Implementing Structure through the School Day for a Child/Student with Autism Spectrum Disorder

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Abstract: Students with Autism Spectrum Disorder (ASD) learn best when they are provided with structure. A structured teaching approach provides the tools students need to fill the deficits they have in organising, focusing, and planning, collectively known as executive functioning skills. Providing a structured learning environment will enable the students to understand what is expected of them and what is happening during the day. This paper will explore the core deficits of Autism and how students can be supported to reduce their anxiety, understand, and navigate the world around them and achieve their full potential, by providing them with a structured learning environment, throughout their day. It will highlight the importance of visual support to aid understanding and communication alongside Work Systems and Schedules to provide clear expectations throughout the child's day. As such, this paper will explain how the structured teaching approach can be implemented in all school environments for students with ASD.

Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder beginning at birth or shortly after. Characteristics of ASD may appear in different ways in each child. Symptoms involve delay and differences in social and communication development giving children with ASD difficulties to communicate their needs and wants (Widiger, et al. 1997). They also demonstrate difficulties in understanding the social concepts needed when participating in a community such as waiting for their turn, finishing highly motivating activities, accepting 'No' for things they could not have, or the way things are happening around their environment. Children with ASD also display a variety of restricted interests and repetitive behaviours that need to be monitored and used in a positive way in order to support the children to function in the community, in a socially accepted way, while accepting and respecting their dignity. Autism Spectrum Disorders are lifelong developmental disabilities characterised by marked difficulties in social interaction, impaired communication, restricted and repetitive interests and behaviours and sensory sensitivities. With the implementation of resources and strategies for a structured learning environment, children with ASD can be supported to overcome some difficulties, which they face in all these areas, and develop the appropriate skill when participating in activities, or learning how to react and function in appropriate situations (Brown, 2017).

Therefore, the objectives of this article is to explore and discuss how educators can develop skills to best implement strategies to create a supportive learning environment for students with ASD, so that they can be able to participate in planned activities; how to use visuals supports and schedules, promoting clear expectations for the students; how to provide a structured environment for the students to fill the deficits they have in organisation and planning, known as Executive Functioning skills; how to reduce behaviour patterns by providing clear expectations; and how to promote success and independence (Brown, 2017).

Literature Review

Core Impairments of Autism

Students with ASD have an impairment in social interaction. They may have a limited understanding of non-verbal communication such as eye gaze, facial expression, and gestures. All the above create difficulties for them to understand important ways that people with typical development use in their everyday life, supporting them to communicate, interact socially and form friendships or professional relationships. (Hodgon, 2007). Often children with ASD would like to be by themselves or play alone. It can be difficult for them to form friendships and seek to share enjoyment, interests, and activities with other people. In situations where you have taught a

student for one year and you see them the following year, or in a few years' time, and they remember your name and say hello, or they may mention something that relates to an activity you did with them, then it means that you have done something significant that affected their life. This feeling is very rewarding for an educator. Another significant impairment they may possess is difficulty with social and emotional responsiveness. This can create issues in understanding what they need to do and how to respond in different situations. They have difficulty knowing and understanding how to react in different situations, avoiding making others unhappy or upset with what they may say or do (Hodgon, 2007).

There is no set description of ASD characteristics that can apply to every individual. It is commonly said that people with ASD are the ones who do not like to be touched or to hug you. This is not the whole situation. Everyone is an individual, and people with ASD should be embraced as they are.

The *DSM-IV-TR* describes children with Asperger syndrome as having severe impairment in social interaction, the development of restricted, repetitive behaviours, difficulties in imagination and flexibility of thought, as well as social communication and language (see Figure 1) (Widiger, et al. 1997).

Figure 1: Core Impairments in Autism
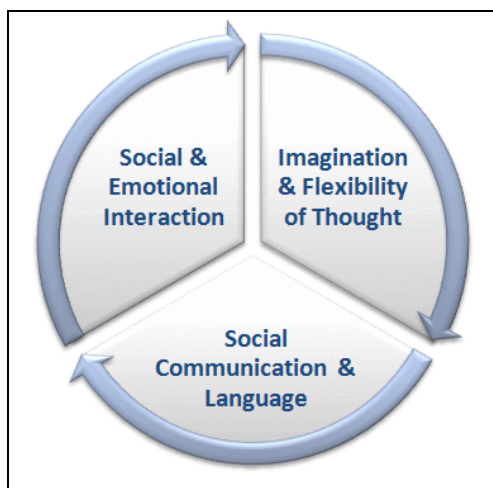
Source: Widiger, T. A., Frances, A. J., Pincus, H. A. E., & Ross, R. E. (1997). *DSM-IV sourcebook, Vol. 3*. American Psychiatric Publishing, Inc.

Students with ASD may have an impairment in their Expressive communication, including their verbal and written language. They usually display characteristics such as echolalia, repetitive use of words and phrases they may hear from other people, or from songs, or video games or favourite television programmes. Educators must be careful that the language that students learn or copy,

or language they teach the students, is appropriate, meaningful, and functional. Students may have conversational difficulties, unusual pitch or tone, or an unusual volume of voice. In receptive communication, students may have problems pertinent to the understanding of the language they hear or an instruction they receive. They could be able to read a text very well but not be able to comprehend its meaning of it. Also, they may have poor conversation skills, take things literally, difficulty understanding metaphors, sarcasm, or jokes. These deficiencies and impairments should not be taken for granted. ASD people should not be seen as intransigent. With appropriate intervention and teaching, they can learn how to participate and communicate, in relation to these social concepts. If you say for example, "I will be with you in a minute", and you take longer than that, they may get upset with you and have difficulties waiting longer. Usually, they prefer talking on topics that they are interested in and carry the conversation on their own terms. Pragmatics (social use of language) is also an area of difficulty for them in concepts such as poor eye contact, use of the facial expression, gestures and body posture and inability to use language functionally (Brown, 2017).

Students with ASD may display restricted and repetitive interests, activities, and behaviours. They can be flapping their hands, lining up cars, and jumping up and down when they are anxious or excited. They have an interest in some items such as trains or picking up leaves or branches from trees. Educators must be careful not to try to get rid of these behaviours but to use them in moderation, in an appropriate way that does not affect student learning and level of functioning, as well as making them look socially acceptable in the community. For example, when a child has a high interest in cars, at the age of 5-7 he may carry or line up cars, but at the age of 15, he may look at magazines with cars or recognise and name car brands he sees out in the community. A good way to use repetitive interests is to use them as a rewarding motivator when asking students to complete non-preferred activities. For example, the educator may say to them "first writing, then cars", while using visuals simultaneously (Baron & Wolfberg, 2014).

