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## Factors That Impact a Child on the Autism Spectrum in the General Education Classroom

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Factors Impacting Mainstream ASD Children 1

Factors That Impact a Child on the Autism Spectrum  
in the General Education Classroom

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Abstract

General education teachers currently have children in their classrooms who are on the autism spectrum. These teachers have had little to no training in either their teacher preparation nor-school based professional development programs in teaching children on the spectrum. The purpose of this paper is to explore teaching strategies that are successful for these children and can be easily implemented in the classroom.

The research literature reveals little on this topic. There is information on early intervention with preschool students as well as environmental, communication, and social supports.

Educators from general and special education were interviewed for their ideas and experiences in working with this population. Their information was analyzed and summarized to form a list of recommendations for classroom teachers.

Results indicated that teachers are open to having students on the autism spectrum in their classroom. They appreciate formal training as part of their in-service opportunities. There are many strategies available to implement. These strategies address social, emotional and some academic supports. Teachers need to understand that with this population, their strategies may have inconsistent results, given the nature of the differences both between and among children.



## Chapter 1 Introduction

Before I began teaching, I worked at a school for children who were diagnosed with autism. Student behaviors in this school setting were much more severe than students that are in the general education setting and are unable to be mainstreamed.

I became very interested in working with this group of students. I decided to get my dual teaching credential in both general education and special education. My hope was that that I would be able to be a general education teacher and have students with special needs in my class.

Over the years, I have had at least one student on the spectrum mainstreamed in my classroom. It is my goal as a teacher at my school to help other teachers understand these children and give them the necessary support and strategies needed to help these students succeed in their classrooms.

### Statement of the Problem

Autism has been declared an epidemic in the United States. The Centers for Disease Control have reported that autism affects 1 in 88 children and 1 in 54 boys (Autism Speaks, Inc., 2013). Due to major laws such as PL 94-192, students with disabilities are to be placed in the Least Restrictive Environment (LRE). Most often, this school setting is a general education classroom with a teacher that has

had no training in working with students with any kind of disability. These teachers often feel unsupported and feel their lack of training does not allow them to work efficiently with this student population.

### Purpose

The purpose of this study is to find out what factors impact a child on the autism spectrum. A second purpose is to provide strategies for general education teachers to successfully facilitate the inclusion of children that are on the autism spectrum.

### Theoretical Rationale

The Civil Rights Movement led to access to schools for children who were formerly marginalized and excluded based on ethnicity. This legislation helped parents gain access to schools for their children who had disabilities (Tomes, 2005).

### Assumptions

Children on the autistic spectrum should be mainstreamed if they are able to be successful in the general education classroom. At the present time, general education classroom teachers do not have formal training to work with children on the spectrum.

With training and modeling of evidence-based teaching practices and strategies by trained specialists, general education classroom teachers can work with students on the spectrum and help them to become successful in their

classroom environment. Teachers need to understand these children in order for them to be successful as students in the classroom. By giving teachers strategies and supervised practice in implementing these techniques with children, it is anticipated that this population will learn how to be independent and require less support from an adult. Teachers will also feel that they are able to support these children in the classroom.

### Background and Need

In 1975, Congress passed the Education for All Handicapped Children Act, guaranteeing all children a free and appropriate education in the least restrictive environment, regardless of the disability. Once this law passed, students went from being pulled-out of the general education classroom for a small amount of time to being pulled-out the majority of the day to the resource room. Here, they were provided small group or one-to-one instruction.

This “pull-out” method became criticized over the next few years. During the past decade, “inclusion” which is where students with disabilities are included in the general education classroom for a certain period of time, has become more and more popular. In 1997, the Individuals with Disabilities Education Act (IDEA), which was formerly the Education for All Handicapped Children Act, required that children with disabilities be educated to the “maximum extent possible” in the least restrictive environment (Dybvik, 2004 p.46).

## Summary

Teachers need support and strategies to work with children on the spectrum in their classrooms. With direct support from trained personnel, teachers can help their students achieve success. Chapter Two follows, a review of the literature which explores the research on professional development for classroom teachers.

## Chapter 2 Review of the Literature

### Introduction

The following section documents the research on autism. It is divided into the following sections: Historical Context, Review of the Previous Research, Statistical Information, Administrative Records, Special Collections/Web Sites, and Interview with an Expert.

