

Sensory Integration

Definition: Sensory integration is defined as the neurological process that organizes sensation from one's own body and the environment, thus making it possible to use the body effectively within the environment.

In layman's terms, we use our senses to learn and to develop skills which help us with everyday life. Our sensory development begins in the womb and continues to grow throughout our childhood years. By the time we are adolescents we have a fully functioning sensory system.

Sensory-motor skills are an important category of learning in many tasks and occupations. Children with sensory motor delays or "Sensory Processing Disorder" can find learning difficult because of the sense of disconnect they may feel from their environment. These students may show some of the following issues:

- problems with coordination
- low self-esteem/poor self-concept
- poor attention span/difficulty staying on task
- self-help delays (tying shoes, dressing, feeding, etc.)
- school-based delays such as poor handwriting, cutting, etc.
- extremes in activity levels (high/low)

There are many types of materials that can be utilized to provide students with an appropriate sensory diet. Some of them are:

- **Body Socks:** This stretchy fabric cocoon promotes proprioception (body position awareness) and tactile tolerance. Children can climb completely inside the sock and explore movement. Some socks are for one student but there are also classroom socks.
- **Tactile manipulatives** such as Squishy hand prints, water filled pat mats, multisensory books that feature sounds (crinkly, beepy, etc.) and textures, hide and seek tubes or beanbags that the child manipulates to find hidden items contained within and fine motor/occupational therapy materials such as hand manipulated squeeze items, knot items or therapy dough.
- **Kinesthetic/proprioceptive materials** such as textured floor mats, balance beams, stepping stones, footprints, etc. that allow a student to experience texture through the sole of the foot or palms of the hand.
- **Auditory items** such as sound tubes that when tilted create a variety of sounds, shaking items that create a soothing rain sound, puzzles that make a corresponding sound with each puzzle piece and white noise CD's.
- **Visual items** such as mirrors (some have an enclosure with glittery confetti that can add stimulus), mazes, puzzles, magnet mazes, etc.

Many children who are on the spectrum of autistic behaviors also have a secondary diagnosis of Sensory Processing Disorder. This can manifest itself as difficulty processing loud sounds and bright lights, sensitivity to touch and tactile input and an aversion to large groups and strange locations. Often a child on the spectrum will receive sensory integration therapy through an occupational therapist either within a program or on a personal level. Many of the materials offered in our Sensory Integration collection are examples of materials used by educators, therapists and parents with students on the spectrum. These materials are available to borrow for school or home use.