Deficits in Executive Functioning

The crucial importance of understanding the deficits in the Executive Functioning of students with ASD is highlighted by Dr Thomas E. Brown (2017). They have a lot of deficits in Executive Functioning such as shifting attention from one thing to another, impulsive control, difficulties shifting their attention to a series of things, problems initiating activity or a conversation with others, or self-monitoring on how to control themselves and how to act out appropriately in different situations (Figure 2). They have many difficulties in how to behave appropriately in different situations and perceive the emotions of other people around them such as when someone is sick or sad (Brown, 2017).

Figure 2: Deficits in Executive Functioning of Students with Autism Spectrum Disorder

Source: (Brown, 2017).

Central Coherence Deficit

Central coherence is the ability to draw information together to gain meaning within a context. Students with ASD have weak central coherence. They fail to grasp the whole picture. They concentrate on details and if the details change so does the whole picture for them. They have difficulty ascertaining which details are important within a picture and they have difficulty in generalising and sequencing. They do not see the relationship between information, and they fail to understand the meaning between events and connect them to make consistent patterns. They also find it very difficult to construct high-level meaning related to occurring events (Booth & Happe, 2010).

People with ASD have a weak centre of coherence. It is difficult for them to understand the big picture, or a situation and they usually look at the details rather than the big picture/meaning behind an event or situation they are in, such as a birthday party or Christmas and other family celebrations.

Other areas they face difficulties in are generalising the skills they have learnt in one situation and applying those skills at other times. Sequencing events and activities they need to do can be also challenging for them and they have difficulties understanding the relationship between events.

That is why giving them one or a few instructions at a time is often more successful for them. Also, providing visuals with clear expectations of what they need to do step-by-step is another successful strategy. Perceiving the emotions of others can be challenging for them too (Booth & Happe, 2010).

Theory of Mind Deficit and Mind Blindness

Other impairments that students with ASD may have are in Sensory Processing and intellectual capacity. This theory refers to the ability to infer the full range of mental states, beliefs, desires, intentions, imaginations, and emotions, that cause action.

ASD students may have difficulties reading or processing the emotions of others. They have difficulties understanding body language and are unable to appreciate perspectives of others. Besides having difficulties appreciating feelings, they also have difficulty monitoring their own feelings.

Sometimes they can laugh in a non-appropriate situation, or they may scream if there is some noise when they are in an environment where they need quiet (Baron-Cohen, 1995).

Sensory Processing

Children with ASD have many great difficulties in sensory processing. They have difficulty connecting with their body, the movement of the body, planning, motor planning, difficulties with fine motor activities, and difficulties with coordination of things they need to do, as shown in Figure 3.

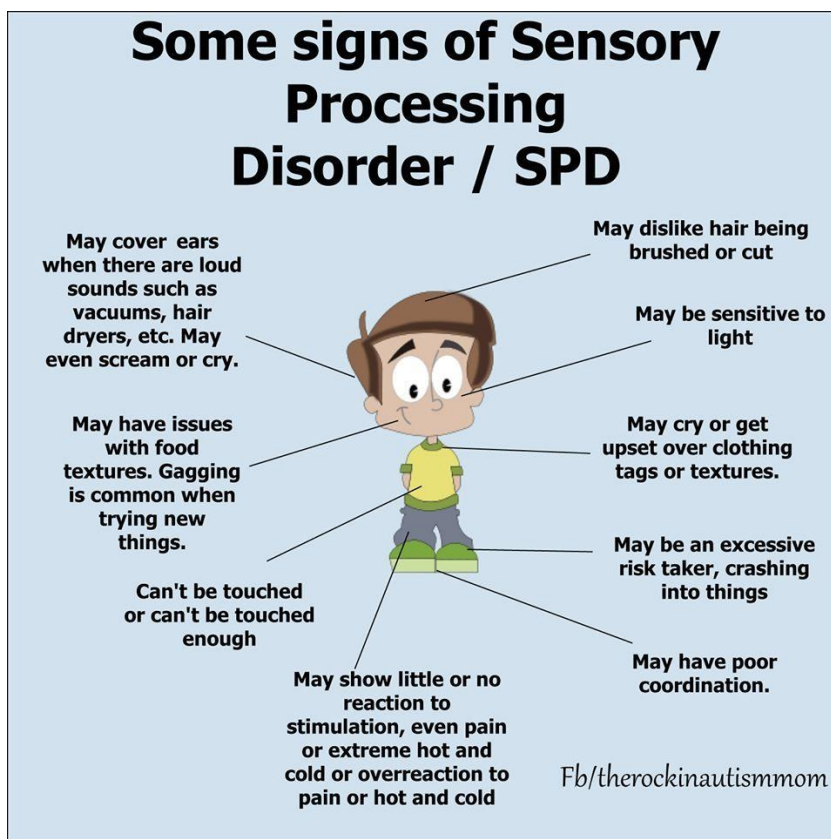Figure 3: Characteristics of Sensory Processing
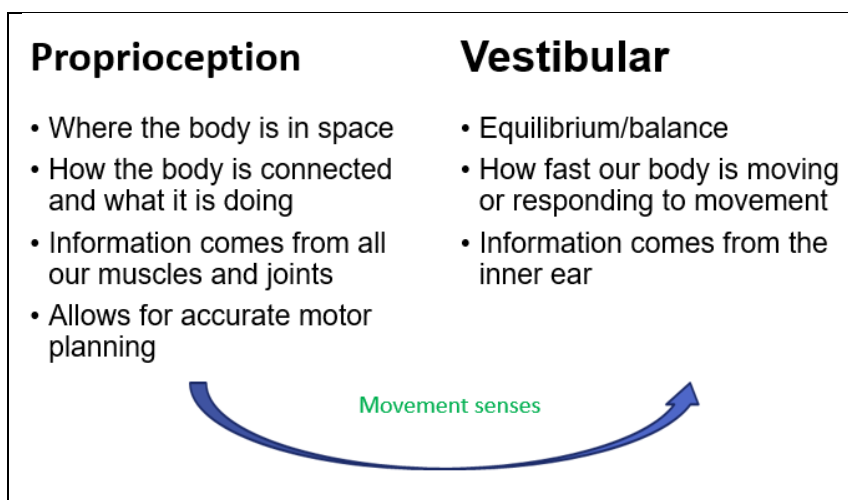
Source: (Hatch-Rasmussen, 1995).

Sensory processing is very crucial for ASD people. Educators need to really understand how ASD children feel; they need to assess them to find out where they are more sensory-oriented and what difficulties they have with specific activities that require sensory processing. Children with ASD need to be supported to cope when dealing with these issues.

However, extra care should be taken on how to interpret sensory difficulties. For example, the children may cover their ears, but that does not automatically mean that they are sensitive to noise. There could be another factor that is stressing them. They may dislike someone touching them, or having their hair cut. They might cry or be upset with the texture of their clothing, or because they don't like to be touched, or they may have different reactions towards cold weather and different weather conditions. As shown in Figure 4, there are many different signs of Sensory Processing Disorder, and their consideration is of utmost importance when planning for ASD students. (Hatch-Rasmussen, 1995).

