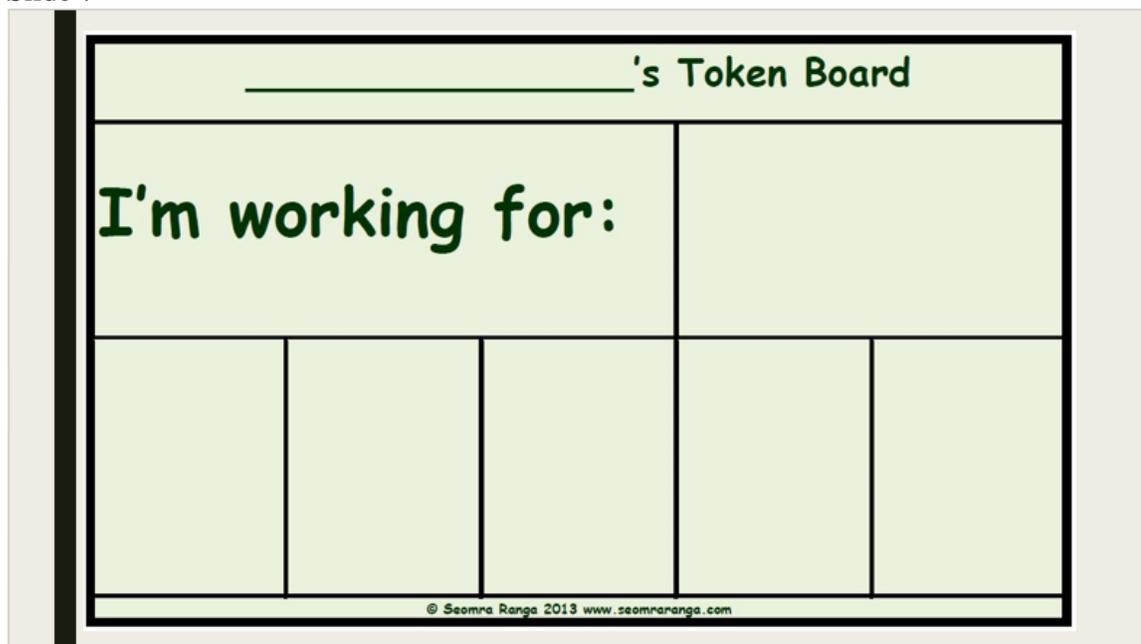
Reinforcement

- Reinforce immediately following desired behavior. Reinforcement should be varied to keep student's interest.
- Examples of Positive Reinforcements
 - *Food*
 - *Toys*
 - *Physical touch (Caution)*
 - *Movement*
 - *Task completion*
 - *Removal of task (Knock off table into basket)*
 - *Verbal praise (pair with tangible)*
 - *Counters/tokens (Pair with special interest)*

(Iovannone, Dunlap, Huber, & Kincaid, 2003)

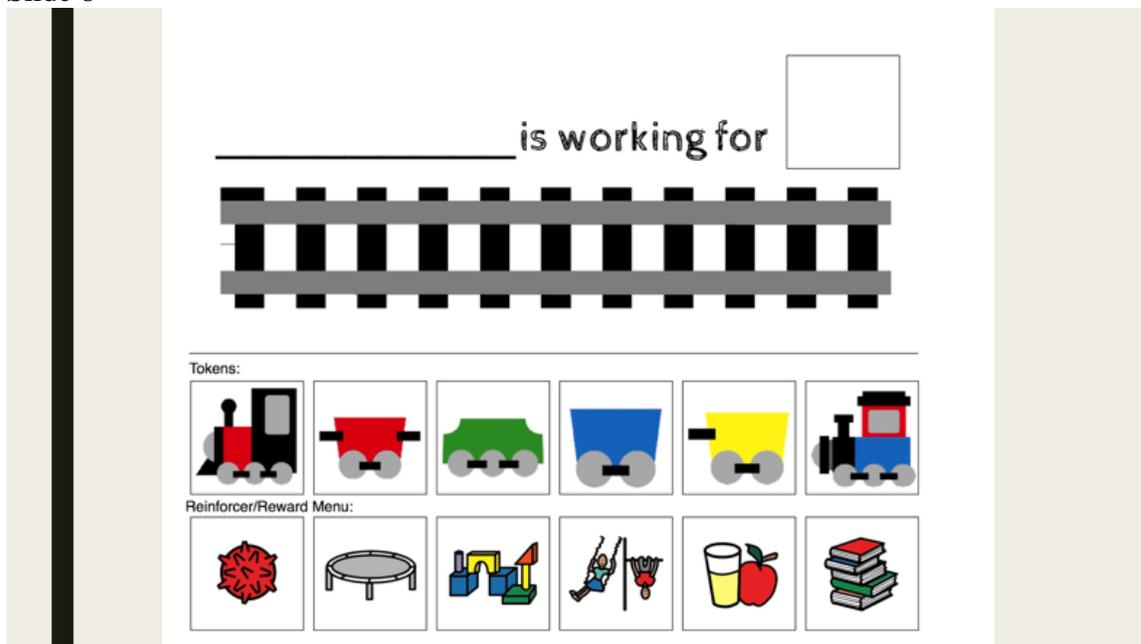
Discuss what reinforcement is and examples of positive reinforcements and negative reinforcements.

Slide 7

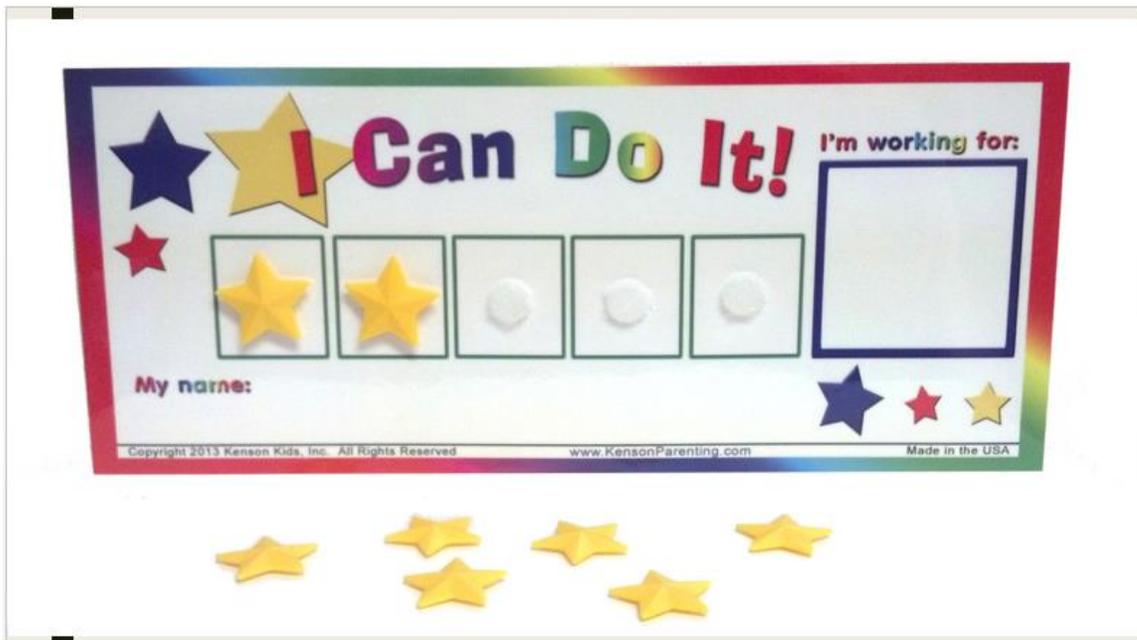


The next few slides are examples of reinforcement boards. Discuss each one and how it might be used along with what age/functioning level of a student with ASD.