### Historical Context

As a result of the passage of Public Law 94-192, the Education for All Handicapped Children Act, all people with disabilities are allowed free access to public education and equal rights to due process procedures to ensure equal protection under the law. In addition to a free and appropriate education and due process, the law provides for LRE placement (U.S. Department of Education, 2007). LRE, or Least Restrictive Environment, describes a situation in which a child has the greatest possible opportunity to interact with children who do not have a disability and to participate in the general education curriculum (Autism Speaks, Inc., 2010).

## Review of the Previous Research

### *Mainstream Strategies*

Humphrey (2008) discusses evidence-based practices that aid in the success of Autism Spectrum Disorder (ASD) children in the mainstream classroom. He outlines some strategies that can be used. These strategies were found based on his research and professional knowledge in the field of autism.

In order for a student to function in the mainstream classroom, Humphrey feels that teachers should not have a preconceived notion about these children. These children thrive on order, consistency, and schedules. When these children have peer relationships, their overall school experience is more positive. He also believes their social skills need to be developed because they struggle with the unwritten rules of language. Teachers also need to make adaptations in a variety of academic subjects. Lastly, he feels that it is important to modify the conversational language because students with ASD have a difficult time understanding speech that is not literal.

Humphrey concludes the article by stating that partnerships with parents and the community are important in children's ability to be successful. Humphrey gives some ideas as to what he thinks are important strategies to teach in the classroom. A weakness in this article is that he does not discuss where he found

these strategies or if implementing them has helped these students. Some strategies he discusses are strategies I feel are important and have used in my classroom. He offers some suggestions that are important to consider.

Hart and Whalon (2011) report that children with ASD have “trouble using and comprehending verbal and nonverbal communication which is social conversation, interpreting the emotional states of others, forming and maintaining friendships with peers, and developing effective play skills” (p. 274). Children that are mainstreamed in a classroom still struggle with these issues which can make their experience unsuccessful and cause them to feel alone. In order for these students to be successful in the classroom, teachers need to understand the students’ strengths and know how to best help them participate in a meaningful way (Hart & Whalon, 2011). Teachers and others working with the student also need to be given multiple strategies that have been proven successful for that particular student (Hart & Whalon, 2011). The evidence-based strategies discussed in this article include: “flexible grouping, concrete supports, self-management, and video modeling” (p. 275).

#### *Teacher Attitudes*

Leblanc, Richardson, and Burns (2009) examine the influence teacher training has on a group of beginning teachers in Ontario, Canada. The three hypotheses of this study are: that the training would be effective in changing participants’ views in

working with ASD kids, effective in increasing technical knowledge, and effective in providing strategies that will be able to be implemented in the classroom.

The participants in this study were 105 male and female university students who were enrolled in teaching program for high school teachers. An ASD Inventory was given to the participants before the training sessions and two months after the sessions. The inventory questions were about teachers' attitudes and perceptions of students with ASD, two short answer questions on strategies to use with these students, and thirteen questions, including ten multiple choice and three short answer items, about the knowledge of ASD and evidence-based practices.

The group of teachers received a total of three hours of instructional training by four ASD consultants who work for a company called School Support Program-Autism Spectrum Disorder. This study found that the results support all three hypotheses. Teacher comfort level regarding students with ASD increased, technical knowledge increased, and ability to access and implement teaching strategies increased. This study also described that teacher knowledge of how to access support increased.

One strength is that this study shows that with professional development, teachers do feel more comfortable having student with ASD in their classrooms. They also feel capable in implementing strategies. It appears based on this study,



they are continuing to implement these techniques two months after receiving the training.

One limitation to the study is that it did not provide participants' previous experience or knowledge of students with ASD. Many of the questions were too clinically focused so teachers in a teacher-credentialing program would not have any information on that topic. Also, there were no questions that asked about knowledge regarding how to access support. However, there was discussion of how this area showed an increase in the post survey. This study shows that teachers are willing to accept ASD student in their mainstream classrooms when provided support and professional development. When teachers do not have anxiety or fear over how to best support these students, they are able to work with them in the classroom.

Segall and Campbell's study (2012) assesses the experience, knowledge, attitude and current practices of educational practices in regards to children on the autism spectrum. Teacher disposition and behavior are an important component to a successful inclusion. Predictability, consistency, and concern with social development are important traits that teachers must possess in order to create a successful environment.