Figure 4: Sensory Processing Disorder

Some signs of Sensory Processing Disorder / SPD

May cover ears when there are loud sounds such as vacuums, hair dryers, etc. May even scream or cry.

May have issues with food textures. Gagging is common when trying new things.

Can't be touched or can't be touched enough

May show little or no reaction to stimulation, even pain or extreme hot and cold or overreaction to pain or hot and cold

May dislike hair being brushed or cut

May be sensitive to light

May cry or get upset over clothing tags or textures.

May be an excessive risk taker, crashing into things

May have poor coordination.

Fb/therockinautismmom

Source: Auditory Processing Disorder (2022)

Discussion

This is an example of a specific student in a School for Autism. The students will come to school every day wearing the same T-shirt and same shorts. His mum said that she had to wash the same

T-shirt and shorts every day after school, and he was waiting naked with just a nappy until his clothes were dry to put them back on. This meant that it became a long process for the teachers to change this pattern. Also, the teachers had to understand how difficult it was for his mum to be able to feel certain and safe that it was time for her to change this set of clothes. She did not want him to be unhappy, and she was nervous about what could happen with him. The mum said that she was not able to cope if he got upset with her and cried every day wanting to wear the same clothes daily. Therefore, the teachers had to understand her, as well as the student. Henceforth, the teachers started with just one new T-shirt and shorts, then placed his favourite T-shirt and shorts in a 'finish' box at school. It was located on a high shelf that he could not reach but he could see it. The student could see that the clothes he favoured were at school, in the 'finish box', and at the end of the day, he could wear them and go home. That made him feel calm and reassured that while they dressed him in different clothes at school, at the end of the day he would wear his favoured ones. Gradually, the teachers changed him to different clothing items, and finally, they put him in a school uniform. At the end of the day, he would take off the uniform and go home in his favourite clothes, leaving the uniform at school, and then putting it on the next day when he would arrive. It was a long process, but the teachers managed to succeed in changing this pattern of behaviour. It took a few months to achieve that change because the teachers wanted to understand how he was feeling but also to understand his expectations and made sure that he was happy and safe. This strategy was implemented to support the student to cope and gradually tolerate wearing different clothes. It was also to reduce the pressure and anxiety of his mother watching him facing difficulties to adjust to this change (Baskerville, 2014).

Structured Environments and Students with ASD

Students with ASD have difficulty gaining meaning from structured environments around them (Mesibov, Shea, Shopler, 2005). Distractibility is a challenge for them as they may be distracted by a variety of sensations they may be experiencing in a structured environment (i.e. sounds, sights, smells). These sensations hinder their ability to prioritise what is important in the structured environment. They get distracted very easily; they are poor planners and poor organisers; their attention span is very short, and they have problems remembering what happened in the past and reflecting on what will happen in the future. They have difficulties with routines and understanding what will happen next. They are visual learners and they have limited working memory, but most importantly, they are very prompt-dependent. (Hume, 2011)

Many children with ASD have restrictive and repetitive behaviours. They often like to line up things, play with the same item repeatedly, build-up blocks the same way all the time, and they find it extremely difficult if someone tries to intervene in their world and change what they are

doing. Therefore, in order to bring change to these patterns, it must be done in a very gentle way, and in a planned structured way, so that the teaching strategies do not cause them to become anxious and upset. Change must be taught gently and gradually.

It is of utmost importance for the educator to understand that ASD students have great difficulty with introducing change. They also have poor concentration and are impaired in social understanding. They lack understanding in certain social situations, lack appropriate social skills, and have difficulties with their eye gaze (Quil, 2000).

What does all this mean?

What it all means is that educators can only change their behaviour. That means educators need to change the way they approach students with ASD and help students to put structure in their lives. Educators need to understand the ASD students first, in order to help them change and improve their life (Baron & Wolfberg, 2014).

Structured teaching

It is of the highest importance to structure their environment, and their whole world, when teaching children with ASD. By structuring their environment, the educator creates and promotes meaning and predictability in their world. Therefore, educators need to present information visually, they need to organise their environment, and they need to clarify the expectations of the task that they give the students to do (Baron & Wolfberg, 2014).

Components of Structured Teaching

It is very important to structure the physical environment and to understand the learning styles and behaviours of every individual before many changes can be implemented to the environment.

There must be structure in the teaching methods and incorporate visual schedules; it is important to implement a structured curriculum or a Work System and design the classroom based not only on the curriculum but also on the learning needs of the students. The design must include a clearly organised environment within the classroom considering the students' needs and boundaries affecting their learning (Baron & Wolfberg, 2014).

The physical environment in the school setting

The physical environment for students with ASD is important because it helps them to understand the expectations of the activities they need to do. The structured physical environment helps to increase their independent skills. Therefore, it is extremely important to label classroom areas, like

independent work, group work, one-to-one work, play and relaxation areas, wait for area. This will help students to transition to areas, hopefully, later, as independently as possible.

Figure 5: Classroom structured environments

Figure 5 shows photos of a clearly structured environment, workstations and relaxation area with toys and books. The use of different colour floors is important as it signifies that each area is for different activities. Because classrooms are not very big areas, they are divided into sections, like an Art area in the middle, with different coloured carpets, and plastic tablecloths on the tables, to indicate that it is an area for doing Art (Hume, 2011).

Considerations when organising a structured classroom

Furniture to be used within the classroom to set up clear and defined learning spaces for students (e.g. independent work area, group work area, eating area, reading area etc.) Students to be seated strategically, away from windows if they are easily distracted, facing a wall if this helps them to focus when completing work tasks.

Physical structures are to be created to provide organization for the students. This also helps students and staff understand what activities are occurring in each area of the classroom at any given time.

A highly structured physical environment can reduce student distractibility – whereas a disorganised classroom can be highly distractible for the students. It is important to keep classrooms free from unnecessary clutter, items etc. Reduce the number of visual stimuli. Clearly label areas for students and label the areas where belongings are to be kept. It is very important to avoid clutter in the ASD classroom.

A structured teaching environment is created by providing visuals and schedules for each student according to the level of understanding of each individual student. There could be six different students in a class, who may need six different visuals to understand and perform throughout the day, and it is important that all of them are accommodated with the appropriate visuals (Hume, 2011).

For example, photos of items should be used to indicate where those items belong in the classroom. This will assist children with Autism locate items. Items should be kept in clear familiar spaces as this will support students with ASD to have greater independence in locating items they need for a task.

Another way of structuring the environment is to have labels on the tubs where materials are kept, so students know where to go and get the activities they need. Also, labels should be placed on the equipment and utensils in the classroom like drawers, knives, forks, books, plates, and coloured pens, so that student independence is promoted. Also, it is very important to prepare the materials the educator will need for the day's lesson and have them out of the drawers. The educator must not be looking for the required items during the classroom lesson, because that does not contribute to providing a structured environment.

