

Removing Barriers to Learning for Children with Autism Spectrum Disorder

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Abstract

There is a significant increase of children diagnosed with autism spectrum disorder (ASD); therefore, parents, educators, and specially trained instructional resource teachers need to come together to provide effective programming for these children. This paper provides a number of strategies and educational methods to assist educators in providing effective educational programs for students with ASD. This paper focuses on visual aids, multimodal interventions, and strategies for challenging behaviour so students receive the education that is most suited for them.

The past few decades has shown an increase in the number of students diagnosed with autism spectrum disorder (ASD). Individuals with ASD commonly have difficulties with communication and socialization and may have a narrow range of interests (“Teaching Young Children,” 2016). Given broad calls for meaningful access and inclusion for all, educators are tasked with implementing effective educational programs that include strategies to provide access to curriculum and teach these children. Educational methods and strategies will vary for individual students, based on their unique interests and skill levels. Children with ASD have diverse interests, strengths, and challenges; therefore, what works for one child may not work for the next. Strategies to help students with ASD in the classroom include visual aids, multimodal interventions to enhance communication, and strategies to support students with challenging behaviours. Practice born in the universal design for learning begins with a holistic conception of the potential for many possible learning experiences, in which the emphasis shifts from a focus on the benefits to an individual to the benefit of the whole community (Baglieri, Valle, Connor, Gallagher, 2011), by incorporating a variety of strategies into the classroom we are creating a more inclusive atmosphere that benefits all students, not only those who have ASD.

Visual Aids

Many students with ASD struggle with abstract thinking (Knight & Sartini, 2015), but often have visual strengths; therefore, visual aids are one of the most common strategies for educators to use with their students. Students with ASD may face challenges in predicting how long an activity will take and are dubious about when the activity is complete; visual aids are a particularly effective tool to support students who face these challenges. Visual supports guide appropriate behaviour and promote proper functioning in and out of school (Young, Falco, & Hanita, 2016). Visual aids range on a continuum from concrete objects and pictures to symbols (Government of Newfoundland and Labrador [GNL], 2003). There are many examples of visual aids (for example, see “English Visual Images,” 2008). When and how to use visual aids depends on the individual’s comprehension level as well as where the student falls on the autism spectrum. Some of these examples include daily schedules and social stories.

Daily schedules can be used as a way of reducing anxiety throughout the day by clarifying what subjects or activities will be involved, what to expect throughout the day, and whether there are any changes to the daily routine. A high percentage of students with ASD also experience anxiety; therefore, having a schedule for the student can assist in developing a sense of time and knowledge of how long they will be participating in an activity and when to transition from one activity to the next. Depending on the severity of the disorder and their processing levels, they may need tactile objects attached to the schedule or may simply need a

symbol to represent the picture. As a classroom teacher, I have used large-scale schedules posted on the wall in conjunction with individual schedules on the students' desks. Portable schedules are another option that can be used, whereby the students take the schedule along with them in their pocket. These visual schedules provide the students a way to predict the events throughout their day; therefore, these daily schedules should be used consistently to alleviate any unnecessary anxiety that they may experience.

Social stories, officially kept by Carol Gray, are used in and out of school to help students with ASD better understand social expectations and cope with different social situations. Gray's experiences as a teacher has helped her to develop her philosophy: First: Abandon all assumptions. Second: Recognize that the social impairment in autism is shared, with mistakes made on all sides of the social equation. Third: When typical people interact with people with autism, both perspectives are equally valid and deserving of respect ("Carol Gray – Social Stories," 2017). These principles help to develop current social stories. They are useful in developing visual aids that assist in altering behaviours, easing transitions, and helping students to understand social cues and proper interactions (Notbohm & Zysk, 2010). I have used social stories to help my students to transition from one grade to the next. Introducing this transition before it took place helped to alleviate some unknowns and stressors that would have been experienced otherwise. In a situation like this, it is beneficial for the student to have a story that includes pictures of the new teacher, the new classroom, the student's new desk, and a picture of the student's new locker, for example. Reading these stories together recurrently helps ease to the transition between classes and teachers, while at the same time demonstrates and teaches proper behaviours expected of the student. Students with ASD may demonstrate challenging behaviour such as aggression and off-task activity during transitions (Lequia, Wilkerson, Kim, & Lyons, 2015); therefore, social stories are an important tool to ease the transition. Social stories should facilitate these conversions and help the student to understand new situations.

Visual aids such as daily schedules and social stories are a key component to an accessible classroom for a student with autism. These aids should be tailored for each child by varying their complexity. Given that children with ASD can struggle with abstract thinking, visual aids can be used in the classroom to reduce dependence on others by giving students with ASD direction about what is expected, which will also reduce anxiety (Heflin & Alaimo, 2007). By including visual aids in the student's environment, educators can attempt to decrease anxiety that may cause a barrier to learning.