There are many variables that influence the opinions of teachers and other educators that work with ASD students. These variables include type and severity of disability, training and knowledge of disability, and contact and experience with disabilities. Teachers with special education qualifications had more favorable attitudes regarding inclusion than teachers without any special education training.

The study included thirty-three schools in fifteen counties throughout the state of Georgia. One hundred and seventy-seven professionals completed the survey. Thirty-nine participants were administrators, fifty-three were general education teachers, seventy-one were special education teachers, and thirty-three were school psychologists. Eighty-four percent were women and Caucasian (91%). Fifty-six percent of participants had specific ASD experience, thirty-three percent had specific training, and twenty-five percent currently had students with ASD in their classrooms, (Segall & Campbell, 2012).

The survey contained six sections. Questions were asked about the knowledge of ASD, opinions about inclusion, classroom behaviors, and classroom practices. It was determined that the greater the survey participant's experience to a child with ASD, the more likely they were to answer the survey questions correctly. Nearly all participants reported positive attitudes towards inclusion of ASD students. Special education teachers reported more positive attitudes than either administrators or general education teachers. Special education teachers

were more likely to agree that students with ASD should be included in general education settings than were general education teachers. As with previous research, the overall study showed favorable attitudes towards inclusion for students with ASD. Overall, the differences in the survey showed that more teacher training is necessary for educators that are working with students that are being included in general education classes.

One weakness of the study is that it is too small. The views might not represent the opinions of all educators' in other states in the country. An overwhelming majority of people surveyed have positive attitudes about mainstreaming. Educators who disagree possibly could have opted out of this survey.

It is important to see that many educators who do not have experience or training with ASD students feel positively about inclusion in general education classes. With proper training, I believe that all educators would feel much more comfortable in having these students in their classrooms.

#### *Visual Cues*

The authors, Ganz and Flores (2010), researched the effects of visual cues and how visuals can improve communication skills for children. The authors believe that play groups can be beneficial for both typically developing children and children

with ASD. These groups help children expand their circle of friends and teach children how to develop empathy.

The two types of visual cues discussed are peer instruction cards and scripts. Peer instruction cards are visual cue cards that typically developing peers use to get the attention of and communicate with kids with ASD. These cards have been introduced to the children before play group sessions. Scripts are written by a teacher to go along with the play theme. These scripts teach children phrases to use when playing with others. Once the child can independently cite the phrase, then the teacher can introduce more scripts. These strategies can be used in early childhood classrooms for children with ASD to learn new communicative and social skills.

#### *Educational Strategies*

Gately (2008) explains how difficult reading comprehension can be for children on the autism spectrum and discusses eight different strategies that can be used for Higher Order Reading Comprehension Skills. Children on the spectrum have varying difficulties when it comes to reading comprehension. Many children have hyperlexia, which is “when higher word reading skills accompany poor reading comprehension” (p. 40). Since many of these children have difficulty with language, social understanding, and intent of a message, they often display

problems with effectively comprehending narrative texts. They often “misperceive the intentions of others” (p. 40).

Theory of mind is one speculation as to why these students struggle. Theory of mind is “the ability to infer the full range of mental states of others and the ability to reflect on one’s own and others’ action” (Gately, 2008, p. 41)

The eight strategies Gately (2008) discusses in her article are: priming background knowledge, picture walks, visual maps, think-alouds and reciprocal thinking, understanding narrative text structure, goal structure mapping, emotional thermometers, and social stories.

Priming background knowledge teaches students how to focus on reading and how to connect what they already know to the new information that they have read. Tools such as picture walks and visual maps provide good support to aid in teaching this skill. Picture walks are predictions made about the story based on the illustrations. It is important that the teacher models how to make accurate predictions about the pictures and to teach the students to think about their predictions while they are reading.

Visual maps are an example of a story map. When using a story map, the information from the story is being written out for the student to see specific story

elements such as character, setting, problem, and the solution for the story. Think-alouds help students learn predicting, questioning, clarifying, and summarizing.

Reciprocal teaching explicitly teaches students how to use these four strategies by modeling their use for students.

Understanding narrative-text structure is important to understanding who the main character is and the actions the character takes in the story. This process teaches the sequence of who-did-what events.