For example, for planning a play activity there should be on the bench or on the shelves, only the number of toys that will be needed for that activity so there is no clutter and no confusion. It is then easy for the students to find something to play with and at the same time not become overwhelmed by the number of toys that are available. It is also important for the students to learn independence, so when they are given the instruction to pack away there is only a limited number of toys that they will have to pack away (Hume, 2011).

Visual supports in the school setting

Students with ASD need visual support to be able to cope and function. It is common sense that everyone needs visual support to be able to function and cope in their life, for example, a diary, a watch, post-it notes, reminder notes, etc.

Figure 6: Visual suppports: People with Autism are visual learners and do not process a lot of information well
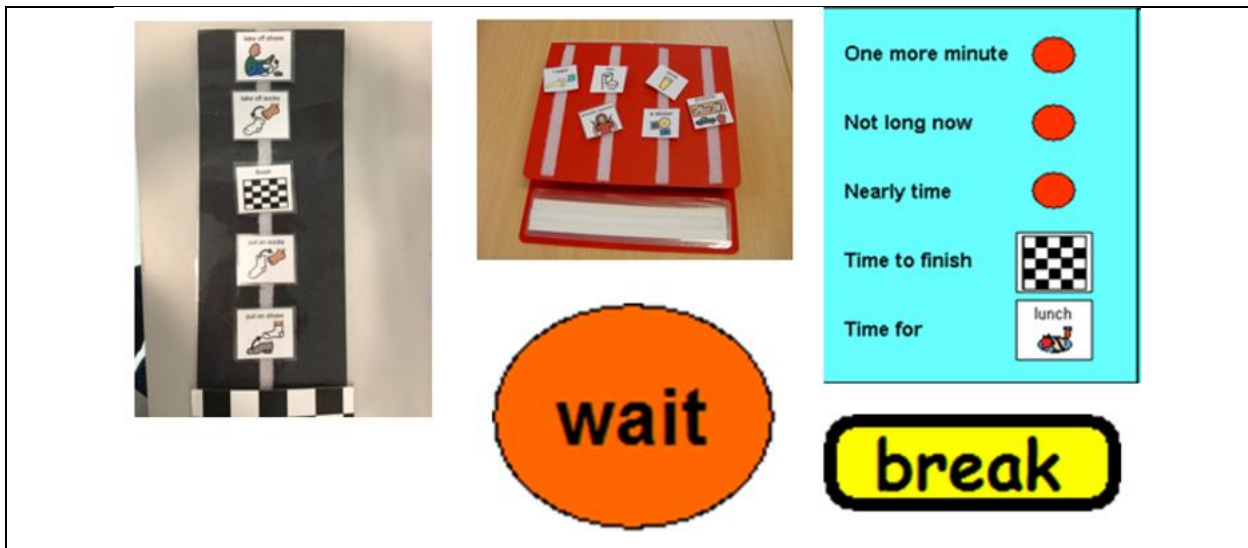

Figure 6 shows a variety of visuals and scripts used to support students' understanding of expectations, such as, using schedules to show them activities they need to complete in order, placing visuals on the front page of a Picture Exchange Communication System (PECS) to support them making choices, before learning to scan pages in their folder. The use of a script (One More minute) supports them to understand and prepare them when they are finishing an activity. It allows them time to process how long they have until finishing. It helps to reduce behaviours when students are using highly preferred activities. The 'Wait' visual is used to show a student that they need to wait for an activity/toy until they can have it. Occasionally, dots are used on this symbol and removed gradually by an adult, controlling the time they need to wait for.

The 'break' card is used to teach the students to request a break from an activity they are doing or a session they are participating in. The time of having a break is controlled by an adult. Students may also be able to request a break when they find the activity they are participating in, is highly stressful. The adult needs to control how many breaks a student can have so it doesn't become a way of avoidance of participation in activities. For example, a student is allowed to have 3 breaks throughout the day (in tasks they are doing).

The role of visual supports is extremely important because the more the visual supports increase the understanding of a child, and what is happening around their world, then it is more likely that they will have fewer challenging behaviours (Hodgdon, 2007).

Visual supports come in different formats. It can be a schedule using visuals; it can be the PECS (Picture Exchange Communication System) folder or a communication systems folder. Important

to note that a schedule is a better way of controlling the timing of the activity, instead of having a timer, because students can visually see the order, and what is coming next. This also avoids students presenting behaviours if the activity takes too long.

Visual supports can be offered by teachers, peers, or stand-alone resources, such as written words, pictures, sign language, gestures, objects in the environment, as well as environmental arrangements. These visual supports help the child to understand the expectations and to follow them thus reducing behaviours (Hume, 2011).

Changing and modifying visual supports

The educator should pay special focus on making the visual supports unobtrusive and age-appropriate. Visual supports must never be reduced to a minimum and eliminated. The educator can change and modify them as the child grows up so that the educator continues to meet the needs of the student, with the aim of promoting independence and success in mind (Koegel, 2000).

It is also very important to know when it is time to change or modify the visual support and, it is important to know that it does not mean that the older a child gets the less visual support, they will need. Getting older does not mean they need fewer visual supports. The visual support for older students can be there but it can be presented in a different format. Strategic and methodical use of visual supports focuses on promoting understanding, meaning, and independence, for example, aiming to do an independent activity by following a visual schedule (Hume, 2011).

Visual Schedules

Visual schedules improve receptive language and assist in providing meaning to students (Hume, 2011). They help the classroom and the student to become more organised and help the child to perform more consistently. Visual schedules give information in a sequential and structured form, they clarify verbal information, support transitions between activities, reduce behaviour problems and redirect students' behaviour, because the child knows from the visuals where they are going and what they are doing next, and they do not stress about the next step. Also, the visual schedule reassures the children because they know what is happening, and where they are going. Also, the visual schedules show the specific activities that will occur, and that they will not change. They are still there, and they, therefore, know what the next step by the teacher is, and the teacher will follow it and not divert and do something else. That is why it is very important that when the teachers set up a visual schedule, they must stick to the schedule and not do something else. Except if there is an emergency, and even with that, the teacher must use a visual schedule to show the students that there is something else happening, for example, a different event or a place is not

available, such as a playground on a rainy day. Educators must be very careful how they introduce the change and how they teach the students to accept a change in the routine.

It is very important that the objects included in a visual schedule be related to the students' daily routine, be meaningful, and at the students' level of understanding.

For example, the educator may use real objects representing activities such as a wooden spoon indicating that it is time for cooking. The teacher can take photos of true objects and place them on the visual schedule board, such as a photo of their drink bottle that looks exactly the same size. Gradually, introduce smaller photos and symbols of those objects so that the students will generalise their understanding and increase their generalisation skills.

