Characteristics of Students with Moderate to Severe Autism

According to Schaaf (2014), between 45 and 96 percent of individuals with autism experience difficulties with sensory processing. The severity of autism is commonly correlated with the severity of the sensory difficulties (Milts, n.d.). Students with autism have trouble organizing sensory information neurologically. They may receive too many tactile messages in the brain but cannot organize the information fast enough to provide appropriate and typical responses to the stimuli (Cantu, 2002). Sensory responses in students with autism can be either hyperactive or unresponsive. Both bring out different behaviors in a child with autism.

Hyperactive Characteristics:
- Students with autism often dislike being touched or interacted with due to the fear of being in direct physical contact with peers. The student fears being taken by surprise due to unusual sensory experiences. This affects the student's ability to interact with peers due to the chance of them taking in too much sensory information all at once (Cantu, 2002).
- Distraction is common for students with autism due to the fact they are not able to organize the information in their brain but cannot organize the information fast enough to provide appropriate and typical responses to the stimuli (Cantu, 2002).
- Students often lack the ability to understand common social cues due to the fact they do not recognize the intention of their peers when interacting with them.

Unresponsive Characteristics:
- Students with autism often seem disengaged and withdrawn from situations due to a lack of ability to respond to stimuli. Their sensory processing is slow so their responses to stimuli tend to be delayed and sometimes inappropriate based on the setting.
- Students often lack the ability to understand common social cues due to the fact they do not recognize the intention of their peers when interacting with them.

What is Sensory Integration?

The ability to process sensory information plays an important role in an individual's ability to participate in daily life activities (Polenick, 2012). Sensory integration is an organized opportunity for students with autism to engage in stimulating sensory experiences. This is done to aid in balancing sensory information in the central nervous system (Polenick, 2012). A variety of activity-based practices can be utilized based on the individual needs of the targeted student. Sensory integration is necessary when three main sensory systems are effected. This includes: (a) vestibular system which deals with understanding how the body moves, (b) proprioceptive system which refers to the use of different muscles and joints within the body and (c) the tactile system which is sensory input related to touch (Polenick, 2012). When these main systems are not working adequately, sensory integration can help to stimulate the student's sensory deficits.

How Sensory Integration Assists Students within the Classroom

Sensory stimulating opportunities can aid students with autism in a variety of ways that ultimately help them to become more efficient in their everyday life experiences. These activities are designed to aid students with their sensory deficits. This leads to a variety of benefits that help the student reach their full potential within a classroom setting.

- Sensory integration can motivate students to participate in classroom activities throughout the duration of the day (Special Learning House, 2018). By incorporating sensory opportunities within the classroom, the students have an opportunity to release internal stressors through an emotional outlet experience. The students are able to take a break from the overstimulating environment which allows them to come back to the setting in a calmer state. They are then more ready to learn.
- Sensory integration can also assist students in the development of fine motor skills (Special Learning House, 2018). Different sensory activities can target specific deficits in the targeted individual. Some allow for the opportunity to work on manipulation of small objects that require “precision”.
- Sensory integration improves the ability of a student with autism to socialize with his peers in a classroom setting (Special Learning House, 2018). By giving the student an opportunity to associate with the different sensory stimuli, he will feel less anxiety and become more likely to engage with other students due to the lessening of fear towards the unknown sensory experience it may bring.
- Sensory integration can directly aid in increasing information processing within the vestibular system (Special Learning House, 2018). Students are able to better organize the information in their brain.
- The sensory opportunities are both expected by the student and controlled by the teacher. This can help to promote a routine for the student with autism and increases his ability to understand and follow the teacher’s directions.
- Sensory integration can serve as an opportunity for students to develop a greater understanding of the sensory experiences they will encounter within their environment (Special Learning House, 2018). These experiences will prepare students for typical interactions with adults and peers as well as improve their everyday living skills.
- Sensory integration can help students better regulate their five senses; touch, smell, taste, sight and sound. By incorporating different sensory stimulations in the classroom, the students have an opportunity to utilize their five senses in an appropriate way. This makes them more comfortable with their surroundings. They become more familiar with the everyday sensory environment (Sensory Integration Therapy, n.d.).

Examples of Sensory Stimulators in the Classroom Environment

- Chew necklace
- Sensory balls
- Weighted stuffed animals
- Swing chair
- Grippable silverware
- Teeter Popper
- Glitter Tube
- Sensory table
- Fidget spinners
- Sensory wall
- Kinetic sand
- Trampoline
- Gange Hilltops
- Yuck-e Medicine balls

Conclusion

In conclusion, students with autism can benefit from sensory integration in a variety of ways. Teachers need to be aware of their student's sensory needs within the classroom in order to set them up for success. Sensory input can be achieved through a variety of different materials that teachers can easily set up within the classroom. The exposure to these stimulators can help students to reach their full potential within a special education classroom setting. When setting up a classroom, teachers should make sensory integration a priority. This should be done to ensure that all students are receiving appropriate classroom supports.

Bibliography