Goal-structure mapping uses shapes, lines, and arrows to organize stories so students can begin to understand how one character can influence the actions of another character.

Darretxe and Sepulveda (2011) described ideas and suggestions for educational supports and guidelines to help children with Asperger's Syndrome in mainstream classrooms. They discussed the three theories from which they developed their educational supports. The first is Theory of Mind which is the ability to understand what others think, know, or feel. This is something that is difficult for people with Asperger's. The second theory discussed is the Central Coherence Theory. This is "a persons' tendency to gather different data in order to obtain the most possible information about a context, in other words, the tendency to give meaning to situations and events based on reality," (Darretxe & Sepulveda,

2011, p. 876-877) which, too, is difficult for people with Asperger's. Lastly, the ability to have executive functioning skills is challenging. This is when there are limitations with memory that prohibit planning (Darretxe & Sepulveda, 2011).

Darretxe and Sepulveda (2011) go on to provide many strategies for students in the classroom. There are classroom strategies, intervention principles to help aid with the difficulty in the three theories previously discussed, environmental supports, developing comprehension and mathematical problem-solving skills. They also address how to help these children learn to be successful with unstructured parts of school such as recess, assemblies, and the lunchroom.

In order for all of these interventions to occur, staff must receive "professional help...and ongoing support over time" (Darretxe & Sepulveda, 2011 p. 886). Mainstream teachers "require such basic support, including: appropriate training to enhance their professional competency, support services, channels for autonomous training, analysis, guidance, and reflection with other professionals, allowing them to exchange experiences and to look for common solutions in inclusion situations," (p. 886-887).

*Social Acceptance*

In Jones and Frederickson's study (2010), they examined behavioral characteristics of children on the autism spectrum that are predictors of a stable mainstream education. The purpose of this study was to investigate the behavioral characteristics as reported by peers, parents, and teachers.

This study had 86 participants that attended mainstream primary and secondary schools in Buckinghamshire in the United Kingdom. Forty-three of these students were diagnosed with ASD. Seventy-nine students were male and seven were female. Sixty-five students were white, 8 were Indian or Pakistani, 4 were White European, 2 were Caribbean, and 7 were mixed race.

The measures that were given included The Social Inclusion Survey, Strengths and Difficulties Questionnaire, and the 'Guess Who' Social Behaviour and Bullying Measure. The Social Inclusion Survey "assesses how willing children are to associate with classmates at school. Children indicated how much they liked to *work with* each classmate at school," (Jones & Frederickson, 2010, p. 1097). The Strengths and Difficulties Questionnaire "used the 25 items Teacher and Parents rated versions which both have five subscales: Prosocial Behaviour, Conduct Problems, Hyperactivity, Emotional Problems, and Peer Problems," (Jones & Frederickson, 2010, p. 1097). The 'Guess Who' Social Behaviour and



Bullying Measure is a peer assessment which “asked [children] to identify anyone in their class who fitted each of the following behavioural descriptors: ‘co-operates,’ ‘disrupts,’ ‘seeks help,’ and [is] ‘shy,’ (p. 1097).

The results of the Social Inclusion Survey are that compared to the comparison group, students with ASD are not seen as cooperative, but rather shy and often in need of help (Jones & Frederickson, 2010). On the ‘Guess Who’ measure, “students with ASD were significantly less likely to be described as being ‘co-operative’ and significantly more likely to be described as ‘help-seeking’ and ‘shy’ compared with the comparison group,” (p. 1098). ASD kids were “rated by their parents and teachers [as] being significantly more hyperactive, having greater emotional and peer problems and being less prosocial than those in the comparison group,” (p. 1098). The higher the perceived shyness of a student with ASD by the comparison group, the higher the social rejection. “A diagnosis of ASD was associated with greater social rejection,” (p. 1099).

This study’s findings (Jones & Frederickson, 2010) are similar to studies done in the past on social inclusion. Students with ASD are less accepted by their peers overall, but especially in social situations. [They] “exhibit lower levels of beneficial, prosocial behaviors, and higher levels of ‘costly’ social and emotional difficulties than students in the comparison group” (p. 1100). One surprising

factor was that “no teacher-ratings of behavior predicted either social acceptance or rejection” (p. 1102). Teacher attitude often appears to play a role in how a student with ASD is accepted in the classroom. “Co-operation has emerged as an important factor in both social acceptance and rejection for all students” (p. 1103).