Usually, sessional schedules should be presented for lower-level students because providing them with a whole day schedule will become overwhelming and not at their level to understand.

Every student will have an individual visual schedule of what they need to do during each session and for a particular amount of time. These visual schedules are made according to the level of each student. Some schedules are presented in a written form and the students need to tick each activity after completion (Hume, 2011).

Figure 7: Visual schedules for students with Autism

Schedules using real object   Schedule using large outline photos

Schedules using symbols

Figure 7, is a photo of different Classroom Schedules, showing the students the activities for a session. Visuals used on these schedules accommodate the needs of individual students, consisting of real items that relate to each activity, such as a nappy of the child who is wearing one during the day, large cut-out photos of the same size as real objects and visuals representing each activity. A 'finish' box, or pocket, is used at the end to guide the student on where to place each visual or item after completion.

The four basic but essential questions that need answering for Visual Schedules

There are four essential questions we should consider when preparing visual schedules: What am I doing? How long am I doing it for? What will I be doing next? When will I get to do the things that I really want to do?

If the educator can have a clear understanding and clear answer for each of these four questions, then the educator will be able to develop the same understanding to the students; eventually, the students will be able to answer these questions, and that means success for the students. The children will be able to feel successful and this will increase their independence.

It is very important to place a motivator at the end of the visual schedule because it helps the students to know that they are getting a reward or something that they enjoy doing after attending a session; this will help them to increase their focus and attention on an activity. However, a very high motivator does not have to always be used, because it may increase the students' anxiety and then they lose focus on the activities they need to participate in (Hodgdon, 2007).

Work Systems in the School Setting

Work Systems can be like mini schedules; they can be used in a variety of settings, like home, school, worksite, and with all ages of students, preschool through to adulthood. The number of expectations can be increased by raising the amount of work, the number of tasks, or getting the students to travel in order to locate their tasks and materials. For example, a Work System shows them exactly the activities they need to participate in during their work session, with a 'finish' pocket on the bottom where they need to place each activity in, after completing it.

For the Work Systems, they need to be helped to understand and answer the four questions: What work do I have to do? How much work do I have to do? When do I finish? What happens next? Work Systems should be presented in a form of written works, pictures, and work activities.

For example, on their Schedule, they could see four visuals of the activities they need to do with a 'finish' pocket on the bottom. This means that there are four steps and every time they complete one and put a visual in the 'finish' pocket, there is less work to do. Then it shows what will happen next. It can be a motivator activity or an item represented in a visual or photo at the end of their Schedule. This will promote and encourage their participation in the activities, knowing that they are rewarded after completing all the tasks. Depending on each student's ability and time they remain focused, the educator may use rewards in-between single activities or after a few activities.

It is important to show them what they are doing after. In a Work System, it is also very important that their materials are organised, they are all there for them, and there are the clear start and finish activities, so they can complete them.

Depending on the level of functioning of the student, materials needed to complete activities can be given to them, placed in view or in clear labelled areas, such as shelves or cupboards. (Hume, 2011)
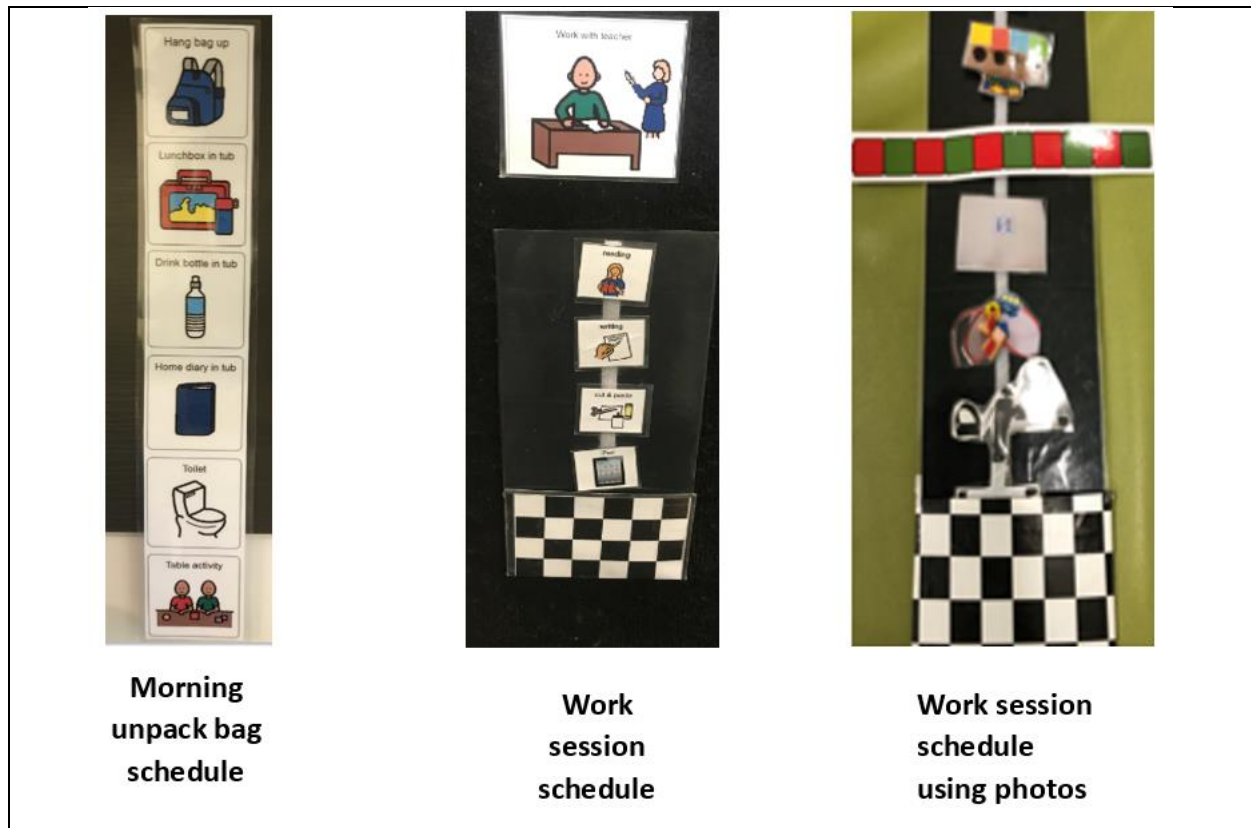
Figure 8a: Examples of Work Systems

Figure 8a shows Work System Schedules. They show each student what activities they need to complete during their work session. These are individualised for each student's level of ability and understanding.