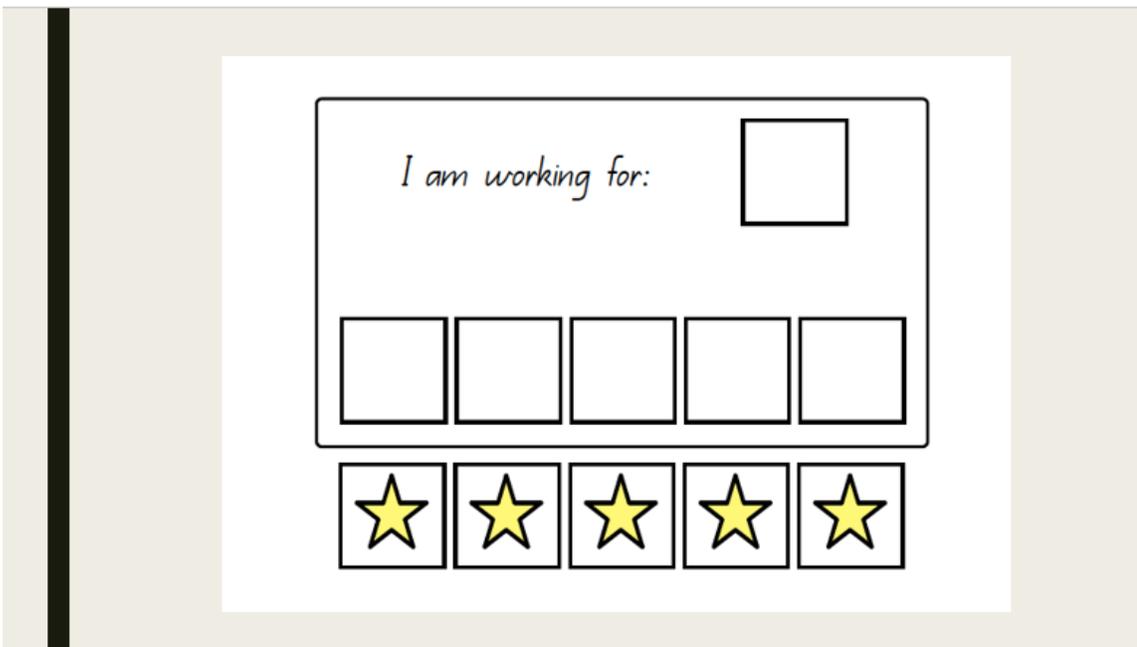
Slide 8



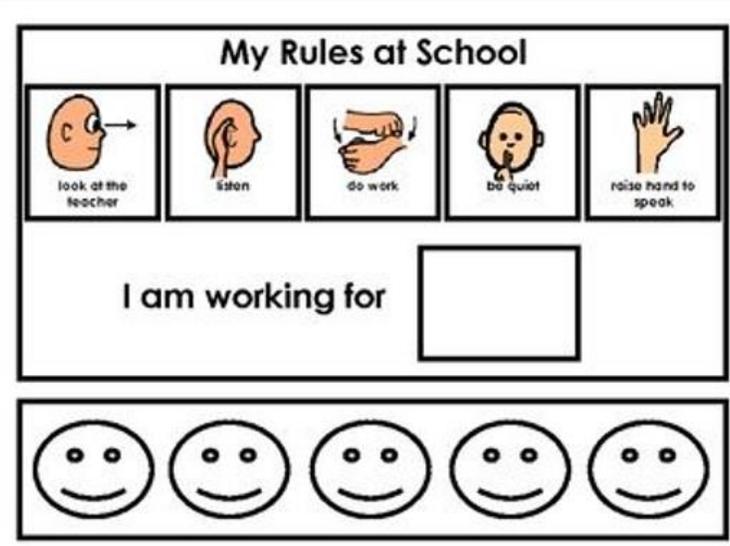
Slide 9



Slide 10



Slide 11



My Rules at School

 look at the teacher	 listen	 do work	 be quiet	 raise hand to speak
--	---	--	---	--

I am working for

				
---	---	---	--	---

Slide 12



_____'s Token Board

<input type="checkbox"/>				
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

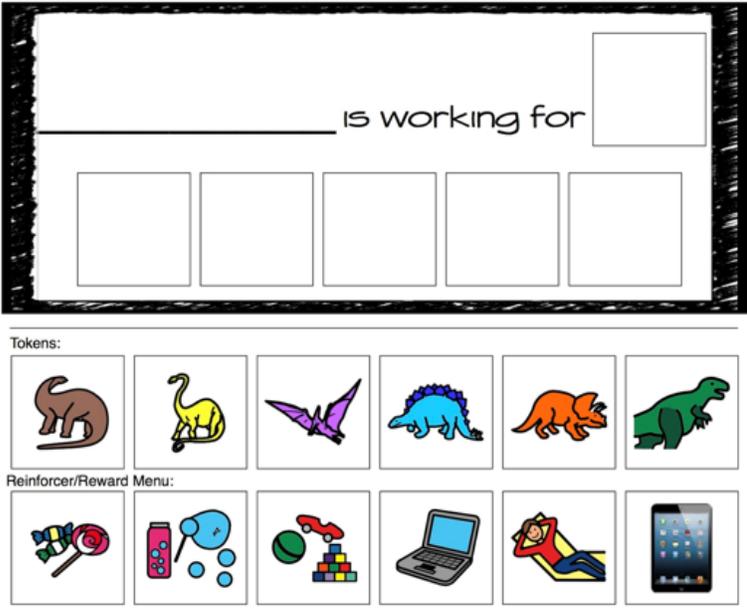
Slide 13



Slide 14



Slide 15



_____ is working for

Tokens:

Reinforcer/Reward Menu:

Slide 16

Self Management

- <https://www.youtube.com/watch?v=1Y2MUz0bwSs>

Watch Youtube video about self-management and discuss whole group about what the teachers noticed or are wondering about self-management.

Slide 17

Name: Alex
Date: _____

My Self-Monitoring Form

	Today in class ...	Was I paying attention to my assigned work?	Y	N
		Was I following the classroom rules?	Y	N
		Was I paying attention to my assigned work?	Y	N
		Was I following the classroom rules?	Y	N
		Was I paying attention to my assigned work?	Y	N
		Was I following the classroom rules?	Y	N
		Was I paying attention to my assigned work?	Y	N
		Was I following the classroom rules?	Y	N

Total number of Y (yes) = _____ My Goal = _____

Signed: _____
Student
Teacher
Parent

Discuss self-management charts on next few slides and discuss the age/functioning level of a student for ASD that they would be appropriate for.

Slide 18

Self-Monitoring Form: on task behavior

Student Name _____ Date _____

Parent Signature (Please sign and return) _____

Good Choice	Not such a good choice	Sad Choice	Teaching Time	Teacher and/or Parent Comments
			7:50-8:30 Morning Routines/ Familiar Reading	
			8:30-9:00 Calendar Math/ Morning Meeting	
			9:00-9:30 Guided Reading	
			9:30-10:00 Phonics/Sumate	
			10:45-11:25 Lunch	
			11:45-12:30 Whole Group Math/ Math Tube	
			12:30-1:15 Specials	
			1:30-1:50 RECESS	

Slide 19

Name: _____



Staying on Track!

Checking off rules I have followed during each subject (or task) ✓

Date: _____ 20__
 Mon. Tues. Wed. Thurs. Fri.

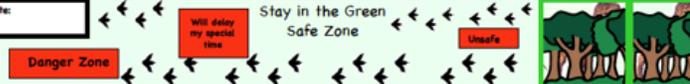
My Rules to Keep Me On Track	Subject	Between Subjects	Subject	Between Subjects	Subject	Between Subjects	Subject	Between Subjects	Subject	Between Subjects
Followed My Schedule										
										
Used Safe words & voice tone										
										
Used Safe Hands & Feet										
										
Remained in my area										
										

www.victoriaautism.com
Schedule/Checklist (may need 2 or 3 copies for a.m. & p.m. classes)

Slide 20

Date: _____

Stay in the Green Safe Zone



Scheduled Tasks or Time Periods	Remained in my assigned area	Used Respectful Words & Voice Tone	Used Safe Hands & Feet	Completed Task Assigned	Bonus: Teacher Agrees (check box & initials)	Total Safe Choices + Bonus (Max. 5)
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Slide 21

Self-Monitoring Card	
Class or Time : <u>Reading</u>	
Behavior Tasks : 1. Be prepared for class with all materials. 2. Start the assignment when told to begin. 3. Continue working until assignment is done. 4. Ask the teacher for help in a pleasant way.	Results? Yes No Yes No Yes No Yes No
Total Yes = _____	Signed : _____
Total No = _____	Teacher : _____

Slide 22

Rosie King- TED talk



http://www.ted.com/talks/rosie_king_how_autism_freed_me_to_be_my_self

Watch TedTalk from Rosie King and have a discussion in small groups about what the teachers noticed and wondering.

Slide 23

Make and Take

- Take the rest of the morning to make a token/point board or a self-management point sheet for a student in your classroom.
- Resources Available to Use
 - *Computers- Colored Printers*
 - *Boardmaker*
 - *Laminators*
 - *Scissors, Glue, Tape, Markers*
 - *Velco*
 - *Construction Paper*

Provide the rest of the morning for teachers to make a token/point board for reinforcement or a self-management sheet.

Slide 24

References

- Finke, E. H., Davis, J. M., Benedict, M., Goga, L., Kelly, J., Palumbo, L., ... & Waters, S. (2017). Effects of a Least-to-Most Prompting Procedure on Multisymbol Message Production in Children With Autism Spectrum Disorder Who Use Augmentative and Alternative Communication. *American Journal of Speech-Language Pathology*, 1-18.
- Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D. (2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 18(3), 150-165.
- Liu, Y., Moore, D., & Anderson, A. (2015). Improving social skills in a child with autism spectrum disorder through self-management training. *Behavior Change*, 32(4), 273-284.

Slide 25



Slide 26

Visual Supports

- Visual Supports are things that we see that enhance the communication process.
- Make a list at your table of the things that all adults use that are visaul supports.