There were limitations to this study. The sample size was relatively small and included a majority of Caucasian males. This study needs to be replicated to see if the same conclusions could be drawn from other groups as well as in different geographical locations.

#### Statistical Information

In 2007, the U.S. Department of Education Statistics reported that 296,000 students with autism were served under the Individuals with Disabilities Act, IDEA. Of those students, 34.6%, 102,416 students were in the general education classroom less than twenty-one percent of the time. Eighteen percent, 53,870 students, were in the general education classroom 21-60% of the time, and 36.9%, 109,220, students were in the general education classroom more than 60% of the time (Digest of Education Statistics, 2009, p. 85).

### Interview with an Expert

In an interview with Barbara Boroson (email and phone interview, December 3, 2012 and December 12, 2012), an Autism Spectrum Consultant, Speaker, and author of Autism Spectrum Disorders in the Mainstream Classroom: How to Reach and Teach Students with ASDs, I asked her to share with me her feelings on mainstreaming children on the spectrum in general education classes. She shared that she feels mainstreaming is important for several reasons. First, some students benefit from mainstream peers who can serve as models for “typical” behavior. In order for this to have value, it is critical for teachers and support staff to have many strategies available to help facilitate socialization. Students on the spectrum are then able to gain the comfort of a community and the satisfaction of feeling like they are part of something. Second, mainstreaming can offer benefits to their typical peers. Typical students can learn to accept differences, be flexible, and work with people who are different from themselves.

According to Dr. Boroson, inclusive education is here to stay. It is the trend for both economic and ideological reasons. However, if adequate support is not given to general education teachers, students on the spectrum may be unsuccessful in the mainstream classroom. In that case, the pendulum may swing back toward special, or self-contained, classroom placement. She feels there needs to be more

of an emphasis on special education in degree programs and in professional development.

In an interview with Karen Kaplan (March 5, 2013), I asked her what factors she feels impact students on the spectrum in general education classes and how they can be successful. When it comes to mainstreaming students on the spectrum, she feels that “it is critical that we have a variety of learning opportunities for students with ASD.” She believes “general education classes should be available for those students with ASD who are ready to access the curriculum with some minor accommodations.” She too states that general education peers can be excellent role models for these students in both socialization and communication. One key element she stated is that “strategies that a teacher must use to help the child with Autism stay engaged, acquire the social reciprocity and increase cognition are strategies that the typical student can benefit.”

She states a number of factors that contribute to a child on the spectrum being successful. First, she states that “the teacher’s understanding, training and experience in developing relationships with ASD students” is key to working with these students. It is also important that the teacher knows and understands a variety of strategies that work specifically for that particular child. The teacher needs to understand how a child with ASD truly learns and can work to build an accepting environment with other students and staff on site.

Parents also play a role in the child's education. The parent needs to be supportive of the teacher. Parent communication, parent trainings, and validating parent input all help build an education that is consistent and collaborative.

Success for the student depends upon a parent who also understands the strategies that work for organization, sensory regulation and social thinking and implements them at home. Lastly, success for the student also depends upon them getting enough sleep, eating well and coming to school ready to learn.

## Chapter 3 Method

### Research Method

The study was a qualitative, nonexperimental design that involved interviewing general education teachers and professionals in the autism field.

### Sample and Site

The first person I interviewed was Karen Kaplan (personal communication, March 5, 2013). She has been working in the field of Autism for over thirty years. She has worked with schools, residential programs, and has consulted with families.

Dr. Barbara Boroson consults with educators and districts to help successfully integrate students on the spectrum into mainstream classrooms.

The two teachers interviewed are experienced female teachers. One is a kindergarten teacher and the other teaches fifth grade. Both have had more than one child on the spectrum in their classrooms. The kindergarten teacher is a Caucasian, 30-year-old who has been teaching for seven years and the fifth grade teacher is a 35-year-old Caucasian who has been teaching for ten years.

### Access and Permissions

I currently work at a K-5 elementary school and have asked permission to interview teachers about their knowledge of children on the autism spectrum. I made the teachers aware of my research and that their information would be kept confidential.