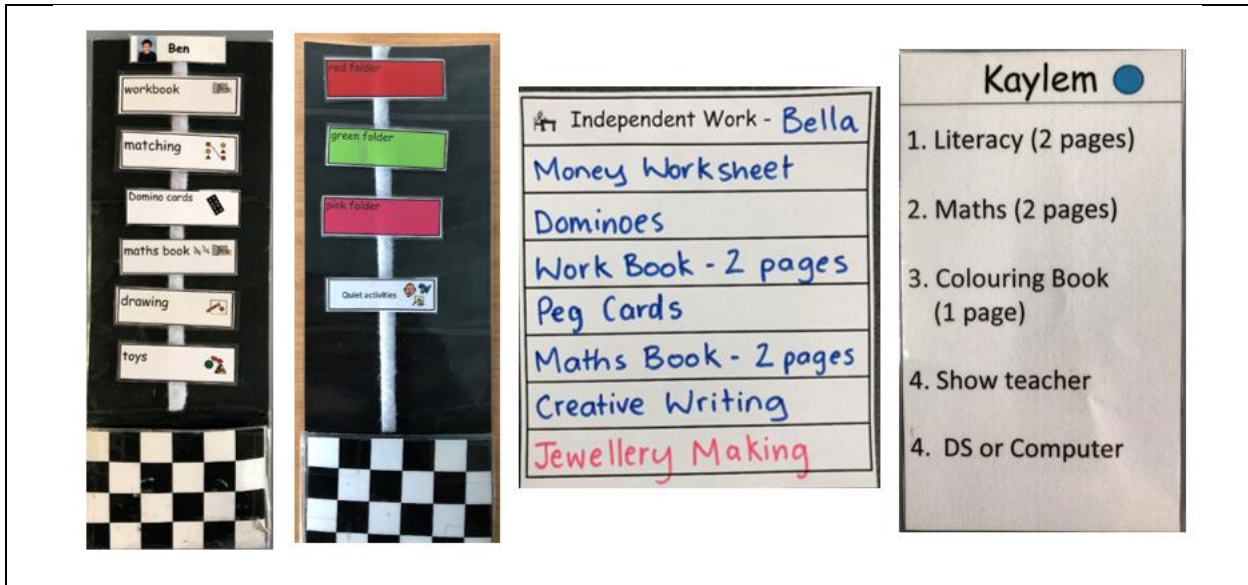Figure 8b: Examples of Work Systems/Mini-Schedules

Figure 8b shows Work System schedules for students who are able to read. The activities included in these schedules are individualised to the student's ability to promote further development of students' skills, promoting independence and success.

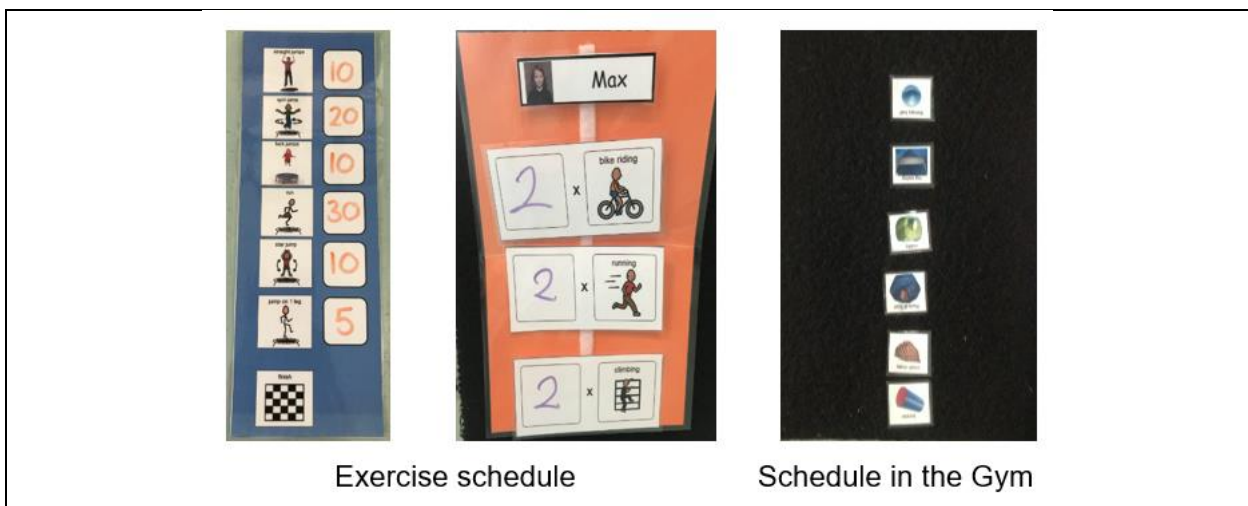Figure 9: Examples of Work Systems/Mini-Schedules

Exercise schedule   Schedule in the Gym

Figure 9 shows schedules of activities that students need to complete during an exercise session.

Visual Structures: These provide students with a strategy for approaching a task and using materials. It answers the question: How do I complete this task or activity?

Visual structures provide visual organisation, visual instructions, and visual clarity.

Figure 10: Visual Structures

Figure 10 shows samples of activities that students can complete with a clear start and finish. Upon getting the activity, students should be working from left to right, working in the middle of the table, and putting it in the 'Finish' box located on the right side.

Visual structures provide students with a strategy for approaching a task and for using the materials. They answer the question: How do I complete this task or activity? Visual tasks provide visual organisation, visual instructions, and visual clarity. The educator must take care that the materials selected are specific and exactly what is needed for the activity to be completed and for the students to understand what they need to do exactly (Hume, 2011).

Figure 11: Organisation of Visual Structures

Figure 11 shows a variety of tasks with clear expectations of what the student needs to do for each task. Each task has the correct number of resources required to be completed.

The visual organisation is also very important. It is also important that the educator does not overload the students with materials. The materials should be placed in clear and defined areas.

Figure 12: Organisation of space and materials

Figure 12 shows activities prepared for the students using clearly defined areas and selected resources to complete each activity. Also, these activities consist of the correct number of items needed to complete each task in order to promote structure and a clear understanding of the expectations. Also, they provide clear understanding of when the task will be completed. This reduces anxiety and promotes success.

The organisation of space is also very important with visual materials so that the students work from left to right and the students can easily reach the materials, the materials are stabilised, so they will not fall off the table. The activities should have a clear beginning and a clear end. Stabilisation of materials helps the student focus on the activity rather than looking to see where things are if they move around the table or fall on the floor. Sometimes using folders and clear containers where materials are placed helps the students to understand what to do, and they are provided with a very clear start and then the stages needed to complete each activity (Hume, 2011).

