

Shiym Chastanet

Professor Rodwell

FIQWS 10113

22 November 2021

## **How Does a Communication and Learning Disability Impact Students With Autism and How Can Assistive Technology Be Useful?**

People face various challenges throughout their daily lives. A situation that every individual deals with is how to react in an ordeal and live with the consequences. Now, most people are able to control their emotions and handle themselves accordingly. However, people with autism might have problems knowing how to react to different issues and as a result it could potentially worsen the situation. This can later become problematic for them and lead to becoming very dependent on a caretaker. When a child's inability to communicate and learn is tackled at a young age these achievements can be easier to accomplish. This sense of independence can allow those individuals to grow and become successful in living a comfortable life. By providing and improving access assistive technology to children with autism at a young age that demonstrates difficulties controlling and expressing their emotions, they can later in life be able to perform well in school which could lead them to achieving degrees in a college, form a social life, and become independent.

Individuals that are born with a disability find that performing throughout their daily lives provides a challenge. The individuals that have communication and learning disabilities tend to find it difficult to do well in their education. Lerner and Barenbaum present the struggles of those that have inability to communicate and how it ties into hindering a person's ability to learn by

informing us that “Beginning writers and many persons with learning disabilities experience a similar difficulty with written communication. Common written communication problems related to learning disabilities are poor handwriting, spelling, organizational skills, productivity, and quality of writing” (qtd. in Lewis 17). By being incapable of speech or expressing themselves, those with a communication disability find it hard to process information. This can pose an issue in the classroom which could lead to a child not being able to have a proper education. The text goes on to state “Learning disabilities interfere with the learning process by inhibiting the acquisition of new skills and knowledge and the recall of previously learned material. As with communication barriers, the most typical response to problems in learning is instruction” (Lewis 17). As mentioned in the previous quotes these forms of disabilities go hand in hand. If this is not tackled at a young age, those that struggle with these disabilities might not be successful in finishing their schooling. In the article “Assistive technology: Impact on education, employment, and independence of individuals with physical disabilities” Stumbo states that “While approximately 25% of individuals without disabilities complete college educations, only 13% of persons with mild and 2% of persons with severe disabilities complete similar degrees” (Stumbo 102). Those with disabilities tend not to be accommodated in the educational system which results in being incapable of finishing out college. By not being able to complete the requirements for their degrees, finding jobs as a disabled individual can be difficult. With this in mind, educators and parents need to take the necessary actions to help guide these children in developing methods in which they can use to learn and function in society.

There are many people that live life without some form of a disability that lack an understanding of the potential struggles a caretaker and a person with autism goes through. In the handout titled “Augmentative and Alternative Communication: Frequently Asked Questions”

Frailey perfectly summarizes as to why caretakers find it hard to raise someone in this position by stating “Parents and educators may become overwhelmed when working with a child who is nonverbal or has some form of unintelligible speech” (Frailey 1). The lack of understanding between a parent and their child that finds it hard to communicate can lead to the child feeling frustrated. People would start to question how an individual that isn't able to communicate properly is able to express themselves.

Two forms of assistive technology that can help individuals express themselves are AAC systems and AAC Devices. The handout explains what each of these forms of AAC is by stating “An AAC system encompasses all methods of communication. This includes facial expressions, manual gestures, possible speech or vocalizations, picture symbols, electronic devices, as well as strategies and skills used in a variety of communication situations. An AAC device is a mechanical or electronic tool that assists in communication. Examples include picture symbols, communication boards, and computer devices. An AAC device may or may not be part of an AAC system” (Frailey 1). These two methods present the options caretakers have to help their child communicate. By doing so the individual can be able to express their emotions through the methods that they were taught which can help them be able to understand how to communicate their feelings to others. This results in people with autism developing a functional social life, achieving their academic goals, and becoming employed.

Every child with autism that finds it hard to regulate their emotions are different. There is no one perfect solution. Since there are different spectrums of autism each child would struggle with different daily functions. What might work for one child might prove to be useless to use for another child. With the various forms of assistive technology parents are able to use what specifically works for their child. In the article titled “Assistive Technology for Students with

Autism Spectrum Disorders” by the National Association of Special Education Teacher, the writer provides educators and caretakers with different examples of assistive technology that they can use to help children with autism. This is explained by stating “Typically, children with autism process visual information easier than auditory information. Any time we use assistive technology devices with these children, we're giving them information through their strongest processing area (visual). Therefore various types of technology, from "low" tech to "high" tech, should be incorporated into every aspect of daily living in order to improve the functional capabilities of children with autism” (N.A.S.T 1). The intention of this article is to provide it’s readers of different approaches they can take to teach those with autism. As I had mentioned before each student would require their own unique set of tools to help them learn and grow. Some students might benefit more from using low technology such as calendars in order to provide consistency in their life and basic symbols to help them express how they are feeling throughout the day. While others would benefit from using high technology such as voice cameras which would be used to tape a child and allow them to learn from their behavior. Discovering what is more beneficial for a child does take time, however, the pay out in their lives does provide to be long lasting. By enabling children with the necessary resources for them to develop they can become an independent and well functioning individual in society.