Make a list of things that all adults use that are visual supports.
Exit signs, Men/Women bathroom signs, lines on roads, signs on roads, gas tank arrow,
calendar,

Slide 27

Types of Visual Supports

- Body Movement
 - *Body language*
- Environmental Cues
 - *Signs*
- Traditional tools for organization
 - *Calendars*
 - *Shopping Lists*
 - *Instructional Manuals*
 - *Timers*
- Specialized communication aids
 - *Picture Stories*
 - *Visual Schedules*
 - *Labels*

Discuss each type of visual support

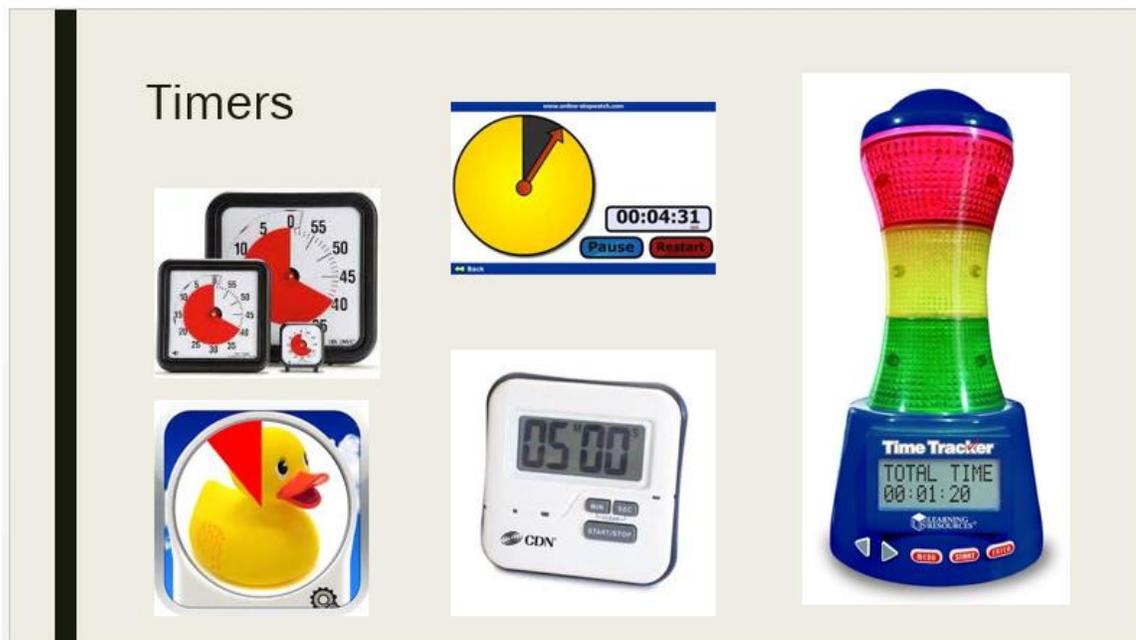
Slide 28

Why are visual supports important?

- Give the student/child time to focus
- Time to work out meaning
- Child can refer back to visual
- Enable communication to be more specific
- Encourage consistency in procedures, expectations, and routines across all people involved with the child
- Child can anticipate what comes next
- Framework for coping with change

Discuss why visual supports are important for students with ASD.

Slide 29



On the next few slides are examples of different visual supports. Discuss how each visual support can assist a child with ASD.

Slide 30



Slide 31

Clearly Defined Spaces



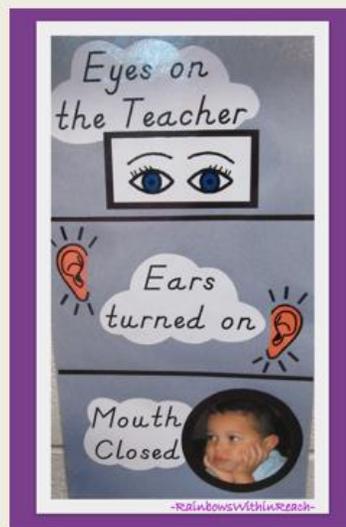
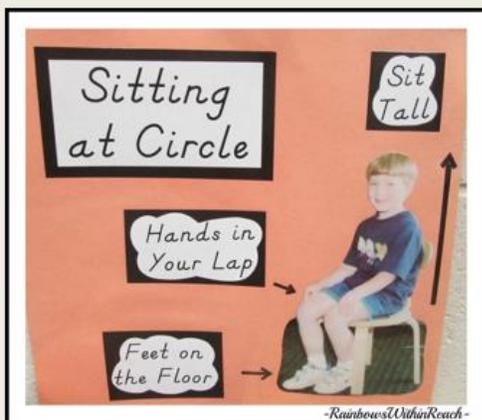
Slide 32

Visual Classroom Rules



Slide 33

Rules/Expectations



Slide 34

Routines for Fire, Tornado, Lock Down Drills



Slide 35

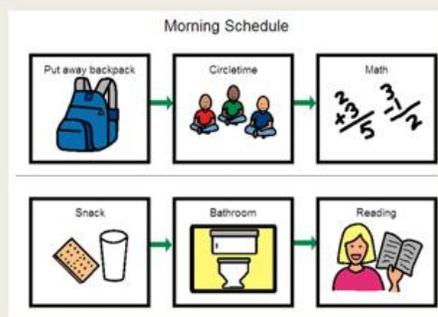
Whole Day Schedule



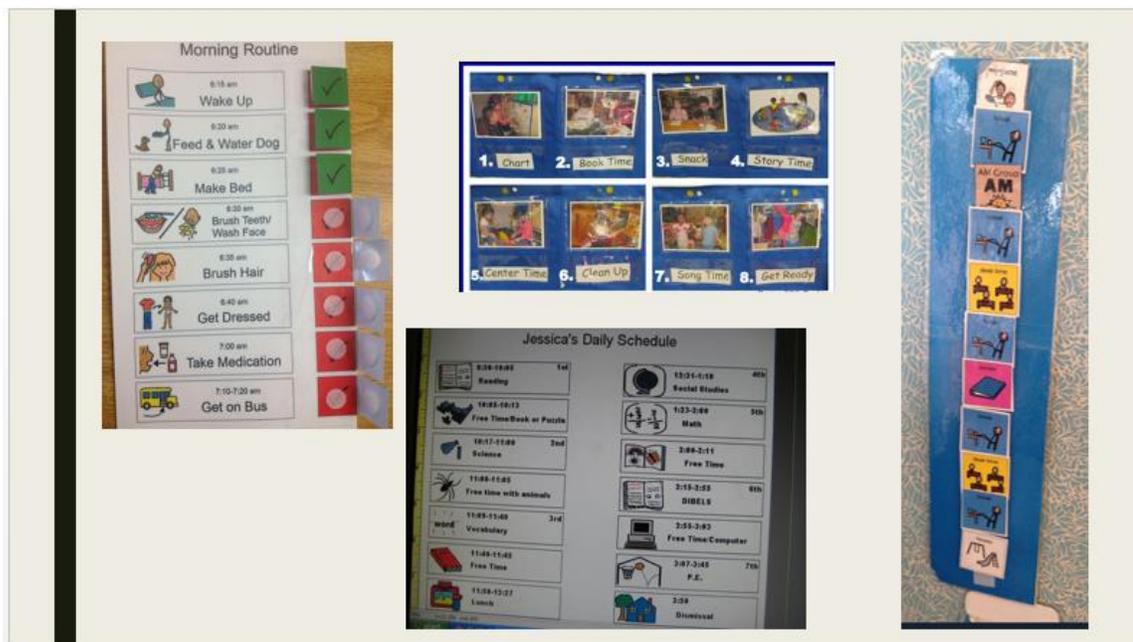
Discuss importance of a visual schedule in each classroom that has a student with ASD. Discuss the use of manipulating the schedule to help children who struggle with change.

Slide 36

Morning Schedules



Slide 37



Slide 38



Slide 39

References

- Knight, V., Sartini, E., & Spriggs, A. D. (2015). Evaluating visual activity schedules as evidence-based practice for individuals with autism spectrum disorders. *Journal of autism and developmental disorders*, 45(1), 157-178.
- Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., ... & Schultz, T. R. (2015). Evidence-based practices for children, youth, and young adults with autism spectrum disorder: A comprehensive review. *Journal of Autism and Developmental Disorders*, 45(7), 1951-1966.

Slide 40

Make and Take

- Use the rest of the day to make a visual schedule for your classroom.
 - Whole Class/ Individual
 - Pictures/Words/Times/Clocks
 - Whole Day/ Partial Day/ Segment
 - Detailed/General Steps
- Resources Available to Use
 - Computers- Colored Printers
 - Boardmaker
 - Laminators
 - Scissors, Glue, Tape, Markers
 - Velco
 - Construction Paper

Provide teachers time to create a visual schedule to use in their classroom. Encourage individuals to share their creations before dismissing.

Day 3 PowerPoint Slides and Notes

Slide 1



Slide 2

Visuals

- Use visuals to support communication and social skills.

