

# OT

## focus



▶ QUARTERLY NEWSLETTER WITH AN OCCUPATIONAL THERAPY FOCUS



▶ A LOOK AT DIFFERENT DIAGNOSIS



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Sensory Integration

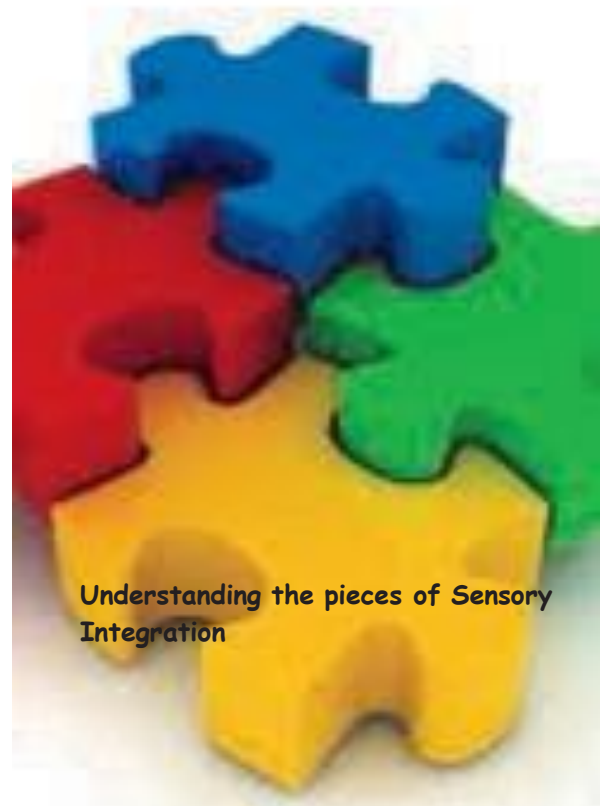
ADDRESSING THE NEEDS OF EACH STUDENT BY PROVIDING FUNCTIONAL CLASSROOM INFORMATION

The last OT Newsletter we took a look at our 7 senses. We briefly reviewed the Alert Program, How Does Your Engine Run?® In this newsletter we will address Sensory Integration.

## Sensory Integration

Sensory experiences include our 7 senses. As we wake in the morning, get up, take a bath, get dressed, eat breakfast, brush our teeth, gather our items for school, walk to school, ride the bus or catch a ride from a parent, our senses are at work gathering stimulation and information from our environment. Once at school it gets bombarded even more. Even as familiar and routined as our school day can be, it's unpredictable. There are many bits of stimulation that are unpredictable. Sometimes we struggle with how to handle the information. We take in stimulation through tastes, sights, sounds, touch, movement and the pull of gravity. We are bombarded all day long. Our brain receives information from all our senses

and interprets it for us, this is called sensory processing. This interpretation of sensory information helps us to respond to our environment in an organized manner. For most children, the sensory systems start to integrate in utero and are fine tuned in the course of their development through normal play.



Understanding the pieces of Sensory Integration



## Central Nervous System

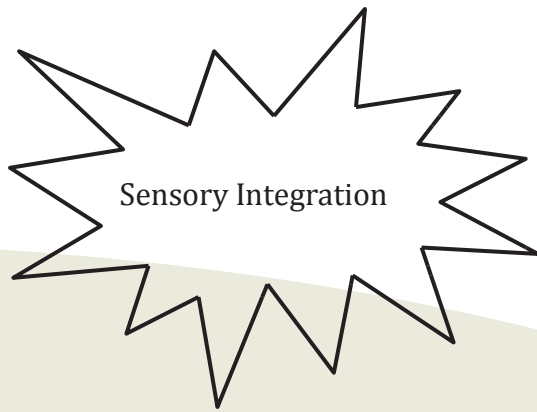
The pyramid to the left illustrates and describes why it is important for our sensory systems to be well integrated. They are the foundation for higher learning. Remember these systems start integrating in utero. Think of what all is happening with the senses in utero. Once born the systems get many more opportunities to experience and understand stimulation. As the systems understand and integrate our bodies mature to the point where we engage in academic learning.

Figure 5. Pyramid of Learning. (Williams & Shellenbarger, 1-4)



## Behavior is based on an accumulation of sensory input

*but it is also just part of being a kid...*



### 1. Sensory Registration

“I was touched. I felt something.”

### 2. Orientation

“I was touched *on my back, left shoulder*”

### 3. Interpretation

“A friend poked me with their finger.”

### 4. Organization of the response

“I want to see who it was”

### 5. Execution of the response

“I turn around”

## Story:

I just don't understand why Sam stands there with a flat affect and won't follow the simple instructions of writing down the 4 math problems from the Smart board on to his paper. How hard can this be? I just don't think he is motivated. He doesn't care. He is just plain lazy, reports the teacher. Sound familiar?

Here is how Sam is processing. I got up this morning and things went rather well because I was in my home. It's secure there and predictable. I have a good routine. Dad is off to work as I get out of bed. He gives me a kiss on the forehead and tells me he loves me. Mom is yelling at my older sister because she doesn't like getting out of bed. Then she comes to greet me with a big warm smile and says, I have your bath water running. This all makes senses to me. Then off to school. It's colder than normal so this makes it hard to concentrate. While on the bus the other kids are so loud it hurts ears, plus I'm getting squished by the kid sitting next to me. At school everything is moving fast. There are so many smells and noises, it's overwhelming. I make it to my locker and get settled into my seat. I hear and see the teacher giving instructions but I just sit there. I'm still overwhelmed and trying to figure out all the stimulation that happened as I walked in the door of the school. This is my world. It takes me extra time to process information that kids with well integrated sensory systems organize quickly. It takes me longer to understand the information being presented in the environment. I'm not lazy and I do care. I just need extra time to understand everything that is going on around.

## INVESTIGATE Behavior vs. Sensory



It does not take very long for kids in your class to display or demonstrate a variety of behaviors. Some behaviors we tolerate and others are not acceptable. Behaviors are a type of communication. Sometimes behaviors are just bad decisions or impulsive decisions. However, sometimes behaviors are the result of the brain not understanding how to interpret the stimulation presented. So ask yourself, is this behavior just a behavior or is it sensory based. Many times if it is sensory based, there will be a pattern to the behavior. Certain stimulations will trigger the behavior. If you have concerns or see behaviors that are hard to understand, please contact your OT.



Consult your OT