

A8 - Hand skills

- When developing reaching or explorative hand play, it is important to ensure the child is supported well in seated or lying positions, to facilitate stable propping and reaching for toys.
- Use a variety of positions (depending on the task) to improve upper limb awareness and functional reach or grasps such as if propping on their tummy on the floor – try placing a rolled up towel under their shoulder, to encourage their arms to come up and forwards for reaching.

Preparation for hand activities – ‘warm-ups’

Aim: to facilitate the touch and proprioceptive receptors to improve the awareness of hands and individual finger movements, in preparation for any fine motor tasks

- **Brush both hands** fairly firmly with a piece of memory foam, a bath wash scrub or alternative tactile fabric. You may also go up the forearm to the elbow, to increase the sensations.
- **Use handcream to massage** the hands (child to do themselves), while talking through each area of the hand – palms, back of the hand, name fingers, thumb, wrist – as the child finds each part and rubs cream into it. Finish with a general vigorous rub of hands together encouraging round and round and vertical movements.
- **Shake hands** loosely in front, behind, up in the air, to the side, down by the floor, right hand, left hand, etc.

Four P’s Exercises to raise Proprioceptive awareness to hands:

Pull - Link “hook” fingers of the two hands and try to pull them apart.

Pray - Put palms of hands together (like praying) and push hard

Push - With a partner, put palms together and push against each other or stand up and put hands flat on the table to lean body weight through hands. Alternatively if you have a therapy ball programme in place, use this to weight bear through upper limbs

Piano - pretend to play the piano with wrists on the table, and fingers lifted up and down individually.



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

Activities

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

- Use a variety of **‘multisensory toys’** eg bright, shiny, musical, tactile ‘feely or messy play’ or interactive toys with push button or levers. Try combining different types for additional heightened sensations or add vibration to the play tasks such as vibration applied to a sand tray to create additional sounds or movement.
- **Encourage the child to touch everyday items** and participate in tasks (to carry or hold or pass items, collect books or assist with dressing or cutlery use, etc).

Developing grasps

The functional role of the hand is to shape itself around and manipulate objects, grip different surfaces and be in a position where it is most useful and efficient, through using dynamic **palmar arches** combined with movements of the **wrist and forearm**.

At times the hand needs to be powerful, but at other times it must make the most delicate movements. **Power in the hand develops before precision therefore the strength of the hand muscles is critical.**

The power grip allows us to plant an object in the palm and flex all the fingers around it – use items that are easy to grasp with fingers and thumb closing around the object - such as rattles, wooden spoons, glitter wands, etc. This hand pattern gives the child a powerful, static grip

The more precise components of grasp and release then develop.

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).