I worked for Karen Kaplan at a school for children on the spectrum that she ran for many years. She was the executive director of a school in a county in Northern California for many years. She worked with staff, children, and families to provide support for students with ASD.

I emailed Dr. Barbara Boroson after reading one of her books on strategies for mainstreaming children on the spectrum. In the email, I shared with her my research and asked if she was interested in participating in an interview.

### Ethical Standards

This paper adheres to the ethical standards for the treatment of human subjects in research as proposed by the American Psychological Association (2010).

Additionally this proposal was reviewed by the Dominican University of California Institutional Review Board for the Protection of Human Subjects, approved, and assigned Number 10068.

### Data Gathering Strategies

By interviewing general education teachers, I determined what their knowledge and training has been with these children. They provided me with insight into their attitudes towards mainstreaming children on the spectrum. Interviews were conducted individually, through phone and in person.

The following questions were asked of all participants:

Describe how you learned how to accommodate learning needs of these students.

Why do you feel it is important that ASD students mainstream in general education classrooms?

What is the overall attitude you have seen of teachers that work with ASD students that are mainstreamed?

What kinds of challenges do teachers appear to have when working with ASD students in the mainstream setting?

What kinds of successes have you seen with ASD students in the mainstream setting?

What are the next steps for teachers and others to take in learning how to accommodate learning needs of these students?

### Data Analysis Approach

Following the collection of data, interview responses were reviewed. Common themes emerged and were categorized according to the following: Strategies, teacher attitude, and professional development.



## Chapter 4 Findings

### Description of Site, Individuals, Data

In an interview with Lindsey R., she shared that she has had multiple children on the spectrum in her classroom throughout her seven years of teaching. In her teaching credential program, she did not receive any training or take any classes to prepare her to work with such students.

With the assistance of other teachers, speech therapists, occupational therapists, and trainings, she has figured out how to best help these students in the classroom. She feels that inclusion to an extent is helpful to children on the spectrum. They need positive peer role models but sometimes these children become too overwhelmed in general education classrooms. She states that once a system is in place, these students are much more successful in the classroom. As a teacher though, she feels that you have to be willing to seek help from others as well as figure out what it is that the student needs to succeed. She feels that there needs to be more training for teachers on how to work with students on the spectrum.

In another interview Allison M. shared that she, too, had not taken any courses regarding teaching children on the spectrum. In her ten years of teaching, she has had at least four diagnosed students on the spectrum. In order to help these

students be successful, she has learned by asking others on-site and off for help, and through trial and error. She shared that it was been very frustrating working with these students without any outside support as she felt she was not properly meeting their educational needs.

Some successes she has seen with inclusion are that students' social skills have improved and they are able to better interact with others. These students have been helpful in teaching their peers to be more accepting of students with differences. Students on the spectrum can contribute in different ways depending on their interest and knowledge in a topic as well as their intellectual ability. She feels that in order to accommodate these students in the classroom, there needs to be more training for teachers through the school district, either in person or through websites and videos. She also states that before the new school year starts, meetings with the student, his or her parents, and the student's previous teacher can be beneficial in a smooth transition to a new class.

## Overall Findings, Themes

### *Strategies*

The research indicated that there are many successful strategies for teachers to use in working with children on the autism spectrum. Several strategies are described in this section.

The first strategy is using visuals in teaching. ASD children learn better when they can visualize what it is they are being asked to do. Teachers create a visual schedule to do this. Whether it is through text or pictures, this allows the student to see what his or her schedule for the day looks like.

Routine is very important to children on the spectrum. It may take them a while to establish and understand a routine, but once they get it down, things can run much more smoothly. It is important to work with these students to help them understand that changes in their schedule and routine will occur. It is important to let the child know as soon as possible if something in the schedule might be different. To help teach this lesson, teachers can build spontaneity into a schedule. Planning something fun, but unexpected for the child can help them see that changes in their schedule are something that they can begin to understand and know they can make it through successfully.

Transitions can be very challenging for children on the spectrum. Teachers can facilitate this process for students by using tools such as timers. Visual timers can be helpful for these students so they can see how much time is left. Multiple countdowns from an adult allow the child know how much time is remaining. Lastly, walking the child through the steps, both auditorily and visually, of how to transition from one activity to the next may calm any anxieties about the unknown and what is expected.