Organising space and materials
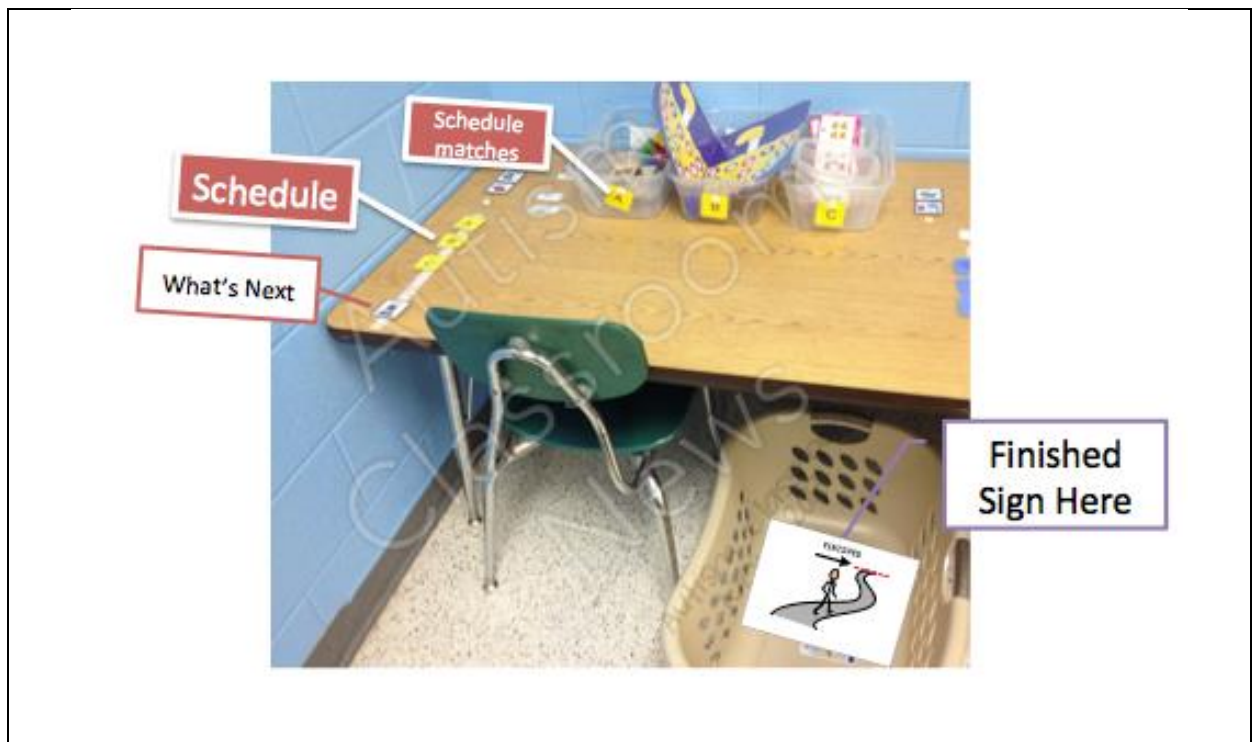
Figure 13: Work Station

Figure 13 shows a Work Station. A schedule on the left gives the student a clear understanding of the activities the student needs to complete. Activities with all resources needed are clearly placed in the top and middle of the table. A basket with a 'finish' sign is placed on the right side on the floor where the student should place each item after completing each one. The visuals on the

schedule match the visuals placed in the container of each activity. This helps the student to learn to get the corresponding activity.

Figure 14: The Independent Work Station

Figure 14 shows a Working station for a student. Activities are placed in individualised baskets for the students to get to each time and complete each task. A rewarding activity is placed on the bottom of the table which the adult will use as a reward at the end of the session. A visual of the rewarding activity is placed at the bottom of the schedule, acting as a motivator to the student. The student does not have access to this activity or item as it is in a closed container, which is not in their view.

Materials should also be limited so that they do not overwhelm the students. The duration of the activity should also be limited so that it does not take too long to complete it. Otherwise, it will create stress in the student.

Final key questions for the ASD learner that reflect the importance of a structured environment

What happens here? The physical organisation (structured environment) helps the learner.

Where am I going? The Visual Schedule provides the information.

What and how much would I do? The Work System or mini schedule provides the information.

When will I be finished? The Work System shows them exactly what is the last activity they need to complete.

What happens next? The Work System will show them what the activity is after they complete those activities.

How will I do it? Materials, structure, and visual supports help the students understand how they will do that activity (Berkell-Zager, Wehmeyer & Simpson, 2012).

Why may behaviour occur?

Figure 15: The stress bucket
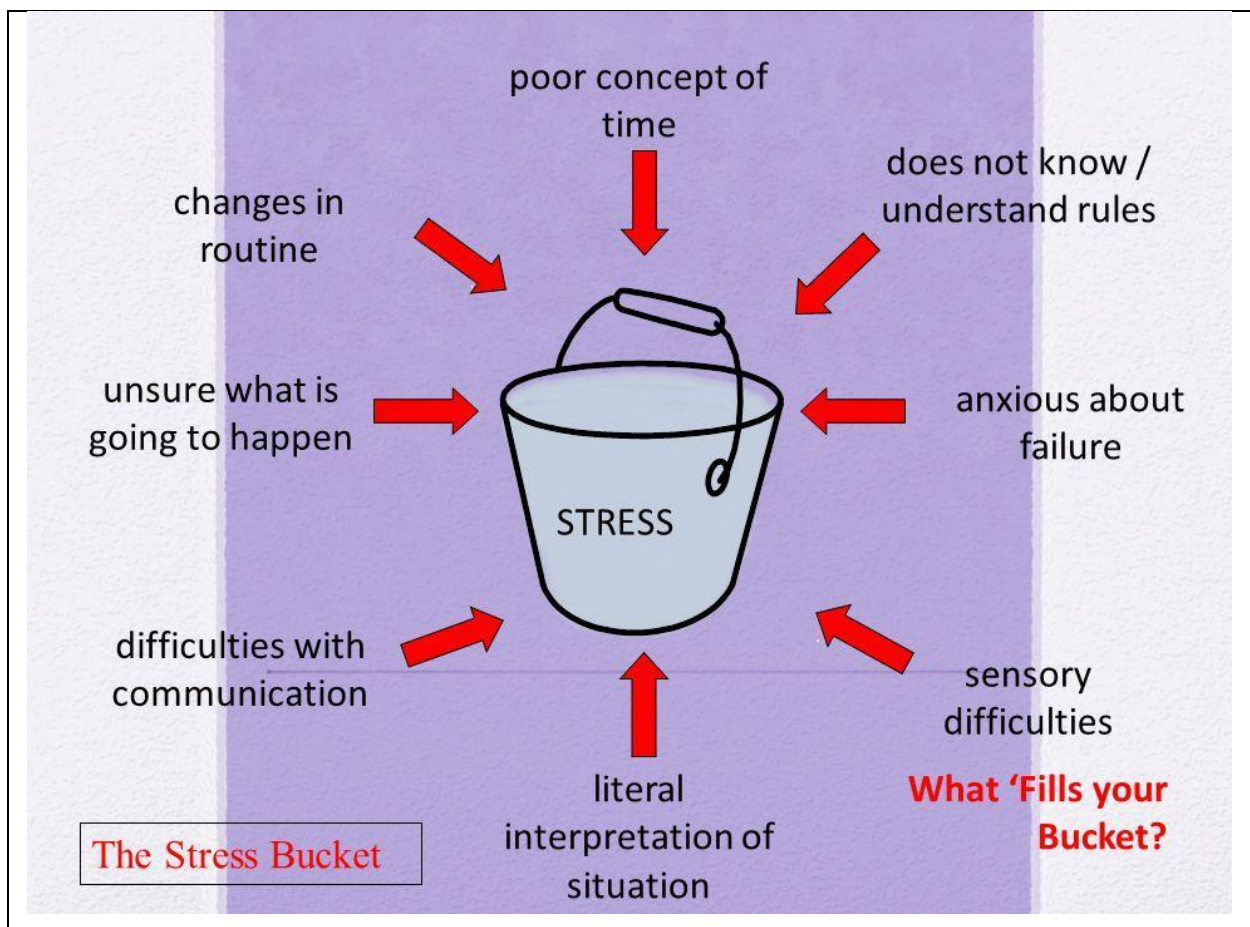
Source: Baskerville, Kevin (2014). Mapping your way through the ASD maze, Autism-Spectrum Disorder and the "Stress Bucket", National Team Teach Conference.
https://www.slideserve.com/chinara/autism-spectrum-disorders-the-stress-bucket