Joining in	Inviting Others	Rules for games
Can I play?	Do you want to play?	Take Turns
How do you play?	Lets play	Wait Nicely
Maybe next game?	What game do you like?	Talk and Share

GOOD LISTENING

If you don't understand...	You can help us to help YOU to understand
<p>Do NOT</p> <ul style="list-style-type: none"> Guess ! ❌ Look away ❌ Just sit there ❌ Talk to or distract other people ❌ Fidget ❌ 	<p>DO</p> <ul style="list-style-type: none"> Keep listening ✅ Put your hand up. Let us know you don't understand ✅ Ask us to say it again. (All of it or just the bit you can't remember) ✅ Ask adult to say it slower ✅ Ask adult to show you what they mean ✅

Begin the discussion by typing in the previous day's work on visuals and how they can help support communication and social skills. Have groups discuss their thinking on the relationship between visual support and communication and social skills. Have each group share out a big idea or comment.

Slide 3

Script-fading

- verbal and/or written description about a specific skill or situation
- serves as a model for the learner
- help learners anticipate what may occur and how to participate during a given activity
- practice repeatedly before the skill is used in the actual situation then systematically fade

When someone is hurting or annoying me I will:

1. Look at them.
2. Put my hand up in a 'stop' sign.
3. Say to the person, "Stop it, I don't like it."
4. If it doesn't work I will get help from a teacher.

I want

 big wheel	 golf	 trampoline
 bubble blower	 sand and water table	 sidewalk chalk



Discuss what scripts can do to support communication and socialization for students with ASD. Discuss the fading of such scripts to support more independent and socially appropriate skills.

Slide 4

Picture Communication (PECS)

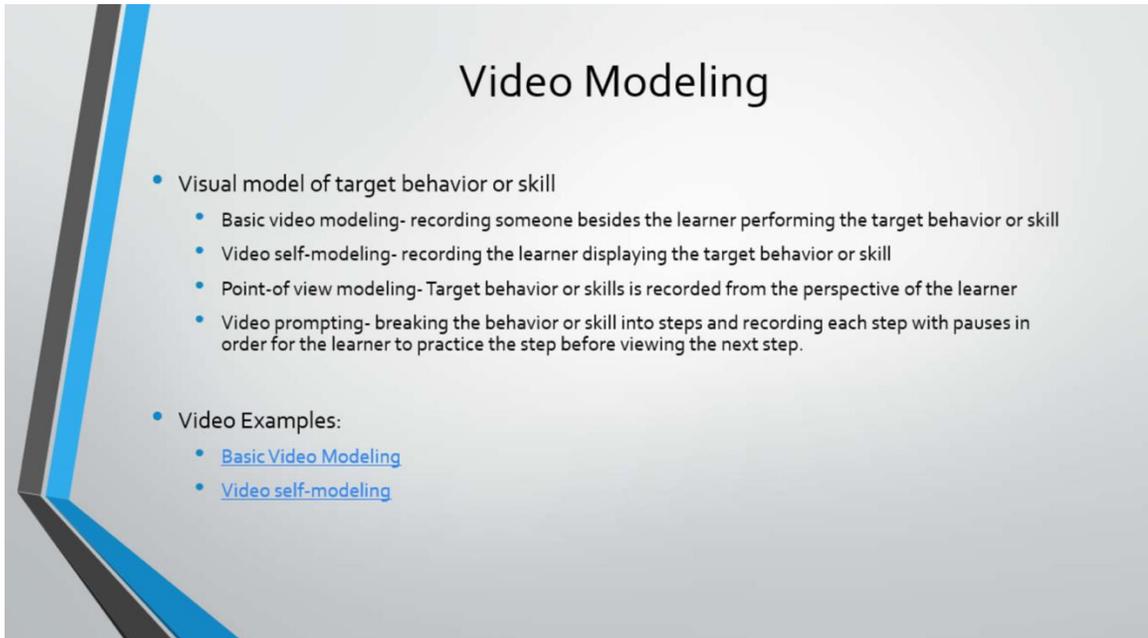
- Allows a child to communicate his/her wants and needs through the use of pictures
- [Video](#)



<https://www.youtube.com/watch?v=HGtZNY0PcVw>

Watch video about picture communication:
<https://www.youtube.com/watch?v=HGtZNY0PcVw>

Slide 5



Video Modeling

- Visual model of target behavior or skill
 - Basic video modeling- recording someone besides the learner performing the target behavior or skill
 - Video self-modeling- recording the learner displaying the target behavior or skill
 - Point-of view modeling- Target behavior or skills is recorded from the perspective of the learner
 - Video prompting- breaking the behavior or skill into steps and recording each step with pauses in order for the learner to practice the step before viewing the next step.
- Video Examples:
 - [Basic Video Modeling](#)
 - [Video self-modeling](#)

Discuss video modeling and watch the example provided:

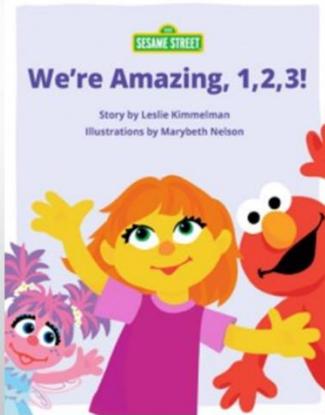
<https://www.youtube.com/watch?v=sBPyVI3S5-k>

https://www.youtube.com/watch?v=s_n1aZy1NV8&list=PLUV-VLbs4zCpnKD2A7-3I_2BvkNuUHm-S

Slide 6

Sesame Street and Autism

- Website: <http://autism.sesamestreet.org/>
- The Amazing song
- We're Amazing, 1,2,3! Storybook
- Daily Routine Cards



Allow teachers to explore the Sesame Street and Autism website for 20 minutes. Ask them to specifically review the Amazing song, We're Amazing, 1,2,3! Storybook, and the daily routine cards.

Slide 7

Social Stories

- Carol Gray
- [What is a social story?](#)
- Written for a variety of purposes based on a student's experiences or responses to events and situations in his/her world.
- Usually written in first person from the student's perspective
- Use two main types of sentences 1) Descriptive sentences and 2) Directive sentences
- Use a ratio of at least 2 descriptive sentences for every directive sentence
- Add pictures to enhance interest/ understanding

After discussing what social stories are using the information on the slide, watch video from Carol Gray website: <http://carolgraysocialstories.com/social-stories/what-is-it/>

Slide 8

Social Stories

- 1) Descriptive sentences:
 - State facts (e.g., "I am in the 3rd grade." Or "My name is ____.")
 - Include feelings (e.g., "My mommy is happy when I sit in my chair.")
- 2) Directive sentences:
 - Identify possible responses (e.g., "If I need help, I can raise my hand or put the help card on my friends desk.")
 - Direct the behavior (e.g., "I will try to ____.")

Discuss the different types of sentences to use within a social story.

Slide 9

Calm Hands

Sometimes I have busy hands. When I get excited,

I put my hands in my mouth or down my

pants. This makes my hands dirty. I will try to

have calm hands by holding my hands still. If I do

this, then I will stay clean.

Show examples of social stories using the next few slides.

Slide 10

Being a friend



When I go outside at break time I like to play with my friends.

1



Sometimes I like to walk around the playground with my friends.

2



Me! I must remember to be the best friend in the world and not to push or hurt my friends.

3



I will try to be the best friend in the world by playing with my friend and not hurting them. This way, I will have lots of friends at school!

4

Slide 11

Back to School

I had a really fun summer with my friends and family.



In September, it is time to go back to school.



At school, I will see my friends and teachers.

At school, I might have new or different rules to follow.



If I am not sure when school is, I can ask to see a calendar.



If I am not sure what my rules are, I can ask my teacher.



Going back to school will be a different schedule than my summer, but it will be fun to learn and play with my friends.



Slide 12

When I go to the movies

When I go to the movies, I wait in line to get my ticket.

Sometimes we buy snacks. Sometimes we buy drinks.

It can be a good idea to use the bathroom before we sit down.

In the theater, we pick a seat and sit down.

The theater might be dark. The theater might be loud.

I can take breaks if I need to. I can ask to take a walk.

When I am in the theater, I am sitting in my seat with a quiet voice.

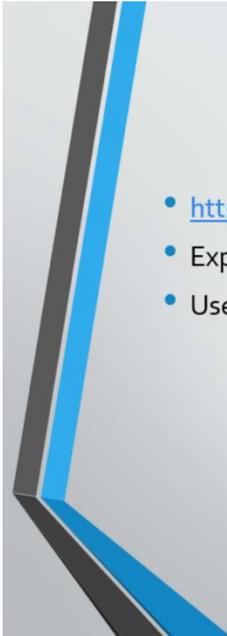
Going to the movies is fun!

Slide 13

References

- Cardon, T. A. (2016). Do as I'm Doing: Video Modeling and Autism. In *Technology and the Treatment of Children with Autism Spectrum Disorder* (pp. 87-96). Springer International Publishing.
- Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D. (2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 18*(3), 150-165.
- Leaf, J., Oppenheim-Leaf, M., Leaf, R., Taubman, M., McEachin, J., Parker, T., Waks, A., & Mountjoy, T. (2015). What is the proof? A methodological review of studies that have utilized social stories. *Education & Training in Autism & Developmental Disabilities, 50*(2), 127-141.
- Lerna, A., Esposito, D., Conson, M., & Massagli, A. (2014). Long-term effects of PECS on social-communicative skills of children with autism spectrum disorders: a follow-up study. *International Journal of Language & Communication Disorders, 49*(4), 478-485.
- Wichnick-Gillis, A. M., Vener, S. M., & Poulson, C. L. (2016). The effect of a script-fading procedure on social interactions among young children with autism. *Research in Autism Spectrum Disorders, 26*, 1-9.