ASD children are often unaware of the unwritten rules of social behavior which is called the, “hidden curriculum.” They frequently do not understand something that might seem glaringly obvious to everyone around them. Positive reinforcement is a way to help the child understand that what he or she is doing is correct. When using positive reinforcement, a teacher needs to make sure to label what it is the child did correctly. If the teacher specifically states that as opposed to saying something ambiguous such as, “Good job,” the child will understand much more.

Positive peer role models and cooperative small groups are two more helpful strategies. Children can often learn many social cues from other peers. If the teacher partners a child on the spectrum with a peer role model or places them in a cooperative group with typical students, the child is around positive behaviors. In

turn, it is the hope that the autistic child will observe this, and emulate some of these behaviors.

Academics, specifically reading comprehension, can be difficult for children with autism. One strategy for dealing with this is “chunking” material and breaking it down into smaller parts. This makes it less overwhelming and easier for the child to take in. Doing a picture walk with a story before it is read can give a child a preview of what the story might be about. Cloze activities, where a child fills in the blanks in sentences can be helpful as well. When working on projects or long-term assignments, make sure to show examples of finished papers. Provide rubrics ahead of time so the child knows what is expected of him or her. If possible, allow the child to write about or do a project on a topic of interest to him. In doing this there may be less resistance to completing the assignment. Once completed, allow the child to present it to the class to show off his or her expertise in that area.

When giving directions for an assignment, teachers should do a check-in with the child to make sure he or she knows exactly what is expected. Don't just assume that children on the autism spectrum will understand everything as it is presented whole class. Use simplified language when possible. When giving multiple assignments or multi-step directions, write down exactly what you expect the child to accomplish.

It is important to remember that some strategies may work and others might not. It is also highly likely that a strategy might work really well for a while, and then all of a sudden, it will stop working. When this occurs, it is important to beware of any changes that may have contributed to why the strategy may have stopped working.

#### *Teacher Attitude*

Overall, most teachers reported having positive feelings about including children on the autism spectrum in their classes. While many of them feel overwhelmed because of their own lack of training, they often seek outside help or look for resources on how to instruct these children and encourage them to be successful in school.

#### *Professional Development*

General education teachers are not required to take formal classes dealing with working with children on the autism spectrum as part of their teaching credential programs. Yet, inclusion is federally mandated and the number of children with special needs is increasing. Therefore, general education teachers need formal training as part of their in-service experience in learning how to accommodate the educational needs of this population in the general education classroom.

## Chapter 5 Discussion

### Summary of Major Findings

Overall teachers have a positive outlook about having children on the autism spectrum in their classes. Research indicates that there are many strategies that address social, emotional, and sensory integration management. While much information is documented on how teachers may accommodate students in the classroom, little is available in translating this information into practice. Providing teachers with information is one step. However, supporting teachers in class is necessary for their confidence, and for the child's well being in the classroom.

### Comparison of Major Findings to Previous Research

In a perfect world, the existing research literature provides great ideas for successfully mainstreaming the ASD child into the general education class. Unfortunately, the process of implementing these ideas is often non-existent. The expectation was that teachers would report a more negative attitude about full inclusion, overall. However, teachers, especially those new to the profession and having completed their training within the past five years, reported a positive attitude and openness to suggestions. They are not necessarily going out to look for information on their own. They are relying on the resource specialist, the

speech therapist, the occupational therapist, and the school psychologist to offer supports in the classroom.

#### Limitations/Gaps in the Study

The research literature has little on academic strategies, specifically those for reading comprehension, and supports for this student population. All school sites may be different in terms of teacher attitude and administrative leadership in following through on full inclusion.

The present study was limited in scope. Only teachers and two non-teaching experts in the field were interviewed. The results might be different if parents were also interviewed for their perspectives regarding how to successfully include their children in the general education classroom.

#### Overall Significance of the Study

Students with ASD will be fully included in general education classrooms. This population will continue to increase. Teacher preparation in the credential program, and in-service training in the school setting are increasingly critical in preparing confident teachers to work with the diversity of student needs.

#### About the Author

The author is an experienced general education teacher in a public school setting. She became interested in working with children on the autism spectrum after



working at a non-public school. This experience led her to completing a teacher preparation program in general and special education. Her goal is to provide support to other general education teachers who have children on the autism spectrum in their classrooms.

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