

# Successful Inclusion of Students with Autism Spectrum Disorder

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## Abstract

*The number of students identified with Autism Spectrum Disorder (ASD) is continuously increasing. Research indicates multiple benefits of placing students with ASD in the general education/inclusion classroom, however, there are a variety of components that must be in place for this to be successful. Students with ASD experience delays in their social and communication skills. The inclusive classroom provides opportunities to develop these skills with their non-disabled peers. Despite progress that has been made in the education system, there are still barriers in place that must be considered and addressed. There are a variety of models and strategies that have been developed. The individual needs of each student with ASD must be considered when designing the specific plan for each student to be included.*

## 1. Introduction

The Individuals with Disabilities Education Act (IDEA) emphasizes the need for students with disabilities to participate with their non-disabled peers in school to the greatest extent possible. This does not mean that IDEA mandates inclusion for all students, but it does recognize the benefits of inclusion if appropriate for the student. Students with Autism Spectrum Disorder (ASD) benefit from opportunities to learn and interact in the general education classroom. The research supports implementation of inclusion for all students and more specifically for students with ASD. Successful inclusion does require specific strategies to be in place for the schools and teachers.

It is important for all stakeholders to have a definition of inclusion that is founded in the most current research. This will ensure the strategies are aligned with the needs of the students with ASD. There are theoretical foundations that support the benefits of inclusion, in a variety of models. It is important to analyze each program or setting to determine any barriers that may be in place for a student with ASD to be successful in the general education classroom. The models and strategies that are used to support students with ASD in the general education classroom should be research based and modified based on each student's individual needs. All stakeholders will best support students with ASD by increasing their knowledge and understanding of the disability.

## 2. Definition of ASD

The definition of autism and/or autism spectrum disorder has changed over the years as research has been conducted and we have learned more about the elements of the disorder and needs of the individuals. Autism spectrum disorder (ASD) involves delays in social skills, communication, and behaviors. It is a neurological disorder that includes specific criteria. In order to be identified with ASD an individual must meet the criteria including social communicative deficits and restricted and repetitive behaviors. Individuals with ASD can experience difficulties with reciprocity in social/emotional situations, social relationships, and nonverbal communication. Behaviors can result in hyper- or hyposensitivity, insistence on sameness, restricted and/or fixated interests and atypical motor mannerisms [1] [2].

Autism Spectrum disorder varies greatly among everyone. It is not appropriate to assume each student with ASD will be successful with the same programs and supports. Individuals with ASD interact with the world and their environment then their typically developing peers. This does not mean that they cannot successfully participate in the same environment.

## 3. Definition of Inclusion

Significant evidence has been published to support the implementation of inclusion in schools. The benefits are numerous for both students with and without disabilities. It is important that the involved stakeholders establish an agreed upon definition of inclusion. Inclusion is not solely physical placement in an environment with non-disabled peers. It must also involve actual participation in the environment that is equitable to that of the non-disabled peers [3].

The increased desire for schools and other settings to include individuals with disabilities should incorporate specific efforts to ensure they can fully participate in all activities. Effective inclusion involves providing appropriate accommodations and supports for the students with ASD based on their specific needs. Accommodations should include more than physical accessibility. Accommodations are intended to be specifically designed to meet the unique needs of each student.

According to research conducted through the University of Kansas Center for Research in Learning support inclusion involves the following conditions in which teachers [4]:

- Are philosophically committed to meeting the needs of all students in the general education classroom, including those of students with mild disabilities.
- Have sufficient time to think about and plan for the diverse needs of students in their class(es).
- Incorporate teaching practices that enable them to better meet the needs of all students in their class (es).
- Work collaboratively with special education teachers to assess student needs, teach in productive ways, and monitor student progress.
- Have the option for their students to receive short-term, intensive instructional support from a special education teacher.
- Have the option for their students to receive sustained instruction in basic skills or learning strategies that cannot be provided in the general education classroom.

#### 4. Theoretical Foundation

The socialization theory emphasizes the social benefits of inclusion for students with ASD. Socialization refers to the process through which individuals acquire social skills, behavioral norms and values of the culture they are living in. The acquisition of these social skills makes it possible for the individual to become a part of society.

The social skills needed, social understanding and emotional security, are skills that individuals with ASD struggle with significantly [5]. It is helpful to explore how social skills are developed as students with ASD often struggle with them. The process of socialization occurs at different stages of development. The introduction to social skills for children starts with their families. As they grow older, they learn additional social skills through their time at school, religious institutions and eventually employment [6].

