Occupational Therapy Terminology for Parents

Introduction

With the role of the occupational therapist becoming much more evident on IEP's this month's Parent Teacher Conference Handout provides parents with a glossary of terms commonly used by occupational therapists. This will provide parents with a guideline of understanding if their child has this service.

A

Adaptive Response: An action that is appropriate and successful in meeting some environmental demand. Adaptive responses demonstrate adequate sensory integration and drive all learning and social interactions.

B

Bilateral Coordination: The use of both sides of the body together in a coordinated fashion, indicating smooth communication between both cerebral hemispheres. The vestibular proprioceptive system is suggested to serve as the foundation for developing bilateral coordination, based on the work of Dr. Jean Ayres.

Binocularity (Binocular Vision; Eye Teaming): Forming a single visual image from two images that the eyes separately record.

Body Image: (Also called body scheme) Body Image is one's perception of his/her own body and is thought to consist of "maps" or sensory images that are stored in the brain.

C

Cocontraction: All muscle groups surrounding a joint contracting and "working" together to provide that joint stability resulting in the ability to maintain a position.

D

Depth Perception: The ability to see objects in three dimensions and to judge relative distances between objects, or between oneself and objects.

Directionality: The awareness of right/left, forward/back, and up/down, and the ability to move oneself in those directions.

Discriminative System: The component of a sensory system that allows one to distinguish differences among stimuli. This system is not innate but develops with time and practice.

Dyspraxia: Deficient motor planning that is often related to a decrease in sensory processing. The tactile system is suggested to serve as the foundation for developing Praxis, based on the work of Dr. Jean Ayres.

E

Eye-Hand Coordination: The efficient teamwork of the eyes and hands, necessary for activities such as playing with toys, dressing, and writing.

Equilibrium: A term used to mean balance.

Extension: A straightening action of a joint (neck, back, arms, legs).

F

Fight-Or-Flight Response: The instinctive reaction to defend oneself from real or perceived danger by becoming aggressive or by withdrawing.

Figure-Ground Perception: The ability to perceive a figure in the foreground from a rival background.

Fine Motor: Movements of the small muscles of the body, in concert with our visual system.

Fixation: Aiming one's eye at an object or shifting one's gaze from one object to another.

Flexion: A bending action of a joint or a pulling in of a body part.

Focusing: Accommodating one's vision smoothly between near and distant objects.

Form Constancy: Recognition of a shape regardless of its size, position, or texture.

G

Gravitational Insecurity: A sensory defensiveness that results in atypical fear response to movement or changes in head position. Usually expressed with poor vestibular and proprioceptive information processing.

Gross Motor: Movements of the large muscles of the body.

H

Habituation: The neurological process of tuning out familiar sensations.

Hand Preference: Right - or lefthandedness, which becomes established in a child as lateralization of the cerebral hemispheres develops.

Hypersensitivity: (also Hyper-reactivity or Hyper-responsiveness). Oversensitivity to sensory stimuli, characterized by a tendency to be either fearful and cautious, or negative and defiant.

Hypersensitivity to Movement: A sense of disorientation and/or avoidance of movement that is linear and/or rotary.

Hyposensitivity: (also Hyporeactivity or Hyporesponsiveness). Undersensitivity to sensory stimuli, characterized by a tendency either to crave intense sensations or to withdraw and be difficult to engage.

I

I.D.E.A.: The Individuals with Disabilities Education Act, P.L. 99-457, and amendments. This legislation requires school districts to provide occupational therapy as a related service to children who need it in order to benefit from education. Part H relates to 0-3. Part C relates to 3-5 year old's services.

I.E.P.: Individualized Education Program, a legal document specifying the needs of a child identified as having a disability and providing for special education and related services.

Inner Drive: Every person's self-motivation to participate actively in experiences that promote sensory integration.

K

Kinesthesia: An awareness of the direction, strength and speed of a body movement.

L

Lateralization: The tendency for certain processes to be handled most efficiently by one side of the brain. In most people the right hemisphere processes spatial information while the left hemisphere specializes in verbal and sequential processes.

M

Midline: A median line dividing the two halves of the body. Crossing the midline is the ability to use on side or part of the body (hand, foot, or eye) in the space of the other side or part. Revealing brain hemispheres working in concert, and the beginning of reciprocal and contralateral (opposite) activities.

Modulation: The brain's ability to regulate it's own activity. This internal ability to modulate requires a balance between neural inhibition and facilitation in order to stay regulated.

Motor Planning: The ability to have an idea (conceptualize what to do), plan an action and execute the action necessary for completion of a new motor skill.

Muscle Tone: The amount of resistance or assistance a muscle contributes to passive movement.

