# INCLUSIVE EDUCATION FOR PRESCHOOLERS WITH AUTISM SPECTRUM DISORDER

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#### ABSTRACT AND INTRODUCTION

The purpose of this research is to draw attention to what is necessary for effectively educating preschoolaged students with Autism Spectrum Disorder (ASD) in an inclusive classroom. The Individuals with Disabilities Education Act mandates that schools must include children with disabilities alongside typically developing peers to the maximum extent appropriate (U.S. Department of Education, 2017). This raises the need for all educators and administrators to be knowledgeable on the optimal practices for including students with disabilities.

For this research, I studied the optimal practices for including students with ASD because ASD is a complex disability that can present itself in a variety of ways among individuals. According to the National Institute of Mental Health (NIMH) (2020), Autism Spectrum Disorder (ASD) is defined as a developmental disability affecting communication and behavior. Because Autism is known as a "spectrum" disorder, there is a wide variety of types and severity of symptoms one can experience. NIMH also explains that "treatments and services can improve a person's symptoms and ability to function" (National Institute of Mental Health, 2020). Because of the ambiguity that comes with an autism diagnosis, it is important for educators to understand the types of practices that these students require, such as individualized instruction, skill development in multiple varieties, and the promotion of skill generalization and independence for a meaningful life.

Furthermore, this research specifically studies education for students with ASD who are preschool-aged. According to the Centers for Disease Control and Prevention (CDC), 31,400 children were diagnosed with ASD in the State of New Jersey in 2016, which shows a large increase from the 9,900 children diagnosed in 2002 (Center for Disease Control and Prevention, 2020). Additionally, the CDC reports that by the age of two, an experienced professional's diagnosis of ASD can be considered very reliable. These two points show how diagnoses of ASD have increased over the years and professionals can now detect ASD at very young ages. This raises the need for educators to be aware of the best practices for the youngest students with ASD who are enrolled in a preschool program. Thus, the goal of this research is to examine the best practices in educating preschool students with ASD in an inclusive classroom environment.

#### METHODOLOGY

At the start of this research, I began with a literature review through resources provided at The College of New Jersey, in Ewing, NJ. Education journals and psychology journals were primarily reviewed and keyword searches included: Early Childhood Education AND autism, Inclusive Education AND autism, Preschool AND autism, etc. Studies that were published in English were included if they met the following criteria: study of young children with autism with intervention or systematic review of such, and published within the last 10 years. 8 studies out of the 18 reviewed were included in the literature review based on the criteria.

The second part of this research includes interviews conducted with professionals in the field of special education and general education, including teachers, administrators, and a professor of special education. I tailored the interview questions according to the individual's professional background, however, everyone was asked the following questions: What have you personally found to be "good practices" for children with Autism? Are you familiar with any centers that provide support and

education for children with Autism (birth-age5)? Can you recommend any literature that may be beneficial for my research? and, What type of business-related aspects are affected when mainstreaming a child with Autism? Additionally, all participants were given false names for the protection of their identities.

#### LITERATURE REVIEW

Effectively to research the optimal methods for educating preschool students with ASD in inclusive environments it is necessary to review the literature on this topic. Interventions researched in the literature include but are not limited to: Applied Behavior Analysis, Group Early Start Denver Model, Mixed Interventions, Early Intensive Behavioral Intervention, Comprehensive Treatment Models, etc. In the review of the literature, I have discovered that there are three important aspects of educating children with ASD in an inclusive environment: 1. Programs must allow for individualization according to the child's needs 2. Programs should target several developmental areas for growth 3. Programs should set goals for skill generalization, thus promoting independence.

As previously mentioned, the NIMH explained that ASD is a spectrum disorder, meaning that anyone with ASD may have a wide range of strengths and abilities. It is also a federal law that children with disabilities must be included in settings with non-disabled children to the maximum extent possible. If preschools are to successfully mainstream children with ASD in a general education classroom, then the program must be adjusted in accordance with the three important aspects I emphasized in my research.

First, programs must be flexible for individualization in accordance with the child's needs. While children with ASD may experience common symptoms and behaviors, not everyone is the same, nor at the same level of severity. Therefore, children with ASD need programs that can support their individual needs. Secondly, programs must target multiple developmental domains for growth. If a program solely focuses on one aspect of a child's education, then they will not expand in skills in various domains in life, which is detrimental to overall success. Lastly, I found that programs must also promote skill generalization across settings, thus promoting independence. One of the goals for children with ASD, or any disability, is to become an adult that can meaningfully contribute to society. If children with disabilities are not taught to generalize skills, then they may consistently depend on instructors and parents throughout the duration of their lives. Children with ASD have the ability to make progress in all aspects of their lives if programs can successfully incorporate all three of these important aspects in educating children with ASD in an inclusive preschool setting.

