

Glossary of Special Education Terms

Abduction (away from midline): Movement away from the midline of the body or a body part, as in raising the arms to the side and away from the body, spreading the legs, or spreading the fingers or toes.

Abnormal patterns of movement: Forms of movement which are associated with brain damage and which are not observable at any stage of a normal full-term infant's motor development.

Adaptive equipment: Devices used to position or to teach special skills.

Adduction (to the midline): Movement to the midline of the body or body part or the anatomical position of closing the fingers or toes or bringing the arms close to the trunk.

Ambulation: Walking.

Antigravity posture: A position, such as sitting or standing, which requires that the child be able to support himself against the force of gravity.

Aspiration: Inhalation of foreign substances (such as fluid or dust) into the lungs.

Asymmetry: One side of the body different from the other.

Ataxic: One type of classification of cerebral palsy where balance and fine motor functions such as coordination are impaired.

Athetoid movement (or athetosis): Uncontrolled and continuous movement associated with cerebral palsy (and other movement disorders) where involuntary writhing movements occur, particularly in the hands and feet.

Atrophy: Wasting of the muscles, typically from disuse.

Automatic movement: A type of movement which is performed without thinking or conscious control and which aligns body parts or restores and maintains balance.

Bolster: A long, narrow, rounded pillow or cushion. A pillow rolled over and tied makes a good bolster. Ideal size is 6-12 inches in diameter.

Cerebral palsy: A disorder of posture and movement which results from damage to the brain and which produces atypical postural tone and unusual ways of moving.

Chorea: Involuntary jerky movements.

Clonus: A repetitive tremor of spastic muscles after those muscles have been stretched or after pressure (such as in weight bearing).

Co-contraction: Contraction of muscle groups on both sides of the body part (trunk, legs, arms) which enable the child to assume and maintain antigravity postures, such as sitting or standing.

Compensatory movement: An atypical movement pattern used to compensate for the inability to perform a normal movement; may produce abnormal muscle tone.

Consistency (of muscle) – The softness or firmness of the muscle tissue when you press it with your fingers or thumb.

Contracture: Permanent shortening of muscles or tendons which produces limited range of motion at the involved joints.

Corner chair: A piece of adaptive equipment that can be used to seat the child and is shaped in a 90° angle.

Crawl: Movement forward, with child's stomach on floor. Child moves legs in alternate way (moves one, then the other).

Creep: Movement forward on hands and knees, stomach up, in quadruped. Child moves one hand and opposite knee, then other hand and opposite knee, and so on.

Cruise: To walk sideways holding onto furniture or other supports. Example: child walks around coffee table and couch, stepping sideways and hanging on to furniture.

Deformity: Permanent change in the joints of the body which can only be altered through surgical intervention and which results from imbalance in muscle action (as in cerebral palsy or meningomyelocele).

Depression (lowering): Movement that produces a lowering of a particular area; the opposite of *elevation*. The movement most typically occurs to return the elevated part to the anatomical position (returning the scapula to normal alignment) or can occur as an isolated movement as in mandibular (or jaw) depression, which opens the jaw.

Diplegia: A type of cerebral palsy where the muscles in the legs are more involved than those in the arms.

Dislocation (of a joint): Complete separation or displacement of the bones that form a joint. In

hip dislocation, the hip bone (femur) is pulled out of its socket (acetabulum) in the pelvis.

Distal: Farthest from the body trunk, toward the hands and feet.

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Elevation (raising): Movement that produces a raising of a particular area such as scapular elevation or raising (shrugging) the shoulders or mandibular elevation (closing the jaw). The term *elevation* is always used in combination with the name of the bone being moved (scapular) or, more generally, the body area being moved (shoulder elevation or jaw elevation).

Elongation (muscle elongation): Increase in the length of the muscle.

Equilibrium reactions: Automatic patterns of body movements that enable restoration and maintenance of balance against gravity.

Extension (straightening): Movement that causes an increase in the angle between two adjoining bones, such as straightening the knee or elbow.

Extremity: A body limb, such as the arm (upper extremity) or leg (lower extremity).

Facilitation: Techniques that make it possible to move; physical techniques where guidance is specifically provided at key points (shoulders, head, hips/pelvis) to normalize tone and promote more normal forms of movement.

Fine motor: Small muscle movements; use of hands and fingers.

Fixate: To look at or stare at; to focus eyes on something.