Slide 14



Explore and Create

- <http://www.pbisworld.com/tier-2/social-stories/huge-list-of-social-stories/>
- Explore the website or others to read more social stories.
- Use the rest of the morning to create social story for your student

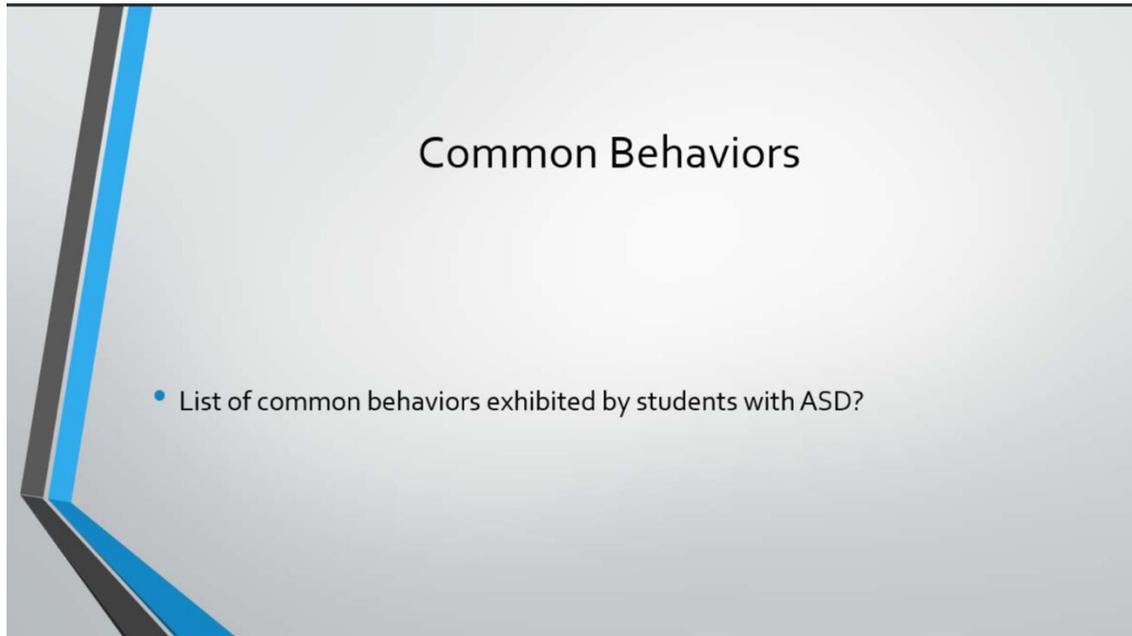
Provide the rest of the morning time for teachers to explore other social stories and then create a social story for one of their students with ASD that will help with their behavior/communication/socialization needs.

Slide 15



Functional Approach to Problem Behaviors

Slide 16

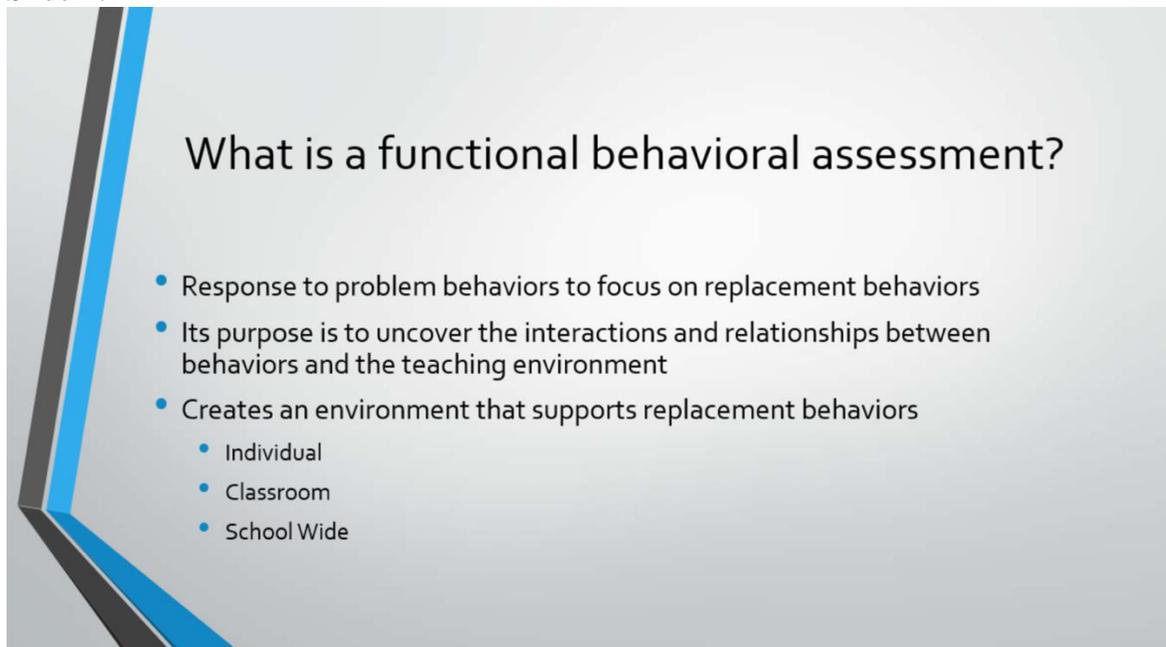


Common Behaviors

- List of common behaviors exhibited by students with ASD?

Have groups discuss the common behaviors they see from their students with ASD and then create a whole group list.

Slide 17



What is a functional behavioral assessment?

- Response to problem behaviors to focus on replacement behaviors
- Its purpose is to uncover the interactions and relationships between behaviors and the teaching environment
- Creates an environment that supports replacement behaviors
 - Individual
 - Classroom
 - School Wide

Ask teachers if they have ever heard of an FBA? Discuss what it is and how it is and how it supports replacing behaviors in a variety of setting. Emphasize its focus on replacement and not extinction of behaviors.

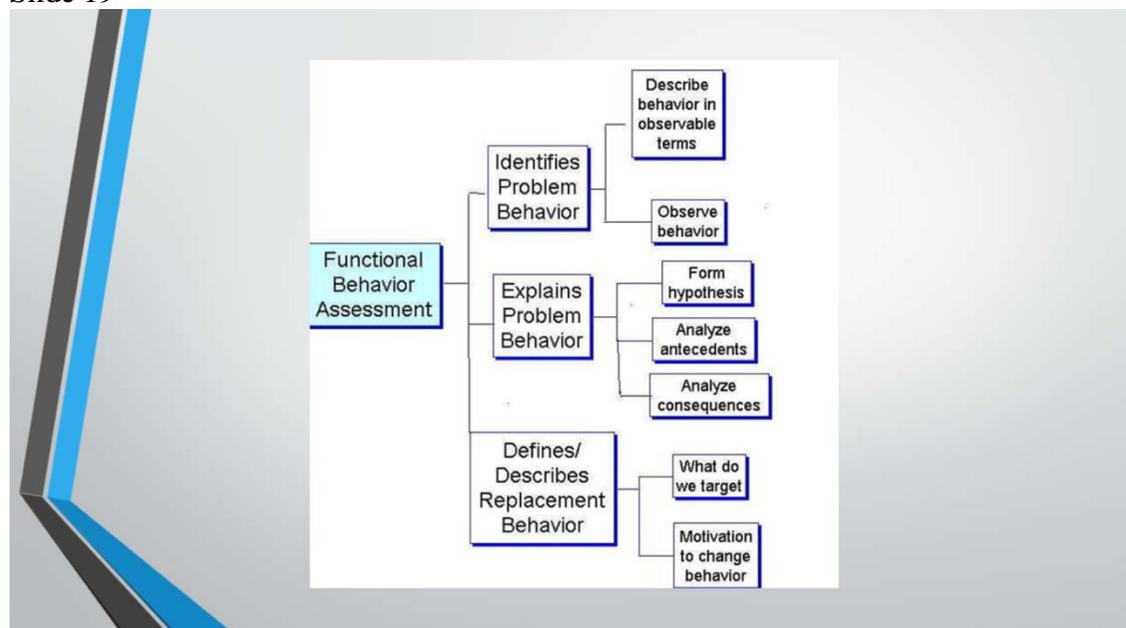
Slide 18

What is a functional behavior assessment

- “A process for gathering information used to maximize the effectiveness and efficiency of behavior support” (O’Neil et al.)
 - Identify the behavior (What we can see and measure)
 - The student hits other peers 3-5 times a week during recess.
 - NOT: The student is aggressive to peers.
 - Identify what happens before and after the behavior
 - Create a hypothesis of why the behavior occurs
 - Observe to determine if hypothesis was correct (monitor/evaluate plans)