From this research, I believe three treatment methods that have shown to be beneficial for young students with ASD in an inclusive classroom are: Applied Behavior Analysis (Makrygianni, et al., 2018), Mixed Interventions (Stahmer, et al., 2011), and Comprehensive Treatment Models (Boyd, et al., 2014). These programs followed suit with the aspects I have outlined above, as well as having statistically significant results in previous research. If these programs were to be implemented for preschoolers with ASD in inclusive classrooms, they must also take into consideration all other aspects relating to business which will be further discussed in a later section.

## **INTERVIEWS**

For the purpose of this research, I interviewed several professionals in the field including: three directors of mainstream preschools, one early childhood special education teacher, two directors of Approved Private Schools for Students with Disabilities (APSSD), and one professor of special education at a higher education institution. The interview questions were slightly tailored according to the individual's professional background, however, all participants were generally asked about the experiences they have had with children with Autism Spectrum Disorder (ASD) and what they have seen to be effective practices in mainstreaming these students.

The interviews conducted with directors of mainstream preschool programs included questions such as but not limited to: Is your center able to enroll and provide education to students with disabilities?, To what extent is the staff trained to provide education to students with Autism?, and What type of business-related aspects are affected when mainstreaming a child with Autism? I found through

these interviews that directors of mainstream programs are willing to enroll and educate students with ASD if the center has the necessary budget, staffing, and proper physical facility arrangements. However, all of the directors noted that their programs had limitations in providing education to these students due to lack of trained staff, lack of adaptive equipment and other resources, and lack of budget to provide appropriate services. Therefore, if mainstream centers are to enroll students with ASD, they must take into consideration what supports the individual child needs in order to assess if the center is the right fit for the student.

Next, I conducted an interview with an early childhood special education teacher at a local public school district. I asked similar questions regarding the curriculum, funding, and staffing arrangements. It was apparent based on this interview that public school districts include a team of certified special education teachers as well as other professionals such as behaviorists, psychologists, speech pathologists, and caseworkers. The interviewee also spoke on the school's funding by stating that the State of New Jersey provides funding for the special education department. Furthermore, the program and curriculum are implemented through research-based practices and are heavily dependent upon the student's individual needs. Additionally, the goal of the program is to develop the students' skills to eventually be fully mainstreamed in a typical classroom.

The following two interviews were conducted with directors at Approved Private Schools for Students with Disabilities (APSSD), specifically on educating students with ASD. I asked questions such as: What curriculum does your center follow?, To what extent is the staff trained to provide education to students with Autism?, What type of business-related aspects do you believe are affected when including a child with Autism in a mainstream setting? I asked the same questions to both directors and received very similar responses regarding the necessary staffing, budget, and physical facility requirements necessary in educating students with ASD. It was apparent through these interviews that APSSDs are research-based, highly individualized, comprehensive, and goal-oriented to transition students with ASD into fully mainstreamed classrooms. Thus, APSSDs and public school special education programs reveal themselves to be an optimal setting for young students with ASD as they cover all three important aspects outlined in the literature review, as well as being research-based and employing certified and trained professionals.

## **BUSINESS RELATED ASPECTS**

For a director of a mainstream early childhood education center seeking to provide education and services for students with ASD, there are several business-related aspects to be considered. For the purpose of this project, I will be discussing state laws, staffing requirements, budgeting, and the physical arrangement of the classroom.

As the interviewee Nicole stated, there is an administrative code in the State of New Jersey (hereinafter N.J.A.C. Special Education, 2016), which includes a chapter specifically for working with students with special needs. Nicole explained that this chapter includes several business-related aspects that directors must be aware of. The Special Education Chapter of the N.J.A.C. includes elements such as, but not limited to, general provisions, procedural safeguards, services, programs, and instruction, proving educational and related services, requirements for services in nonpublic schools, early intervention provisions (N.J.A.C. Special Education, 2016). The code also includes federal special education laws such as the Least Restrictive Environment and Free and Appropriate Education, which will be further explained.

As previously discussed, part of the reason I concluded that APSSDs or public special education programs may be the optimal setting for students with ASD is because of the amount of certified special education professionals these settings included. The mainstream preschool programs did not include trained special education staff, which is a requirement under N.J.A.C. The code states that "each district board of education is responsible for providing... special education and related services... which shall: Be administered, supervised and provided by appropriately certified and qualified professional staff members" (N.J.A.C. Special Education, 2016, pg 2). Additionally, the code states that in-service training and continuing education for staff members who provide special education are required and the training should prepare professionals with content knowledge and collaborative skills to meet the needs of

children with disabilities" (N.J.A.C. Special Education, 2016, pg 6). Therefore, a mainstream center seeking to include students with ASD must allow for the employment of certified special education professionals along with their continuing education on best practices.

Another important business-related aspect includes budgeting appropriately and effectively. As part of N.J.A.C., education and related services must "be provided at public expense, under public supervision and with no charge to the parent" (N.J.A.C. Special Education, 2016, pg 2). This follows the federal law that mandates Free and Appropriate Public Education for students with disabilities, which is important for directors to know to prevent the idea that parents are supposed to pay for these services. Furthermore, mainstream preschools noted in the interviews that they often lacked the budget to provide students with extra services they require, including lower student to teacher ratios and assistive technology. The N.J.A.C. special education chapter also includes student: teacher ratios that are different than general education ratios. It states that "a program for students with autism shall maintain a student to staff ratio of three to one", therefore, if these mainstream preschools are to include students with ASD, then they must take into consideration the extra financial resources that may be necessary (N.J.A.C. Special Education, 2016, pg 107).