Multimodal Interventions for Speech

Multimodal interventions are useful strategies for expanding student's vocabulary by using two or more different interventions at the same time. Children with ASD have a broad range of communication abilities: some students have an impressive vocabulary, while others can have a lack of spoken language. Expanding communication strategies for children with ASD can be very challenging for educators, but must be a priority to ensure that these students express wants and needs, socialize and interact with those around them, and express their emotions (GNL, 2003). Multimodal approaches that have been used in previous studies have had advantages over solitary interventions (Brady et al., 2015). One approach is Augmentative and Alternative Communication (AAC) in conjunction with speech. AAC can be applied to enhance communication by students with ASD. This approach uses graphics, flash cards, and voice recordings to improve communication skills (Heflin & Alaimo, 2007). The educator and Speech Language Pathologist (SLP) can collaborate to determine the specific communication need of the student and develop a program collectively. AAC is used when a student has limited expressive vocabulary. Some strategies under the branch of AAC to increase communication are sign language, communication boards, and computer devices (Maurice, Green, & Luce, 1996).

One type of AAC used to enhance student communication skills is sign language. Total communication, involving sign combined with speech, must be used in school and at home to be successful (Quill, 2000). The goal is for the student to communicate successfully with others by using this visual reference. I had a student in my school who used sign as a way of communicating. The educator working with this child used speech along with sign to enhance the child's expressive language. This approach proved to be successful for this student because she was nonverbal but could communicate requests by using this strategy. The end goal would be to fade away from the use of sign, if possible, and to emerge into spoken language because it will allow the child interact and communicate to a broader audience. Sign encourages students to communicate through a visual representation; it is an important strategy to use with children who have difficulties with communicating.

Another method of AAC commonly used in schools and at home is communication boards. Communication boards can contain pictures, words, or graphs and must be focused on a certain topic. The goal of a communication board is to increase vocabulary, reduce frustration, and provide a method for the child to communicate. Communication boards can vary, depending on the topic at hand. A communication board can be developed for choosing an activity to play at recess time, for example. The student can point to the preferred activity and a particular child in the classroom with whom he/she would like to play. Communication boards can also be used to communicate how the child is feeling, because students with ASD struggle with expressing their feelings and emotions ("Ten Things," 2005). If the child is angry or upset, he/she can utilize the board to point to a picture conjointly with the reason for feeling that way. Some visuals on the board could include a picture to communicate if it is too loud, if the student needs a break, or if he/she needs assistance with something. Communication boards are a useful communication tool when the student struggles with expressive language.

Finally, using a computer device as an AAC method is another valuable resource. Software programs and speech-generating devices can be incorporated into the classroom to enhance speech and to encourage communication. The many advantages of utilizing a computer device or a voice aid for students with limited expressive vocabulary include increasing their verbal speech, developing their literacy, and giving a nonverbal student a voice (Quill, 2000). Many different devices are available to students, and they are constantly changing. Educators and speech pathologists need to consult with personnel who specialize in the equipment, in order to determine which device is most suited for the student, depending on the severity of the speech impairment. Another important aspect to keep in mind when introducing students to computer devices is to illustrate how to use them by modelling correct behaviour.

Communicating with others and developing social connections are sometimes taken for granted. Children typically develop social connections and relationships very early. Typically, children with ASD do not develop social and joint referencing skills on their own, but must be directly taught. There are differences in the ways people move through the world, the ways people access print, and the ways people process new information (Ashby, 2012). Therefore, using sign language, communication boards, and computer devices as multimodal strategies can be beneficial to the success of all students.

Strategies for Challenging Behaviour

Challenging behaviours are something that educators inevitably face throughout their career. When a child with ASD demonstrates challenging behaviours, it is important to understand the root of the problem and devise strategies for supporting students. It may not be possible to eliminate the behaviour, but guiding the student with strategies to deal with it will limit the disruptions for the student's learning as well as his/her classmates. Certain steps are necessary when developing an intervention plan for a behaviour. First, the problem behaviour needs to be identified and the contributing factors to the behaviour must be determined. An alternate behaviour and strategies for changing the behaviour need to be taught, and then a

behaviour intervention plan can be developed (GNL, 2003). Some programs that have been developed to support interventions are Madrigal and Winner's Superflex program (2012), Buron & Curtis's (2003) 5-point scale, and positive programming strategies. These programs and strategies help to devise alternative behaviours and promote classroom management.

Madrigal and Winner (2012) developed a five-step superflex program to strengthen students' social processing. This plan teaches students 5 tools on how to strengthen social understanding. The five tools are: Decider: the ability to stop, decide, and describe which unthinkable is trying to overpower their thinking. Social Detective: the ability to stop and observe the situation and the people in it. Brakester: the power to stop and think to discover why people are expected to act in certain ways. Flex DoBODY: the power to use flexible thinking to determine strategies to use to do what is expected. Cranium Coach: using self-talk to motivate him/herself to keep working (Winner, 2007). The author chose this program because she has seen it used successfully in her school. Students are generally engaged in this program since the characters mimic comic book characters. The program is effective in demonstrating acceptable behaviours in many social interactions.