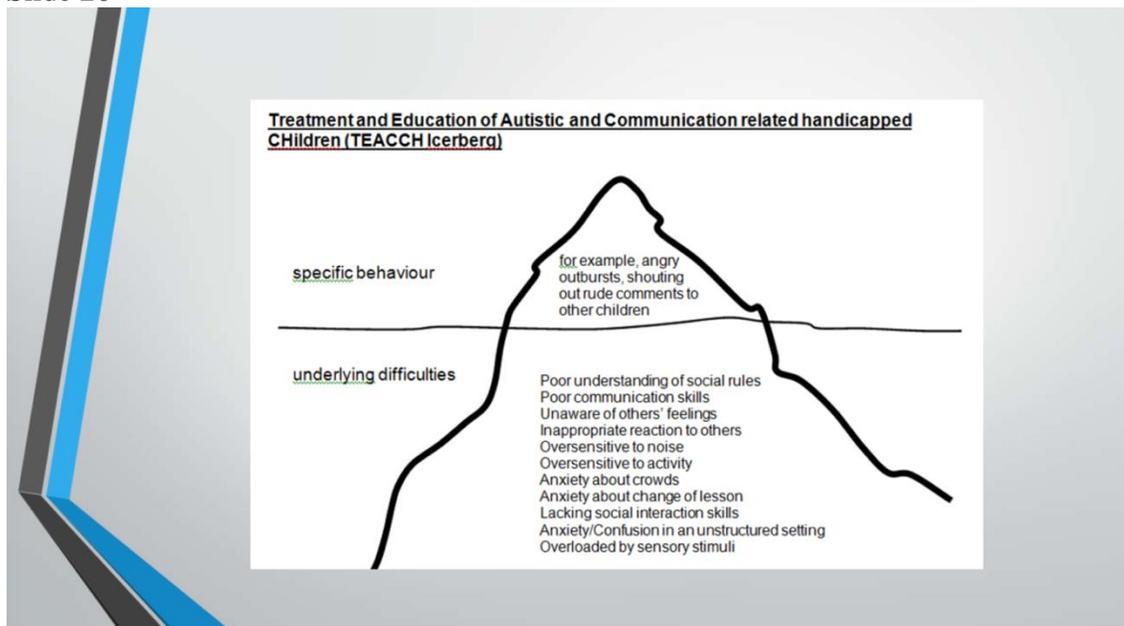
Discuss the steps for conducting an FBA.

Slide 19



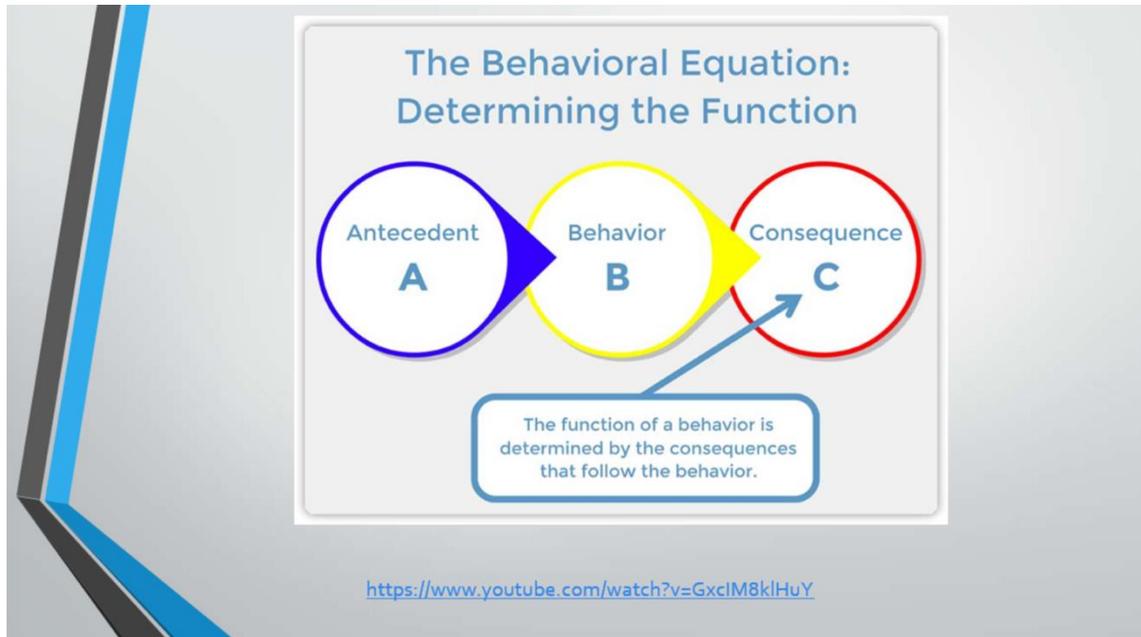
Discuss the chart.

Slide 20



Discuss how most antecedents of behaviors lie under the surface of what we see in students with ASD as their behaviors. We may see an outburst or fit but the antecedent may be anxiety caused by an unexpected day's course.

Slide 21



Watch the video discussing the ABCs of an FBA.

Slide 22

Function of Behavior

- Behavior is a form of communication.
- Children engage in behavior(s) to get what they find reinforcing or to avoid what they find aversive
 - Ex: Student continues to misbehave despite teacher reprimands. (Student seeks attention and receives that attention despite it being negative; a reprimand reinforced the behavior)

Discuss slide's content.

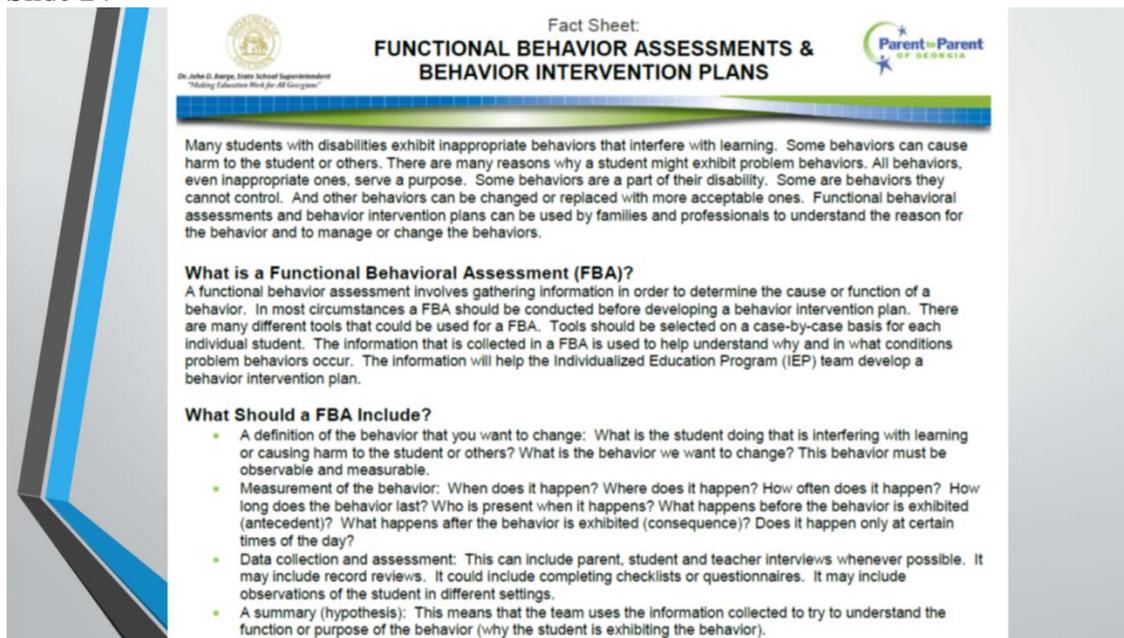
Slide 23

Explore FBA

- Go to the following website and explore FBAs
 - <http://www.pbisworld.com/tier-2/functional-behavior-assessment-fba/>

Provide teachers 15 minutes to explore the Positive Behavior Interventions & Supports website to become familiar with different types of FBAs and BIPs

Slide 24



Fact Sheet:
**FUNCTIONAL BEHAVIOR ASSESSMENTS &
BEHAVIOR INTERVENTION PLANS**

Many students with disabilities exhibit inappropriate behaviors that interfere with learning. Some behaviors can cause harm to the student or others. There are many reasons why a student might exhibit problem behaviors. All behaviors, even inappropriate ones, serve a purpose. Some behaviors are a part of their disability. Some are behaviors they cannot control. And other behaviors can be changed or replaced with more acceptable ones. Functional behavioral assessments and behavior intervention plans can be used by families and professionals to understand the reason for the behavior and to manage or change the behaviors.