Lastly, directors also must plan for the physical arrangement of the facility while providing education for students with ASD. The director must "ensure that students with disabilities are educated in the least restrictive environment" and "a student with a disability is not removed from the age-appropriate general education classroom solely based on needed modifications to the general education curriculum" (N.J.A.C. Special Education, 2016, pg 1 and 96). Students with ASD may need modifications to the general education curriculum and as per N.J.A.C., students should not be removed from the classroom for this reason. As Nicole stated in her interview, the physical spacing must be taken into consideration, as her center allows for group instruction and small cubbies for individualized instruction.

Physical spacing and arrangement of the classroom are important for directors to be aware of to ensure compliance with state laws as well as what is best for the students. One way in which directors can plan for the physical arrangements of the classroom to comply with the least restrictive environment is to arrange large tables for whole group instruction in the main area of the classroom where it may be nosier. Then, arrange for a smaller table in a quiet area in the classroom for individualized instruction. This does not mean to place these small tables in the corner, but perhaps near the reading center or near another quiet activity.

## **DISCUSSION**

According to the literature, there are three important aspects of educating young students with ASD. These aspects include: individualization as per the child's strengths and abilities, targeting multiple developmental domains for growth, and setting goals for skill generalization. As previously stated, those with ASD can exhibit a wide range of symptoms and severity, meaning that not every child with ASD will learn the same way. With this in mind, programs must account for individual differences among these students and tailor the program to what will work best for the individual. Educators run the risk of neglecting a student's individual learning needs if they attempt to use the same approach for every student with ASD.

Furthermore, still accounting for individual differences, students with ASD may need support in a wide range of developmental domains. As the overall literature notes, children with ASD need a variety of skill instruction in order to improve several areas of their lives, including but not limited to, social skills, daily living skills, academic skills, fine/gross motor skills, etc. If educators do not target multiple developmental domains, it could yield students being strong in social skills, for example, but severely lacking in daily living skills.

Finally, programs must set goals for skill generalization and eventually independence. The goal for any individual with disabilities, or without disabilities, is to support them in pursuing an independent life and doing something meaningful in society. In order for students with ASD to address these goals, they must learn to generalize skills learned across a variety of settings to support them in several settings they will be a part of throughout their lives.

The next question I pondered after analyzing the literature is what programs are available for students with ASD, and do they follow suit with the three important aspects I have outlined? Within this part of my research, I concluded that the mainstream preschools I interviewed are very willing to educate students with ASD, however, they often have limitations. Mainstream preschool programs often cannot budget for long-term outside services for students with ASD, unless parents are able to provide the services themselves. Moreover, the mainstream preschool programs I interviewed did not have any special education teachers employed, raising the concern that these students would not receive support from a trained professional in the field. While mainstream preschools may be able to follow all three important aspects, they still are not fully equipped to properly educate students with ASD in that they lack proper professionals and resources for their education.

I additionally interviewed directors from Approved Private Schools for Students with Disabilities (APSSD) and a teacher from a public school special education preschool program. From these interviews, it was apparent that these programs followed suit with the three aspects I have discussed. The programs heavily rely on individualized plans and instruction, as well as generalizing the student's skills in order to place them in an inclusive or mainstream classroom. Furthermore, these programs were designed by professionals and equipped with trained special educators, outside services such as speech/occupational therapy, as well as adaptive technology and support staff. Thus, programs similar to the APSSDs and public school special education preschool programs are able to provide students with ASD all of the necessary components of their education according to the literature and the interview results.

#### LIMITATIONS AND FUTURE DIRECTION

It is important to discuss the limitations of this research as well as a future direction for the continuation of research in the best practices for students with ASD in inclusive settings. First, this research was conducted in Central New Jersey and did not include voices from professionals in other geographic locations. This research includes seven interviews with 3 mainstream preschool directors, 1 special education teacher in a public school, 2 directors of APSSD, and 1 professor of special education. This is a small sample size with a variety of participants per category. Furthermore, two planned interviews had to be canceled due to the impact the recent COVID-19 pandemic has had on the community. Impacts of the pandemic include the closing of all schools and child care facilities in New Jersey, with the exception of those serving the children of essential personnel, beginning in March 2020.

For future research, a research study should include a larger sample size of professionals in the field and similar numbers of participants per professional category. Another step future researchers should consider is the geographical differences in education based on variations in state-to-state education systems. Perhaps including participants from several states would allow for more extensive and inclusive research. Moreover, future researchers may benefit by conducting in-class interviews, where the researcher observes and analyzes the practices used with children with ASD. If future research can follow these suggestions, perhaps the results will prove more meaningful for children with ASD being educated in inclusive classrooms.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> An extensive bibliography from the original research paper is available upon request.

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