Flaccid: Lacking force; weakness (as in muscles).

Flexion (bending): Movement that decreases the angle between two adjoining parts, such as bending the elbow to bring the forearm toward the upper arm.

Floppy: Hypotonic, or with low muscle tone.

Fluctuating tone: Changing from one degree of tension to another (i.e., from low to high tone).

Form: Way in which the various parts of a movement pattern are arranged in skill sequences (i.e., walking and crawling are two different forms of mobility).

Gesture: A physical movement or motion (e.g., child raises hands to be picked up, mother moves her hand toward her to motion for the child to come to her).

Gross motor: Large muscle movements like walking, sitting, crawling.

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Habit (habitual pattern): Compensatory patterns of movement that have been strengthened through nonsystematic (intermittent) reinforcement and practice.

Handling techniques: Methods of holding or moving children with motor delay.

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Head control: Ability to bring head in a straight, upright position when tilted in any direction.

Mouth should be in a horizontal (lateral) position, parallel to floor.

Hemiplegia: A type of cerebral palsy where half of the body (arm, leg, and trunk on same side) is primarily involved.

High tone: Hypertonia or increased tone.

Hydrocephalus: Accumulation of spinal fluid in the brain which results in an abnormally large head.

Hyperextensibility: Extreme flexibility of joints due to loose or lax ligaments; “doublejointedness”; a characteristic of many children with hypotonia or athetoid cerebral palsy.

Hyperextension: Movement that increases the angle between two adjoining parts *past* a straight position (180°).

Hypertonia: Increased tension in the muscles that results in limited range of motion of the joints.

Hypotonia: Decreased tension in the muscles that results in excessive range of motion and inability to move against gravity.

Inhibition: Physical guidance techniques provided at postural proximal key points (shoulders, head, hips/pelvis) to decrease tone and eliminate atypical patterns of movement.

Insult: Injury.

Involuntary movements: Accidental or unintentional movements that are not performed by choice.

Joint: The place where two or more bones of the skeleton are joined. In the hip joint, the hip bone (femur) is joined to the pelvis and held in place by ligaments.

Joint compression: A therapy technique in which pressure is applied to bring the joint spaces closer together. Joint compression down through the shoulders and into the pelvis brings the

vertebrae (bones that form the spine) closer together. Also known as *joint approximation*.

Key points of control: The parts of the body nearest the center of the body; the head, neck, shoulder girdle, and hips. These key points are used in handling and positioning the child with motor delay.

Ligament: A thick band of tissue that connects bone to bone to help form the joint.

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Low tone: A term often used in place of hypotonia to indicate decreased tension in the muscles.

Manipulation: Use of the hands and fingers in relation to objects, including such actions as holding, pointing, pounding, releasing.

Meningomyelocele: Developmental disability present at birth in which there is an opening in the spine through which part of the spinal cord and its covering protrude.

Midline: The middle of the body from top to bottom; an imaginary line drawn from the top middle of the head, over the nose, and down the middle of the body.

Mobility: Capability to move or to be moved (i.e., movement of a body muscle or body part or movement of the whole body from one place to another).

Movement patterns: Organization of components of muscle action required to produce various forms of total movement that result in a change of position of the body as a whole or of an extremity (arms or legs).

Muscle strength: Amount of power of the muscle fibers in relation to contraction of the muscles under varying conditions of resistance; typically rated as good, poor, fair, trace.

Muscle weakness: Decreased power of the muscle fibers in relation to various conditions of gravity and with ratings of fair or trace.

Myelomeningocele: Same as meningomyelocele.

Neurodevelopmental treatment (NDT): A form of treatment of children and adults with disturbances in posture and movement that relies on facilitation and inhibition techniques used when handling and when teaching movement skills.

Normalized tone: Postural (muscle) tone that has been made more normal through use of

procedures to alter tone.

Occupational therapist: Professional trained to work with fine motor activities, self-help skills, visual-motor activities, and activities of daily living.

Occupational therapy: A method of treatment that helps the individual function as normally as possible. With children, occupational therapy typically emphasizes the improvement of movement in play and daily living.

Oral-motor coordination: Interaction of the muscles of the neck, lips, tongue, cheeks, and jaw to produce smooth movement in eating and phonation.

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Orthopedic conditions/problems: Specific problems that involve the bones, joints, and muscles of the body and that include deformities such as scoliosis (spine), hip/shoulder dislocations, or muscle contractures.