O

Occupational Therapy: A health profession focused on the study of human growth and development with emphasis on the social, emotional and physiological effects of illness and injury. The Occupational Therapist enters the field with a bachelors, masters or doctoral degree. Practitioners must complete supervised clinical internships in a variety of health care settings, and pass a national examination. Most states also regulate O.T. practice via a license. Therapy interventions are customized to adapt or restore all aspects of human "occupation" across the lifespan. O.T. is the skilled treatment that helps individuals achieve independence in all facets of their lives.

P

Perception: The meaning the brain attributes to sensory input.

Plasticity: The ability of the brain to change or to be changed as a result of activity, especially as one responds to sensations.

Position in Space: Awareness of the spatial orientation of letters, words, numbers, or drawings on a page, or of an object in the environment.

Postural Adjustments: The ability to shift one's body in order to change position for a task.

Postural Insecurity: A fear of body movement that is related to poor balance, and deficient "body-in-space" awareness.

Postural Stability: Being able to maintain one's body in a position to efficiently complete a task or demand, using large muscle groups at the shoulders and hips.

Praxis: Refers to motor planning and is the ability of the brain to conceive, organize and execute unfamiliar actions in a planned action sequence.

Prone: A horizontal position of the body where the face is positioned downward.

Proprioception: Refers to the perceived sensation from muscles and joints telling the brain when and how muscles are contracting, stretching, being pulled or compressed. This system contributes to our rate and timing of movements and assists with our sense of body organization.

S

Self-Help Skills: Competence in taking care of one's personal needs, such as bathing, dressing, eating, grooming, and studying.

Sensory Defensiveness: A child's behavior in response to sensory input, reflecting severe over-reactions or a low threshold to a specific sensory input.

Sensory Diet: A term devised by Patricia Wilbarger in 1971 to describe a therapeutic method to maintain an optimal level of arousal (in the nervous system) by offering the right combination of sensory information. The term diet is a metaphor for the regular "feeding of the nervous system" to change one's

state of arousal timed carefully throughout the day. A well planned "sensory diet" should include comfort touch, pleasurable social experiences, organizing proprioception, varied tactile activities and modulating vestibular input.

Sensory Dormancy: A child's behavior in response to sensory input, reflecting under-responsiveness or a high threshold to a specific sensory input.

Sensory Input: The constant flow of information from sensory receptors in the body to the brain and spinal cord.

Sensory Integration: The ability to receive, process and act upon sensory input for "use". This "use" may be a perception, an adaptive response or a learning process. Through sensory integration many different parts of the nervous system work together so that a person can interact with the environment efficiently.

Sensory Integrative Dysfunction: (Now referred to as D.S.I.) A brain irregularity that makes it hard to receive, process and act upon sensory input efficiently. DSI can be observed as a delay or difference in one's motor learning, social/emotional, language, or attention abilities. Two categories of dysfunction in sensory integration include dysfunction in discrimination/praxis or dysfunction in sensory modulation.

Sensory Modulation: Increasing or reducing neural activity to keep that activity in harmony with all other functions of the nervous system. Maintenance of the arousal state to generate emotional responses, sustain attention, develop appropriate activity level and move skillfully.

Sensory Orientation: Selective attention, supporting our inner drive to engage with the stimulus, respond and learn.

Sensory Processing: Frequently used interchangeably with Sensory Integration. Sensory Processing is of a response and execution of a response.

Sensory Registration: Initial awareness of a single input. Assigning value and emotional tone to a stimulus.

Sensory Threshold: Individual neural responses to sensory input across each sensory system. The point at which the summation of sensory input activates the central nervous system. This is the mechanism that drives our reactions to sensory input and whether we over-react or under-register the input.

Spatial Awareness: The perception of one's proximity to, or distance from, an object, as well as the perception of the relationship of one's body parts.

Supine: A horizontal body position where the face is positioned upward.

T

Tactile: Refers to the sense of touch and various qualities attributed to touch: to include detecting pressure, temperature, light touch, pain, discriminative touch.

Tactile Defensiveness: A sensory defensiveness that results in tactile sensations being perceived as negative. Decreased attention, avoidance of a variety of touch experiences and strong emotional reactions are seen consistently in a child exhibiting tactile defensiveness.

Therapeutic Listening: A therapy technique; the use of modulated and filtered music during S. I. therapy to promote regulation and praxis, as devised and instructed by Sheila Frick, OTR.

Tracking: Following a moving object or a line of print with the eyes.

V

Vestibular: Refers to our sense of movement and the pull of gravity, related to our body.

Vestibular System: Our inner gyroscope that detects the sense of movement head movement and our response to gravity to help develop a sense of spatial relationships. Our inner drive is to keep the body in an upright position. Any input to this primitive system can last up to 6 hours in the nervous system, so parents and therapist must use caution when applying this powerful input.

Visual Discrimination: Differentiating among symbols and forms, such as matching or separating colors, shapes, numbers, letters, and words.

Visual Figure-Ground: Differentiation between objects in the foreground and in the background.