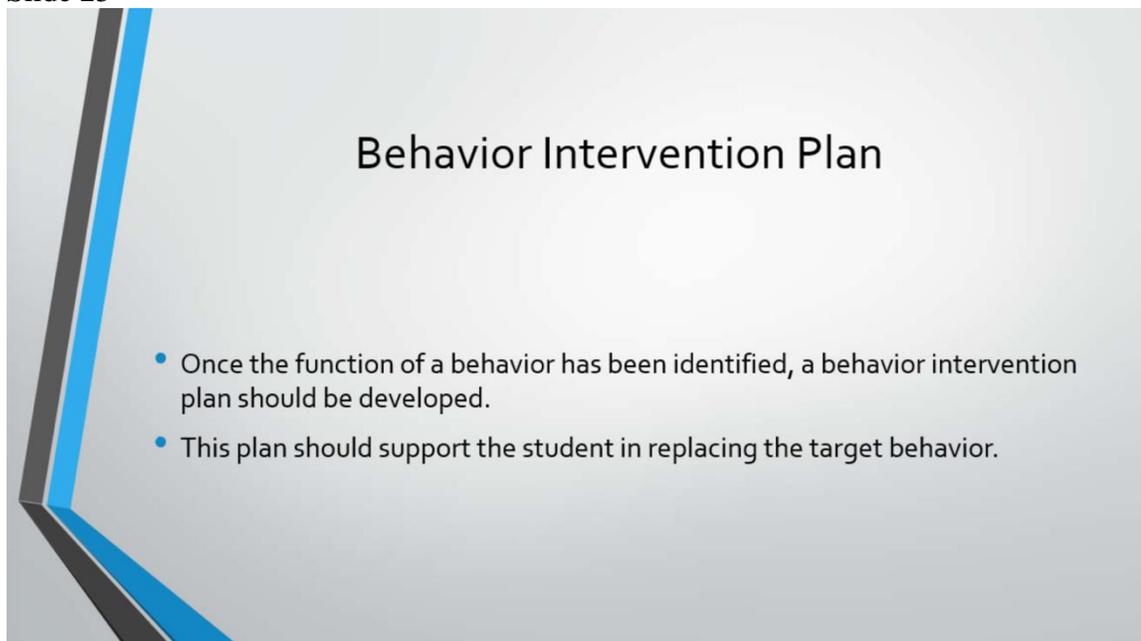
What is a Functional Behavioral Assessment (FBA)?
A functional behavior assessment involves gathering information in order to determine the cause or function of a behavior. In most circumstances a FBA should be conducted before developing a behavior intervention plan. There are many different tools that could be used for a FBA. Tools should be selected on a case-by-case basis for each individual student. The information that is collected in a FBA is used to help understand why and in what conditions problem behaviors occur. The information will help the Individualized Education Program (IEP) team develop a behavior intervention plan.

What Should a FBA Include?

- A definition of the behavior that you want to change: What is the student doing that is interfering with learning or causing harm to the student or others? What is the behavior we want to change? This behavior must be observable and measurable.
- Measurement of the behavior: When does it happen? Where does it happen? How often does it happen? How long does the behavior last? Who is present when it happens? What happens before the behavior is exhibited (antecedent)? What happens after the behavior is exhibited (consequence)? Does it happen only at certain times of the day?
- Data collection and assessment: This can include parent, student and teacher interviews whenever possible. It may include record reviews. It could include completing checklists or questionnaires. It may include observations of the student in different settings.
- A summary (hypothesis): This means that the team uses the information collected to try to understand the function or purpose of the behavior (why the student is exhibiting the behavior).

Have teachers read what Georgia states about FBAs and what they should include.

Slide 25



Behavior Intervention Plan

- Once the function of a behavior has been identified, a behavior intervention plan should be developed.
- This plan should support the student in replacing the target behavior.

Discuss slide's contents.

Slide 26

What is a Behavior Intervention Plan (BIP)?
 A behavior intervention plan includes positive interventions, strategies and supports to address the target behavior. The BIP is created by a team of school staff and the parents. The BIP is used to teach or encourage new behavior. A BIP should address the problem behaviors identified in the FBA. If the team is presented with enough data and knowledge about the causes and circumstance of your child's behavior, a FBA may not have to be completed. The BIP should be modified as the student's behavior changes. Use this hyperlink to view a [sample behavior intervention plan](#).

What Should a BIP Include?

- Information from the FBA: This includes the target behavior, the data that was collected, and the best ideas about the purpose or function of the behavior.
- Positive strategies to avoid or prevent the behavior: These can include changes in routines, changes in classroom instruction, opportunities for choice, etc.
- New skills to replace the target behavior: These can include communication skills, social skills, self-management skills, choice-making, etc.
- Ways to teach the new behaviors: These may include modeling, practice, social stories, prompts, direct instruction, etc.
- Consequences: These include what happens if the target behavior is exhibited and also what happens when the desired behavior is exhibited.
- Dates when the plan will be implemented. Names of people who will implement the plan.
- Materials, training and support for persons implementing the plan.
- Collecting and reviewing data.
- Timelines for team meetings, reviewing the data and monitoring the plan.

Have teachers read about what Georgia states about BIPs.

Slide 27

School's BIP Components

- List of Target Behaviors and Definitions
- Functional Behavior Assessment and Identified Function of Target Behaviors
- List of Intervention Strategies
 - Modifications to the identified antecedents
 - Alternate behaviors (Meet the same function as the target behavior)
- List of Reinforcers and Consequences
 - Individual reinforcers for student to learn alternate behavior
 - Consequences for target behavior
- Action Plan for Data Collection and Monitoring of BIP

Discuss what the district's components for a BIP within a student's IEP. Point out the need to write modifications to the identified antecedents, individual reinforcers, and consequences for target behavior.

Slide 28

Accommodations to assist the student in displaying the replacement behavior

- Clear, concise directions
- Frequent reminders/prompts
- Frequent breaks/vary activities
- Teacher/staff proximity
- Reprimand the student privately
- Modify assignments
- Review rules & Expectations
- Provide alternate recess
- Provide cooling off period
- Communicate regularly with parents
- Supervise free time
- Avoid strong criticism
- Predictable, routine schedule
- Specified study area
- Preferential seating
- Avoid power struggles
- Specifically define limits
- Avoid physical contact
- Provide highly-structured setting

Discuss slide's content.

Slide 29

Positive Consequences for Appropriate Behavior

- Verbal praise
- Earned privileges
- Tangible rewards
- Immediate feedback
- Earned tokens/points
- Free time
- Computer time
- Positive call or note home
- Positive visit to office

Discuss slide's content.

Slide 30

Negative Consequences for Inappropriate Behavior

- Loss of points/tokens
- Loss of privileges
- Phone call home
- Send to office
- Escort to another area
- Work detail
- In-school suspension
- Out-of-school suspension*

Discuss slide's content.

Slide 31

References

- Beavers, G. A., Iwata, B. A., & Lerman, D. C. (2013). Thirty years of research on the functional analysis of problem behavior. *Journal of Applied Behavior Analysis, 46*(1), 1-21.
- Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D. (2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 18*(3), 150-165.
- Preece, D. (2013). Teaching parents to understand and manage the behaviour of children on the autism spectrum.

Appendix B: PD Course Feedback Form

1. Identify two individualized supports and services for students with autism spectrum disorder.
2. Identify two systematic instruction techniques for students with autism spectrum disorder.
3. Identify two ways to create a comprehensible and structured environments for students with autism spectrum disorder.
4. Identify two ways to create specialized curriculum content for students with autism spectrum disorder.
5. Identify how to use a functional approach to address problem behaviors students with autism spectrum disorder.
6. What were some strengths of this professional development course?
7. What were some weaknesses of this professional development course?
8. Identify recommendations to make this professional development course more effective in the future.
9. Identify what you benefited from the most from this professional development course.

Appendix C: Letter of Intent

Date

Jim Hawkins

Dear Dr. Hawkins,

I am currently employed by DPS as a special education teacher at [REDACTED]. I am also currently a doctoral student at Walden University. I am planning to conduct research on the experiences and challenges of general education teachers in elementary schools who have taught students with autism spectrum disorder (ASD).

I am requesting approval to interview 10-15 colleagues within [REDACTED] who are elementary general education teachers of students with ASD. Each interview will take no more than one hour to complete and will not interfere with the work responsibilities of the teacher. From the interviews, I will analyze for common themes. I will ensure that all of the data I collect will be confidential and participation will be voluntary.

I believe research on challenges general education teachers face when teaching students with ASD is critical for our district as we progress towards a more inclusive programming for our students with ASD and as the number of students with ASD within our district increases.

I have attached my proposal for the research and a copy of IRB documents submitted to Walden University which granted permission to conduct the study as you have requested.

Respectfully,

Sally Partlo

Appendix D: Informed Consent

Informed Consent

You are invited to take part in a research study about elementary general education teachers' experiences and challenges teaching students with Autism Spectrum Disorders (ASD). The researcher is inviting elementary general education teachers who have taught a student with ASD within the last 2 years to be in the study. I obtained your name/contact information from your principal. This form is part of a process called informed consent to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Sally Partlo, who is a Doctoral Student at Walden University. You might already know the researcher as a special education teacher within the district, but this study is separate from that role.

Background Information:

The purpose of this study is to investigate the experiences and challenges of general education teachers who teach students with ASD in elementary schools within our district to better understand how to provide more effective instruction.

Procedures:

If you agree to be in this study, you will be asked to in a 45 minute one-on-one interview that can be scheduled based on your availability.