Patterns of movement: The combination of various muscle contractions in order to move a body part in space or to accomplish a particular objective.

Physical guidance: A training (or teaching) procedure in which the required movement is produced by physical manipulation by another person.

Physical therapist: Professional trained to work with gross motor activities, mobility, and ambulation.

Physical therapy: A method of treatment that helps the individual perform movement as normally as possible.

Pivot: The first way that an infant moves when in prone (on the stomach); by shifting weight on the arms, the infant moves in a semicircle on her stomach.

Positioning: Ways of placing an individual that will help to normalize postural tone and facilitate normal patterns of movement; may involve the use of adaptive equipment.

Postural fixation: Co-contraction of specific muscle groups to provide a stable base for movement that can result in normal stability or compensatory stability with atypical postural tone.

Postural tone: The degree of tension in the muscles with the body at rest and when actively

moving; the degree of tension in the muscles with the body at rest and under various conditions of environmental stimulation.

Primitive patterns/movements: Patterns of movement that are present in motor development of a normal full-term infant but prolonged past the typical time of disappearance or integration in the child with motor delay.

Pronation: Movement that rotates the forearm so that the palms are down; the opposite of supination. Pronation is the downward rotation of the forearm.

Prone board: A piece of adaptive equipment on which the child is placed in a supportive standing position with support provided on the frontal surface of the body (i.e., prone stander).

Proprioceptive: Relating to sensations produced in the joint spaces and muscle tendons of the body.

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Quadriplegia: Involving all four body segments (i.e., arms and legs), as well as the trunk.

Quadruped: The hands-and-knees position, as used in creeping on all-fours.

Range of motion: The amount of motion present in each joint of the body under conditions of passive movement of the body part (passive ROM) or of active movement produced by the individual (active ROM).

Reflex: Stereotypic posture or movement that occurs in response to specific stimuli and is outside of conscious control.

Regurgitation: The return of partially digested food to the mouth from the stomach.

Resistance: A force to hinder or prevent movement; a therapy technique used to increase muscle tone or muscle strength.

Respiration: Breathing; the process by which an organism supplies its cells with oxygen and relieves them of carbon dioxide.

Respiration/phonation: Coordination of the respiratory mechanism and oral-motor coordination to produce speech sounds.

Respiratory distress syndrome: Lung condition found in premature babies due to immature lung development which requires ventilation to enable the baby to breathe.

Retrolental fibroplasia: Visual disorder of particular risk to premature infants.

Righting reactions: Subconsciously controlled movements that right the body in space and/or the body parts in relation to each other (e.g., head righting, body righting).

Rigid: A condition of increased postural tone (hypertonus) that prevents any movement at all and in which the individual's body is very stiff and difficult to move by another person.

Rotation: Movement of the head, trunk, or limb about its axis.

Side-lying: A position in which the individual is placed on a supporting surface on either the right or left side.

Spasticity: Increased muscle tone (associated with presence of stretch reflex) or stiffness; hypertonia.

Stability: The contraction of muscles to hold the body against gravity and/or to hold the joints in place to allow movements at other joints.

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Startle reflex: Jerking movements of the body or blinking of the eyes as a result of a loud sound or sudden movement at other joints.

Stiff: Used to describe spasticity or increased postural tone (hypertonus), which relates to the difficulty in moving the body as a whole or any body part.

Subluxation: An incomplete or partial dislocation of a joint.

Supination: Movement of the forearm such that the palm is facing up.

Tactile defensiveness: Extreme sensitivity to touch.

Tightness (muscle tightness): Decreased elasticity in a muscle or group of muscles which produces limited range of active movement but which can be stretched to full length passively.

Transporter chair: A piece of adaptive seating equipment that can be used as a car seat to transport a child safely.

Trunk: The body, not including the head, the arms and the legs.

Trunk control: Ability to bring the body into a straight, upright position when tilted in any direction.

Vestibular: Relating to sensations produced in the semicircular canals of the ear, which affect

balance and posture.

Voluntary movements: Movements produced under the conscious control of the individual.

Wedge: A piece of adaptive equipment, like a pillow, that is used to help position the individual in proper body alignment.

Weight-shifting: Shifting weight off one body part to another. In order to pivot in prone, for example, the infant must shift weight off of one arm (or elbow) and then move that arm while bearing weight on the opposite arm. Weight-shifting in standing allows the child to cruise around furniture and later to walk.