The degree of social skills that children can obtain depends on their exposure to life experiences. This can become an issue for students with ASD who solely spend time with other students with

disabilities. They may not have the opportunity to learn age appropriate and acceptable social skills and behaviors from their peers due to now being included with their non-disabled peers in school or other settings [7].

#### 5. Barriers of Inclusion

The numerous barriers to inclusion of students with disabilities in the general education classroom are more than expected. The barriers may be unintentional but need to be recognized and removed. It is beneficial to consider the unique needs and perspective of the student with a disability to understand anything that may prevent them from experiencing full inclusion. The barriers can include stigma, physical environment, communication, and teacher preparation. While we have made significant progress regarding perception of individuals with disabilities, there is a stigma present. This can create an attitudinal barrier that prevents students with disabilities from feeling welcomed and valued in the classroom. Negative perceptions of individuals with disabilities can be negated through inclusion. As non-disabled students have more opportunities to interact with students with ASD, they will be more understanding of their differences. The understanding of differences will reduce the stigma.

The attitude of the general education teacher towards the students with ASD can impact all of the students. If the teacher has a negative attitude about working with students with ASD, other teachers and students may display negative attitudes as well. General education teachers often have negative attitudes about working with students with ASD based on stereotypes related to difficulties with behaviors. They may be due to a lack of experience, knowledge or training, but can be negated with proper supports [8]. There can be architectural barriers preventing the students with disabilities from being able to physically access everything in the classroom, the same as their non-disabled peers.

According to the Americans with Disabilities Act (ADA), everything within a school must be accessible. This includes ramps, modified desk or chair, accessible technology, transportation, etc. Students with ASD may require sensory supports, alternative seating, assistive technology, or modified materials. These physical accommodations can support inclusion of students with ASD.

Students with ASD often experience delays in the development of communication skills. They may require assistive technology, pictures, sign language, etc. to successfully communicate in the inclusive classroom. The teacher and other students should have some training in how to communicate in the alternate form as well. This will allow the students with ASD to communicate in the inclusive classroom effectively.

General education teachers are often hesitant to support inclusion of students with ASD because they do not feel prepared. The individuals involved in preparing an inclusion classroom must be provided with the needed training, strategies, and support. Social skills need to be included in the curriculum for all the students. In addition, teachers of inclusive classrooms need to have an open mindset. They need to be flexible as new situations will arise regularly. If the teacher of an inclusion classroom does not feel prepared and supported, it will not be successfully inclusive [9]. It is interesting to consider the power of a positive attitude as well. When the teacher as a positive attitude towards students with ASD they can sense that and it impacts their success in the inclusive classroom. Students with ASD are often viewed by others in a negative way. This can be negated by a teacher's positive outlook and view of ASD and inclusion. When teachers have the needed training for an effective inclusion classroom, they will be more positive in that setting [10].

## 6. Models of Inclusion

It has been noted that there are a variety of ways to set up a successful inclusion classroom. The model should be chosen based on the specific needs of the students. In addition, the IEP team will need to review the program choices to determine the least restrictive environment for the student. The options of models can include push-in/full inclusion, team-teaching, strategies of intervention and circles of inclusion.

The push-in/full inclusion model involves the students with ASD being in the general education classroom for the full school day. The student experiences all of the academic content, lunch, recess, special classes (ex: physical education), field trips, etc. the same as their non-disabled peers. They are not any type of alternative schedule. They receive the accommodations and modifications that are outlined in the individualized education plan (IEP) in the general education classroom, which is full inclusion.

An inclusive classroom can also involve two teachers who are team-teaching. This would typically be a general education teacher and a special education teacher working together. This can be extremely beneficial as they both have different areas of expertise. Team-teaching can be very effective when done correctly. This would involve the two teachers planning their lessons together, being cohesive in their instruction and classroom management and good communication skills.

The strategies intervention model involves very specific components that are research based to be effective in an inclusive classroom. This model involves acquisition strategies, storage strategies, expression strategies and organizational and concept

routes. Acquisition strategies involve supports to assist students with acquiring new knowledge in way that aligns with their specific needs. This can include using visual supports for a student who is a visual learner, which often includes students with ASD. The storage strategies include methods of retaining content, such as specific note-taking models. Providing a timeline for larger assignments or projects can be used as an expression strategy. This will provide the student with support in monitoring and completing a project independently. Students with ASD rely on structure and routine and this will be an important element in an inclusive classroom. An organizational routine can include providing a daily picture schedule for students to follow. Concept routines are strategies used to help students make connections between their prior knowledge and new content [11].

