

A7 - Bilateral hand skills

The ability to coordinate the right and left side of the body and to cross the midline of the body is an indication that both sides of the brain are working well together and sharing information.

Bilateral Coordination is an important foundation skill for the development of many motor skills and essential for the development of hand dominance and refined fine motor skills.

Children with poor coordination of the two sides of the body together may present with:

- difficulties in motor activities that involve two sides of the body (jumping or catching)
- tend to avoid crossing their midline (will work to the side an item is placed)
- difficulty in coordinating the action of both hands in a coordinated way such as one hand action while the other stabilises work or use of scissors to cut and hold
- swaps hands during fine motor activities
- have difficulty in reading left to right across the page
- have difficulty in self-care skills (fastenings or cutlery use)

Additional adult support will be required to help with increasing tolerance and acceptance of unfamiliar or new activities for sensory skill development, to facilitate **bilateral hand skills** and use **hand over hand techniques** to teach the coordinated use of both hands together and use of functional grasps, with greater resistive force & control with tool use.

Activities

Introduce the activities at a graded level, within the child's individual level of tolerance and achievement.

Warm up with hand gym

To push hands together in prayer position

Pull on flexed fingers

Action songs & rhymes – involving two arms and legs

'Wind the Bobbin Up', 'The Hokey Cokey', 'Heads and Shoulders, Knees & Toes' but be prepared to slow the pace until they are more familiar with integrating the actions with rhyme.

Heavy work for hands

Pincer or in-hand pulling theraband

Try making simple shapes and patterns with Geoboards

Theraputty use

Eggs in a nest – roll large balls in the palms of your hands, and then poke your thumb down the middle to make a hole. When there is a deep hole, pinch off some smaller bits and roll little balls between your thumb and each finger...to make four eggs.

Rolling a snake in theraputty

Go on to create a snail, a crocodile or a series of shapes

Clapping games – and patterns that require copying or following a partner lead.

Shake out upper limbs or rub hands together to wake up the senses & prepare for hand skills.

Manipulating small toys and objects

Working with Lego, building blocks and puzzles develops a child's tactile and proprioceptive system, with use of two hands.

Stringing and Lacing

Provide shoelaces, pipe cleaners or 'Scooby Doos' and a variety of lacing cards, buttons, beads or dry pasta (after you have painted it various colours) to develop eye-hand coordination, tactile discrimination, and bilateral coordination.

Household tools

Picking up cereal with tweezers; stretching rubber bands over a box to make a 'guitar', using clothes pegs and sifting flour are activities that strengthen bilateral integration in many ways.

Office and classroom tools

Scissor skills, writing (taking lids off markers), drawing and painting with different implements, using hole punchers and stapler through paper and card, using ink pads, wrapping boxes with paper, tape and string.

Creative crafts

Ripping paper for Papier-mâché, gluing, pasting and painting, Origami.

Play dough–

Kneading, pinching, squeezing, rolling (with a big rolling pin), flattening, pounding and making characters with features or cutting and pressing shapes. Making imprints with keys and coins or cut with blunt scissors. These activities strengthen hand muscles, improve finger dexterity, and give the child a multisensory workout.

Toys that involve pushing & pulling or winding with both hands

Pop Beads, Snap lock beads, counting cubes, Velcro food to cut with the knife, Stretch Scooby or other characters, Russian dolls, or mechanical spinning and moving toys.

Self-help tasks

bubbles in a hand held pot, brushing the floor and collecting the pile with a brush and dustpan, opening jars and pots or wooden screw nuts, pouring games or spreading bread & butter, dressing up games, pulling up or down own clothes for toileting, opening food containers, carrying a tray of items.

Ball skills (see A6)

Talk about the 'helper' hand and the 'doer' hand and consistently prompt the child in two hand use (either verbally or touch stimulus).

Frequency of use: Complete 10-15 minutes sessions every day or at least three times a week.

Monitor the child's level of response (interest and motivation) in the task and adjust accordingly (to simplify or increase) to obtain the 'just right fit' and grade challenges (less challenging to more challenging).