

PLANES OF MOVEMENT AND CHILD DEVELOPMENT

1 || The Sagittal Plane

The sagittal plane of the body involves flexion and extension. An example of a movement in this plane is walking.

2 || The Frontal Plane

The frontal plane involves movements like abduction (movements of the body away from the midline) and adduction (movements of the body toward the midline). An example of a movement in this plane would be jumping jacks.

3 || The Transverse Plane

Movements through the transverse plane are rotational. To visualize this plane of movement, you would split the body by imaginary line into top and bottom halves and any motion parallel to that line would be in the transverse plane. An example of a whole body movement in this plane would be crossbody knee taps (right elbow to left knee and vice versa).

Kids move easily and often through the sagittal and frontal planes. These movements are innate. But, very often, kids experience very little movement through the transverse plane.

It is often easier to promote strength and stability in the transverse plane by working on it through a developmental sequence. Start close to the floor and work in play based activities that involve rotation in small ways. Gradually progress through quadruped, tall kneel, and standing.

Encouraging Movement in the Transverse Plane

1 || Have kids work in prone by reaching for game pieces or stickers with one hand and placing them on a destination on the other side of their bodies from that hand.

2 || In supine, have kids reach overhead for a beanbag with her right hand and, as they sit up, bring it across their bodies to place it in a container on their left side. Switch!

3 || While lying on their backs, see if kids can raise their legs straight up in the air and then move them side to side like their legs are windshield wipers! How low can they get their legs without rolling all the way over?

4 || In quadruped, have kids color or draw on large butcher paper or on the driveway with sidewalk chalk. Kid's won't be able to resist crossing midline to make a beautiful rainbow and, guess what, that is challenging the transverse plane of movement!

5 || Try a game of knock me over! Have the child maintain a tall kneel position while you push against his right shoulder. The isometric contractions that he initiates to resist your force and maintain his balance will help train the core muscles in the transverse plane! Try it at each shoulder, each hip, then try both shoulders together. You can get really creative and challenging with this exercise and it's so fun to see who can hold their ground the longest!

6|| Karate chops and karate kicks are amazing exercises that encourage rotational movement. Have kids pretend to chop down a tree or kick over a tower of blocks!