

Using both sides of the body together

(Bilateral Integration)

Bilateral co-ordination is the ability to carry out co-ordinated movements of the right and left sides of the body and to cross the mid-line of the body. Co-ordination of the two body sides is an important foundation for the development of many gross motor skills (whole body movement) and fine motor skills (use of two hands). The child typically progresses from performing movements with both sides of the body at the same time to each side of the body doing opposite movements at the same time, e.g. walking. The final stage is where the child is able to do different movements with each side of the body at the same time (e.g. cutting with scissors in one hand while holding the paper in the other).

Co-ordination of the two sides of the body is essential to hand use and the development of hand dominance (right and left handed). Good co-ordination is an important foundation for writing with pencils and cutting with scissors. Children learn to co-ordinate both sides of their body when they manipulate toys such as threading beads and lego and when they skip, gallop, clapping games or ride a bike.

A child with bilateral integration difficulties may:

- Move body position to avoid crossing the midline (see figure 1) e.g. when writing, will turn body or shuffle bottom along seat from left to right or right to left to avoid crossing their hand from one side of their body to the other
- Not clearly demonstrate hand dominance (both hands may be equally used to achieve a task, rather than one hand manipulating while the other stabilises e.g. threading beads)
- Exhibit frustration due to being unable to achieve the task easily
- Have difficulties with bike riding, swimming, scooting, dancing and sports in general
- Have difficulty with dressing (managing zips, buttons or press studs independently)

Suggested strategies

- Messy play (e.g. finger painting, shaving cream foam, water or sand play) using two hands together
- Play dough/clay/plasticine activities – e.g. pulling it apart, pushing objects into it, rolling with two hands together or making small balls by rolling in both hands.
- Threading large beads, buttons, cotton reels or macaroni onto laces, straws or pipe cleaners.
- Simple hand sewing or tapestry/weaving.
- Construction kits e.g. lego, duplo and meccano.
- Toys that can be pulled apart with two hands e.g. magnets
- Skipping, wheelbarrow walks.
- Stacking games
- Clapping/tapping games with hands (e.g. pat a cake) or action songs e.g. 'The wheels on the bus'
- Musical instruments that can be played using two hands together e.g. drums
- Ball games (kicking, throwing and catching)
- Balloon games (e.g. hitting balloon with a soft bat)
- Playing card games
- Cooking activities – such as using a manual egg whisk or holding a bowl in one hand while beating with the other hand.
- Obstacle courses
- Jumping or trampolining
- Scissors activities
- Paper activities, paper planes/tearing long strips of paper/scrunching up paper to make balls
- Using templates of stencils for drawing around.
- Swimming
- Riding a bicycle
- Car cleaning or window cleaning
- Woodwork activities
- Board games (e.g. mastermind, battleships)