Here are some sample questions:

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at [REDACTED] will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing.

The proposed study would make significant contributions to the field of special education and more importantly to the education of students with ASD.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password protection software and the use of codes in place of names. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via sally.partlo@waldenu.edu or (706) 934-3989. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **IRB will enter approval number here** and it expires on **IRB will enter expiration date.**

Please print or save this consent form for your records.

Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please indicate your consent by replying to this email with the words, "I consent."

Appendix E: Interview Protocol

Interview Protocol

Study: The Experiences of General Education Teachers of Students with Autism Spectrum Disorder

Time of Interview:

Date:

Place:

Interviewer: Sally Partlo

Interviewee:

Position of Interviewee:

Describe the project, tell about the purpose of the study, the individuals and sources of data being collected, what will be done with the data to protect the confidentiality of the interviewee, and how long the interview will take. Have the interviewee reread the consent form. Turn on the tape recorder and test it.

Questions:

1. Can you please describe your background in education; including how long you have been teaching and your pre-service training?
2. What types of children have you had experience teaching? (probe for ASD, the amount of time students were in the classroom, and the special education staff support they received)
3. In what ways have you provided individualized supports and services for a child with ASD in your classroom?
4. What types of supports and resources do you have to determine and address individualized needs of children with ASD in your general education classroom? Can you give examples and describe how you used them?
5. In what ways have you provided systematic instruction for a child with ASD in your classroom?
6. What supports and resources have you used to provide systematic instruction for your students with ASD in your general education classroom?
7. In what ways have you provided comprehensives and/or structured environments for your students with ASD in your general education classroom? Can you give examples of any supports or resources you used to address these needs?

8. In what ways have you provided specialized curriculum content for your students with ASD in your classroom? Please describe them. Please describe any supports or resources you used to address these needs.
9. In what ways have you addressed problem behaviors of students with ASD in your general education classroom? Please describe any supports or resources you used to address these needs
10. Is there anything else that you would like to add that we did not get a chance to talk about?

Thank the individuals for their cooperation and participation in this interview. Assure them of the confidentiality of the responses.

Appendix F: Sample Interview Transcript

R: Can you please describe your background in education, including how long you have been teaching and your pre-service training?

P: Yes, I have been teaching for a total of 6 years. At Dalton Public Schools I have been teaching for 4 years and then 2 years at [REDACTED]. I student taught in [REDACTED] Schools. I remember taking one course on special education and it mostly dealt with the disorders that you may see from students who were in your classroom but nothing else.

R: What grades have you taught since you've been at [REDACTED] Schools?

P: In the classroom I taught 3rd grade. As a support teacher I've taught 2nd, 3rd, 4th, and 5th.

R: What types of children have you had experience teaching?

P: I have taught general education classes which were mostly composed of Latino students. Other years I have had the inclusion classroom which had students with disabilities as well as English language learners.

R: Have you ever taught a student with Autism Spectrum Disorder and can you describe their functioning levels?

P: I have taught 4 students with disabilities. They were all very different. One was high functioning in math but he didn't really speak to a lot of other students. I had another student that from my understanding was nonverbal when he entered school and was able to make large progress with support from the special education teacher in listening, understanding, following directions, reading, and writing. The other two students had learning disabilities that affected their reading and following directions.

R: Can you tell me more about the student who entered school nonverbal as far as his communication abilities when you had him?

P: The approximate number of words he used to express himself was about 10. When he was frustrated he wouldn't use his words and go back to being nonverbal and get upset. When I would have a conversation with him one on one, he used several words. "How are you?" "Fine." A lot of prompting for him helped as far as him getting to know me and me getting to know him as well.

R: How many other students did you have in your classroom?

P: When I had the four students I had 15 additional students.

R: Can you describe any support you had from your special education staff?

P: For the student that was mostly nonverbal, he had a paraprofessional that came with him at all times. He had one on one support. She assisted him with all the work while he was with me. With the other students, she would also help but we would support each other.

R: How long was your student who had autism in your classroom with the paraprofessional?

P: At the beginning of the day it was 30 minutes and then he came in for science and social studies for about 45 minutes. He would go to lunch, recess, and his specials with the rest of the class for about an hour and a half. At the end of the day for writing which was about 45 minutes.

R: In what ways have you provided individualized supports and services for the student with ASD in your classroom?

P: I remember a lot of redirection and hands-on because what helped him helped other students as well. I remember doing graphic organizers. I remember doing a lot of cut outs where he was able to make meaning of the information, especially for science and social studies. Because of the vocabulary, I would try to make it as simple as possible and use graphic organizers and PowerPoints that would help him with the content.

R: What types of supports and resources did you have to determine and address those individualized needs of your student with ASD in your general education classroom? Can you give examples and describe how you used them?

P: From the school, I did not get a lot of resources. I had to look for those resources on my own on the web. I purchased those resources sometimes because I felt that is what my students needed. Because the school didn't provide them, I purchased them myself.

R: Can you tell me what you know about an IEP?

P: The IEP, from my understanding, is certain goals the student needs to meet. The goals are set by the IEP committee and the committee meets to see how the student is progressing towards those goals.

R: Can you describe any of the goals you remember your students having in their IEPs?

P: I do not know.

R: Can you tell me how you used the IEP to guide your services for the child or how you would use the IEP to help address those goals?

P: No. I did not use it in that way.

R: In what ways have you provided systematic instruction for your child with ASD in your classroom?

P: I did a lot of reflecting when I planned for the lesson. I always kept in mind the question of whether or not the content would be accessible for my students.

R: How have you used data from assessments to guide how you will plan instruction for your students?

P: I remember talking with the special education teacher and the paraprofessional as far as how we could improve the test score or writing. In writing we kept a portfolio so we were able to talk about whether he was making progress or whether he met the report card standard. We would talk about where the students are for when the students were in my classroom and when they were not. We would communicate about what was working and what was not working.

R: As far as supports other than the special education staff, did you have any other supports or resources to use to provide systematic instruction for your student with ASD in your classroom?

P: No, I did not. I am certified to teach special ed so I have read a lot of articles or research that is available. Just because I had those four students, I wanted to make sure everything I did was for their benefit.

R: In what ways have you provided a comprehensive and structured environment for your student with ASD in your classroom? Can you give examples of any supports or resources you used to address these needs?

P: Thinking about the classroom, of course I always thought about providing a safe environment for all my students. Once the students were in the classroom and did our day by day routine, I would assess whether the classroom I created worked for my students. If it wasn't working, I would think about what would be best, and change things if I could. I would talk with the special education teacher to see if the change I was making would benefit the student. If I had to move the desks to a different place if the student would learn better. We would move it for the benefit of the student.

R: did you provide a visual schedule for your student with autism?

P: I did not, but with the guidance given by the special education teacher, we were able to work together. Learning from her, I saw the benefit of having a visual schedule.

R: In what ways have you provided specialized curriculum content for your student with ASD in your classroom? You mentioned he would become frustrated and wouldn't communicate verbally. Would you provide any instruction to address his communication or social skills?

P: As a general ed teacher, no I didn't. The special ed teacher, from the beginning, and I communicated what the student was working on. One of his goals was to communicate verbally...now I remembered one. We would communicate about what to do if the student encountered a situation that he would need to communicate. All of those procedures I learned from the special education teacher and the paraprofessional.

R: Did you ever have to address and teach social skills to your student with ASD?

P: There were several things we did. The special ed teacher and myself collaborated because there were several instances where the student would spit. We communicated how we could stop that. Another instance would be when the student would pull his pants down. I communicated, again, with the special education teacher and we worked together to stop that behavior.

R: Did you use anything specific such as a behavior plan, a chart, or something tangible for the student to monitor his behaviors throughout the day?

P: Because the special education teacher had worked with him a lot with this specific student in years past, she provided a chart. Of course when something was provided, I learned about it and asked questions as far as how does this work and what do I need to do to reinforce what had already been taught. The special ed teacher had taught him how the chart works and I reinforced those behaviors.

R: In what ways have you addressed problem behaviors of students with ASD in your general education classroom aside from a behavior intervention plan?

P: I haven't used anything else.

R: Is there anything else you would like to add about your experiences as a general education teacher teaching students with ASD?

P: I feel that as a general ed teacher, you learn about these students a lot from them showing you or from their special ed teacher. I feel if I didn't have that support from the special ed teacher and the paraprofessional, I wouldn't have been able to help as much as I did last year. A lot of times as a brand new teacher, you feel frustrated because you aren't given the resources or the proper information that is needed to make sure the students with autism are successful in your classroom. I feel like if there was some type of professional development at the beginning of the year or a check in throughout the

year to see how the year is going would help a lot of new teachers. I think that would especially help. Even as a veteran teacher, not every teacher is the same, but you want to have that continuous professional development. Whether it is to learn about the disability or IEPs and how to use them or how to work collaboratively with the special education teacher, I think it would be beneficial to everyone.

R: Is there anything else we did not get a chance to talk about that you would like to add?

P: No that is it.

R: Well I appreciate your time and that is the end of the interview.