

**Sensory Processing** is the body's ability to accurately register sensory input from the environment through receptors in the skin, joints, muscles, inner ear, eyes, nose and mouth, process the information in the brain and react accordingly with a motor response.

**Sensory Modulation** allows the child to participate in activities by filtering relevant sensation from irrelevant sensation. For example, being able to read a book while blocking out the buzzing noise from the florescent lights.

**Praxis** is the neurological process of getting the idea, initiating, and completing new motor tasks. It is important for learning to play with toys, new playground activities and new concepts in school such as math and participating in sports. A child with poor praxis may appear to be clumsy or uncoordinated because of the difficulty in planning movement.

Adaptive Response is when an individual is able to successfully master a new environmental challenge.

### resources

#### Books

Sensory Integration and the Child: 25<sup>th</sup> Anniversary Edition by A. Jean Ayres

The Out of Sync Child: Recognizing and Coping with Sensory Processing Disorder by Carol Stock Kranowitz and Lucy Jane Miller

Parenting a Child with Sensory Processing Disorder: A Family Guide to Understanding & Supporting your Sensory Sensitive Child by Christopher Aurer and Susan Blumberg

Answers to Questions Teachers Ask About Sensory Integration by Carol Stock Kranowitz, Deanna Iris Sava, Elizabeth Haber, Lynn Balzer-Martin and Stacey Szklut

#### Helpful Websites

http://school.familyeducation.com/sensory-integration/ parenting/36660.html

http://www.sinetwork.org/

#### www.childrensdisabilities.info

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## Los Angeles Unified School District



Occupational Therapy Using a Sensory Integration Approach Within the Educational Environment



The Mission of the Division of Special Education is to provide leadership, guidance, and support to the school community in order to maximize learning for all students within an inclusive environment so that each student will contribute to and benefit from our diverse society.

## u n d e r s t a n d

#### Sensory Integration Terms

<u>Sensory integration</u>: Is a methodology developed by A. Jean Ayres. The term *sensory integration* refers to the organization of sensation by the brain for use in everyday life (Ayres, 2005).

#### **Sensory Systems:**

- Touch
  Sight
- ♦ Taste ♦ Sound
- Smell

We are familiar with our 5 basic senses of touch, taste, smell, sight and sound but we often forget about our sense of movement and body position.

- The Sense of Movement: The vestibular system detects changes in movement and body position from receptors in the inner ear.
- The Sense of Body Position: The proprioceptive system receives information from the muscles and joints.

These types of sensory input allows the brain to recognize the parts of the body and how the body is moving.

## Sensory Impacts on **EDUCATION**

Typically, sensory processing occurs naturally without our conscious awareness. Our nervous system begins to detect sensory information from the first day of life. Most school-aged children organize themselves, in order to learn new play or classroom skills.

Students who demonstrate the following patterns of responses may have a sensory integration deficit:

- Sensitivity to touch, crying or irritability toward light touch during circle time or centers.
- Difficulty interacting with craft items such as glue, paint or play-doh.
- Fearful responses to ordinary movement activi-٠ ties on the playground (i.e. jungle gyms, slides, steps).
- Difficulty with balance and coordination often appearing clumsy during gross motor play.
- Under-responsive to sensory stimulation often whirling or crashing, oblivious to pain.
- Using too much or not enough pressure on pencils or crayons.
- Becoming overwhelmed during assemblies, fire drills, lunch or recess.

Not all children with developmental, physical, learning or behavioral problems have underlying deficits in sensory processing. Not all sensory concerns require occupational therapy intervention. Contact your school OT if you have any questions.

# Incorporating Sensory Integration Principles in the SCHOOL SETTING

The occupational therapist may provide in-services and training to parents and school staff, collaborating on strategies to best meet the child's needs. Some examples in which the occupational therapist at school may address sensory integration may include the following:

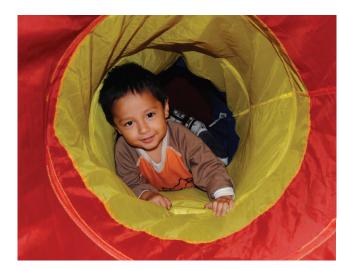


- ٠ The child may be involved in movement and active physical activities. The therapist may encourage or help adapt the child's ability to access typical school activities such as playground slides, tricycles, wagons, monkey bars, scooter board, ball play, and jump rope.
- The child may be involved in activities that ٠ address the sense of touch. The therapist may encourage use of the sandbox, water table, paint, shaving cream, play dough, putty at school.

### Sensory Integration in the

A Therapy Room will provide a safe environment for your child to develop the underlying sensory skills necessary to participate and make progress in their educational program.

- The use of a variety of suspended equipment such as swings makes this a unique environment.
- The child is an active participant in therapy ٠ and often guides the therapist in the selection of activities.
- A typical therapy room session will be play-٠ based. Therapy room intervention should be active, meaningful, and fun so that the child is able to engage in a more functional manner.
- The occupational therapist(s) will gradually increase the demands in order for the child to make an appropriate and organized *adap*tive response.



## Collaboration:

## THERAPY ROOM A KEY TO SUCCESS

A child's success depends on team work across all environments including school, home, and community.



- The school-based and therapy room therapists collaborate to create a plan of action that best addresses the needs of the child.
- The school-based and therapy room therapists will monitor the child's progress and suggest an alternative course of treatment if this approach is not making significant changes.
- By collaborating, the educational team which includes teachers, instructional assistants, and occupational therapists, will provide greater carry-over and long-term benefits.
- Sensory motor skills such as balance or catching may be addressed by other professionals at school such as the adapted physical education teacher, physical therapist or the classroom teacher. These team members should be included in collaboration as well.
- Parental involvement is a key to the child's success in the home and community. The therapists can offer suggestions on activities that they can do with their children at home.