Commonly, if a child can comprehend and produce language, then he/she is able to communicate effectively. Many students with ASD struggle with the cognitive process of language and therefore may not have the ability to use language in a meaningful way (Winner, 2007). Students with ASD tend to face challenges when processing social cues and developing relationships, and tend to react in a way that can produce a challenging behaviour. Madrigal and Winner's strategies encourage students to learn more about themselves and their characteristics, and ways to deal with their behaviours and emotions. They supply teachers with tools to help their students to overcome their difficult social behaviours, and provide examples of alternative responses. By using this program, students learn to think about what behaviour they are portraying, determine how it is affecting others around them, stop and think about an alternative behaviour, make a good choice, and ultimately acknowledge these steps on their own by practising self-control (Madrigal et al., 2012). This superflex program encourages students to self-monitor their behaviour and choose alternative responses.

Conventional classroom management strategies are not always pertinent to students with ASD; therefore, different strategies, such as the 5-point scale, need to be applied for their socialization and communication challenges. The 5-point scale is used with students who have ASD, because it is a visual prompt that shows clear and concrete levels of emotion. The students can use this scale to check in with their classroom or support teacher about how they feel during a certain situation. If they rate themselves at a four or a five, then they can be removed from the situation before a challenging behaviour occurs. Another way to utilize the scale is to have the teacher point to a number, four or five for example, when the teacher witnesses a challenging behaviour. The teacher would then show the student where he/she needs to be by pointing to a one or a two in order to control the behaviour. This scale acts as a reminder of appropriate behaviours for different circumstances. The 5-point scale can be used for any behaviour as long as it is properly introduced to the student, in order to ensure that the child understands how to use it (Buron & Curtis, 2003). This 5-point scale has been found to be successful when conventional behaviour interventions have failed.

When students manifest a behaviour, it is in response to something that is bothering them or they are seeking attention; this is when positive programming strategies need to be implemented. Positive behaviour support (PBS) refers to positive behaviour interventions used to achieve socially important behaviour change (Sugai et al., 2000). Sugai et al. suggested that if we can identify the conditions under which problem behaviour is likely to occur (triggering antecedents and maintaining consequences), we can arrange environments in ways that reduce occurrences of problem behaviour and teach and encourage positive behaviours that can replace problem behaviours (Sugai et al., 2000). Students with ASD often do not have the communication skills to express how they feel; therefore, they demonstrate a problem behaviour. To deal with these behaviours, educators must define the problem behaviour by

observing when and where it happens, how often it happens and for how long, who is present when it happens, and how the student reacts to what is occurring (Heflin & Alaimo, 2007). Once this information is collected, an intervention can be employed. Strategies that can be implemented are teaching the student an alternative behaviour to use instead of the problem behaviour, changing the environment by removing distracting stimuli, or having a designated calming place within the classroom. Educators, along with a support team, are responsible for using these positive programming strategies and reshaping undesired behaviours, so that all students can have success in the classroom and have strategies to respond to their emotions. I have used many different strategies to promote desirable behaviours. One of these strategies was implementing a calming corner in my classroom. The calming corner included a tent with soft cushions inside where the child could remove him/herself from the triggers and have a chance to be alone.

Teachers are guaranteed to experience problem behaviours throughout their teaching careers and must learn and use strategies to deal with these behaviours. To create and maintain positive behaviour and classroom management, teachers can implement strategies and programs such as the Superflex program, the 5-point scale, and different positive programming strategies. By using these strategies, students learn to overcome their problem behaviours and find alternative responses while practising self-control. Teachers are responsible for ensuring that their students with ASD are aware of the appropriate responses for dealing with their behaviours and have the tools to cope in an effective way (Schulze, 2016).

Conclusion

With the steady increase of students diagnosed with ASD, it is pertinent that educators and support teams know how to support these students, in order to ensure that they have the best education possible. Educators need to employ effective practices and strategies such as visual aids, multimodal interventions, and strategies for challenging behaviour so that the students receive the education that is most suited for them. Not all students learn in the same way, therefore we need to have a plurality of perspectives and ways of being by using a variety of approaches to instruction, encouraging forms of assessment, providing more choice in activities and ensure that all ways of being and performing in the classroom are valued and supported (Ashby, 2011). Collaboration between the classroom teacher and support teachers is imperative to guarantee that the program developed for each student reflects his/her needs. Providing students with visual schedules, multimodal interventions to increase communication and speech, and ways to deal with their emotions and behaviours is vital to their development and should remain a focus for inclusive classrooms. By educating students with proper self-regulating and coping approaches, classroom tools, and classroom strategies we are giving them a fair chance at succeeding in school.

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