After understanding the importance assistive technology plays in the life of those with autism, people might be wondering how does life change for those individuals that do use assistive technology as their way to function in society. In the article “Assistive Technology: Impact on Education, Employment, and Independence of Individuals with Physical Disabilities' ' a group of researchers surveyed if people with disabilities that used assistive technology were able to have improved function in their daily lives. In the article under the section titled “Assistive technology

and higher education” Christ and Stodden noted “Research has shown that successful postsecondary education for students with disabilities leads to a more productive and fulfilling life, financial success, and improved vocational options” (qtd. in Stumbo 102). It is well known in society that the key to living a comfortable life is to gain a proper education. While discriminating against those with a disability is illegal, there are individuals with a learning disability that might find it hard to keep a job because of their inability to retain and gather important pieces of information. By introducing technology geared towards those with a learning disability, college students with learning disabilities can have a higher success rate in achieving their degree which can lead them to obtain and keep a job.

Although assistive technology can help with communication and learning disability in children with autism, the challenge is improving access to those in need. There are many individuals that can benefit from using some form of an assistive technology that can help improve their daily lives. According to an article written by the W.H.O. titled “Improving Access to Assistive Technology”, “WHO estimates that there are more than 1 billion people who would benefit from one or more assistive products. With populations ageing and the prevalence of noncommunicable diseases rising across the world, this number is likely to rise above 2 billion by 2050, with many older people needing two or more products as they age” (W.H.O. 1). This is a staggering number of people that could benefit in some way with assistive technology. Most teachers in special education classrooms lack the necessary training needed to utilize assistive technology for students. As noted in the article written by W.H.O. they wish to help prevent individuals with disabilities from getting worse. For instance, someone that doesn't have the necessary tools to help them develop speech in life such as a hearing aid can lead to them finding it difficult to verbally communicate with others (W.H.O. 3). This can lead to them having

difficulty in their schooling which can lead to them not finishing out their education. The idea this article wishes to convey is that it's best to prevent disabilities from getting worse. This also leads to the notion that there is a lack of teachers in special education that are trained to use assistive technology. As stated in the article by the W.H.O. "Today only 1 in 10 people in need have access to assistive products, owing to high costs and a lack of financing, availability, awareness and trained personnel" (W.H.O. 2). The lack of funding and trained teachers make accessing assistive technology in the classroom difficult. By being able to make assistive technology more affordable to low income families and provide the necessary training required to use these tools in the classroom, society might end up with more individuals that successfully completed their education as a person with a disability.

All in all assistive technology is a tool that can be used to prevent a child with a form of a communication and learning disability from becoming solely dependent on a caretaker. While society is still trying to learn more of what autism is, we are currently living in a time in history where we can help those struggling to function in society with this disability. Despite there being more treatments geared towards helping younger individuals with autism than older people with this, in time more research will be conducted to help everyone on different spectrums of autism to gain the help that they need to function in society.

## Bibliography Works Cited

- “Assistive Technology for Students with Autism .” *Naset.Org*,  
[https://www.naset.org/fileadmin/user\\_upload/Autism\\_Series/Assist\\_tech/AssistiveTech\\_for\\_Students\\_W\\_Autism.pdf](https://www.naset.org/fileadmin/user_upload/Autism_Series/Assist_tech/AssistiveTech_for_Students_W_Autism.pdf).
- Frailey, Cheri. “Augmentative and Alternative ... - Superduperinc.com.” *Superduperinc*, 2005,  
[https://www.superduperinc.com/handouts/pdf/91\\_AugmentativeAlternative.pdf](https://www.superduperinc.com/handouts/pdf/91_AugmentativeAlternative.pdf).
- “Improving Access to Assistive Technology.” *Apps.Who.Int.* , 15 Mar. 2018,  
[https://apps.who.int/gb/ebwha/pdf\\_files/WHA71/A71\\_21-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_21-en.pdf).
- Lewis, Rena B. “Assistive Technology and Learning Disabilities: Today's Realities and Tomorrow's Promises.” *Journal of Learning Disabilities*, U.S. National Library of Medicine, 1998, <https://pubmed.ncbi.nlm.nih.gov/9455174/>.
- Stumbo, Norma J., et al. “Assistive Technology: Impact on Education, Employment, and Independence of Individuals with Physical Disabilities.” *Journal of Vocational Rehabilitation*, IOS Press, 1 Jan. 2009,  
<https://content.iospress.com/articles/journal-of-vocational-rehabilitation/jvr00456>.