Figure 15 shows a variety of factors that can impact the stress level of an ASD student.

As a rule, the more students understand what is happening the less behaviours they will display. Many behaviours occur because the student has a low conception of time. They do not like changes in their routine, or the teacher may ask them to do something that is not their favourite activity.

Using visuals supports the students to avoid displaying challenging behaviours. It helps them to understand routines and activities in their daily life. When challenging behaviours occur, the following strategies can play an important role in calming them down and encouraging them to participate in activities.

Antecedent-based strategies for challenging behaviours (Quil, 2000)

i. If a student is upset, stop talking to them and use non-verbal means to communicate.

ii. Use visuals and schedules to prepare for difficult times.

iii. Develop a positive routine for what to do when the student is frustrated, stressed, and disappointed.

iv. Be flexible and offer choices.

v. Make the beginning and endings of things very clear.

vi. Use strengths and interests to prepare for difficult times.

vii. Redirect (with visual support) and re-engage when necessary.

viii. Provide a place to put things that need to be given up or a visual for time to stop.

If the educator shows the students that an item that they like is provided after they complete that activity, it may reduce their behaviour. Because students have communication problems they may not understand or remember what the teacher says using words. If the teacher uses visuals, students looking at the visuals may be able to understand what is happening and that it is not going to change. Students are also anxious about failure, so the educator should include a limited number of expectations and increase them gradually as the students become more independent and more able to do activities. An important reminder to the educator is that ASD students have sensory difficulties, so they need support to overcome those sensory difficulties. It is also very important that students are given time to process information and clear instructions are given to them (Baskerville, 2014).

Figure 16: The visual world of students with Autism

ALWAYS REMEMBER

Students with ASD understand what they *SEE*
better than understanding what they hear.

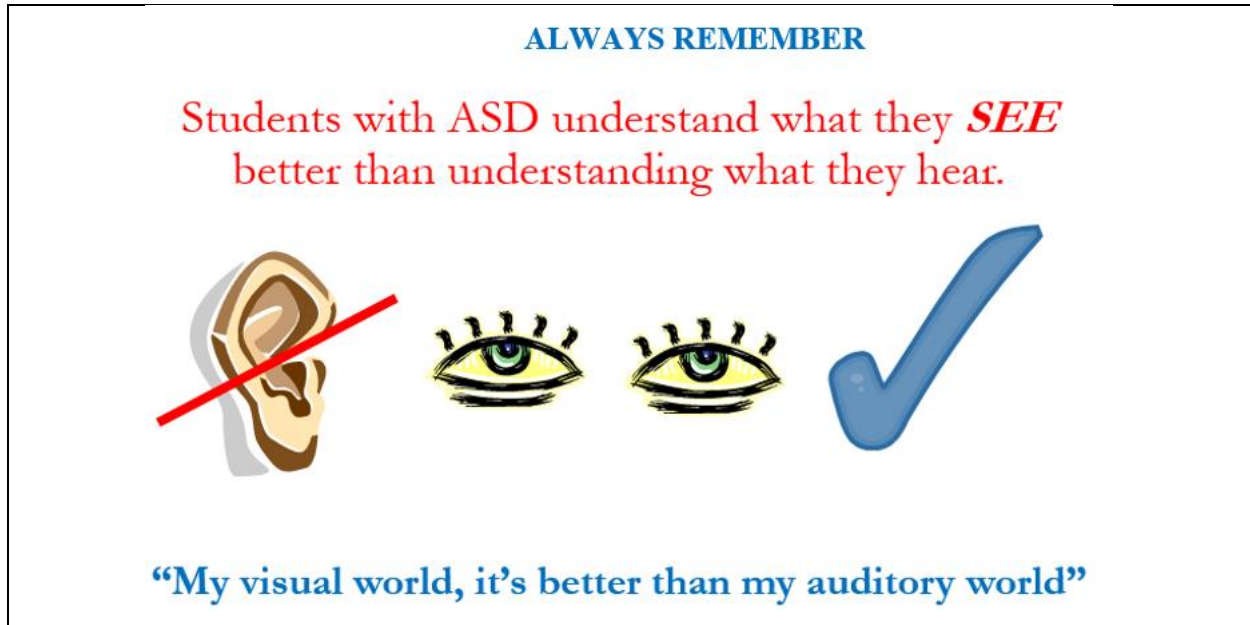"My visual world, it's better than my auditory world"

Figure 16 emphasizes the importance of understanding two extremely important concepts. Students with Autism will find great difficulty processing auditory cues. Thus, the importance of visual cues must not be underestimated. Visual cues and visual supports enhance the processing of information leading to a better understanding of their learning environment. Visual supports are concrete and not changeable. They enhance the students' understanding of the expectations and this helps to reduce their anxiety about what will happen next, and they reduce their fear of the unexpected.

Conclusion

In our society we all need different levels of support to function and be successful in life. The same requirements are needed by students with ASD. Every educator should ensure that in their daily practice they implement a variety of strategies and resources to support students in their participation in activities.

No matter how many years of experience an educator has in teaching students with ASD, it is always very beneficial to hear their voice, how they feel about things, and how they see things differently from their perspective. Then, hopefully, that will help educators to change their perspective and their expectations when they ask ASD students to adapt to the school environment.

Providing a structured environment will create a positive impact on the learning of students with autism spectrum disorder, it will impact their behaviours, and on their understanding. The structured environment will promote independence and success for the students. The educator

must continually assess that impact and make the necessary changes to meet the needs of their students.

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