The circles of inclusion model include three key elements: learning objectives, instructional style and accessibility and usability. The three components work together to anticipate all the students' diverse needs in the inclusive classroom. This model is set up to remove potential barriers to learning. The elements also promote learning outcomes and assessment criteria that are aligned with the classroom profile. As the model of the inclusive classroom is determined the teacher can do other things to prepare for a successful inclusion classroom. It is beneficial for the teacher to utilize the parents' knowledge about their child's disability. They will have the best understanding of their child's interests and abilities. It can be beneficial for the parents to understand how the inclusion classroom will work and what the teacher is doing to set their child up for success as well.

The teacher can take the time to individualize a plan for the students with ASD. This will help the students feel understood and valued in the classroom. When students with ASD receive recognition and positive praise from their teacher, they are more likely to participate and put forth effort. As the individualized plan is developed students with ASD tend to be more successful when there is a focus on their personal abilities and interests and when they are provided with choices.

## 7. Research

Students with ASD who participated in the general education classroom had higher IQ and communication scores [12]. There is a positive influence that participation in the general education classroom can have on the social and communication skills of students with ASD. It also provides them with the opportunity to develop authentic friendships with their non-disabled peers [13]. There are reciprocal benefits for students without disabilities who have participated in inclusive classrooms. These

students developed an increased understanding of disabilities and how to support their peers with disabilities [14]. Literature research shows that students with ASD can better develop their cognitive and adaptive skills when they participate in inclusion classroom. A characteristic of ASD is being a visual thinker and learner. Even when students with ASD have limited communication skills, they learn a lot through observation. They have a heightened sensitivity with things they see. They often notice small details which can help them learn new content and social skills.

## 8. Inclusion Strategies

The strategies that can be implemented for an effective inclusive classroom can be connected to the barriers which include attitudinal barriers, physical barriers, and communication barriers. When it comes to strategies to support students with ASD with academics, they would be aligned with differentiated instruction and Universal Design for Learning strategies. These strategies can be used to support the diverse needs of all students and can be incorporated into all instruction. It is important for everyone involved in supporting inclusion be on the same page as to how they define inclusion and what is involved in an inclusive classroom. This includes administration, teachers, staff, and students. The purpose of the inclusive classroom must be agreed upon and articulated among all the stakeholders involved. This will promote a positive attitude towards the inclusive classroom.

The physical barriers that may be present in the general education classroom must be considered to set students up for success. Students with ASD may have sensory needs that require specialized equipment (ex: alternative lighting). In addition, they may need additional space in the classroom in case of stimming or behaviors.

Students with ASD may have limited or no verbal communication skills. If they are to successfully participate in an inclusion classroom, they will need to be able to communicate their wants and needs. This will be important in developing their social skills with their non-disabled peers as well. They can be provided with pictures for communication, assistive technology devices or sign language training. The teacher and other students should receive training on the mode of communication as well.

## 9. Understanding Autism

To understand an individual with a disability it is beneficial to consider their personal perspective by “putting yourself in their shoes”. How can this be done with a student with ASD? It can start with simply asking questions. We cannot assume that we

know how they feel in all situations. For example, individuals with ASD do not always prefer people first language, which in the past has been the preferred language for identification. To support the self-determination and identity of the individual it is important to determine what everyone, prefers, rather than assuming. Some individuals with ASD find people first language to be offensive. Providing language that allows respect for their preferences further supports and inclusive environment [15].

## 10. Conclusion

It is known that students with ASD experience delays in social and communication skills. When students with ASD are placed in educational settings where they only spend time with other students who struggle with the same skills, their opportunities for development are limited. Students with ASD benefit from the socialization and communication experiences in the inclusion classroom. The typically developing students in the inclusion classroom benefit as well. They have a greater understanding of individual differences, a higher level of patience and cooperation with others along an overall respect for all differences in the community [16].

Providing opportunities for inclusion of students with ASD has an impact on society. The reach is farther than the classroom. Positive academy experiences foster less behaviors. When students are not engaging in behaviors, they have more time to engage in positive social interactions. When students experience positive social interactions in the classroom with modeling and guidance, they can do the same in society. Community awareness is increased as schools promote more successful inclusion programs.

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