HAND SKILLS DEVELOPMENT

Around the age of two a child should be able to:

- Use 'doer hand and helper hand' at midline (18months)
- Start to have a preferred hand *
- Build a tower of about 6 blocks
- Turn pages of a book
- Place regular shapes in a inset puzzle
- Thread large beads (may use a stiffer lace)
- Hold a crayon with thumb and fingers
- Imitate circular scribbles, horizontal and vertical strokes
- Undo large buttons and zips
- Handle fragile items carefully
- Unwrap food items in simple wrappers
- Wash hands
- An object is passed from hand to hand to get it in the correct place
- Hold and use a spoon with more finger/thumb control
- Snip with scissors (between two and three yrs)

This is because they have:

- Reasonable trunk stability and stable rotation of trunk particularly in static positions
- Shoulder, elbow and wrist are still working as a unit
- An understanding that the fingers are better at holding and controlling smaller objects
- An understanding that finger tips give more sensory feedback
- The beginning of the separation of the two sides of the hands – stabilising and manipulating
- Sense of proprioception is starting to give more refined feedback Good visual tracking
- Emerging eye-hand coordination when working close to the body

Skills are dependent on opportunity

- Gross motor skills, ie development of core/trunk muscles, shoulder stability, wrist and hand stability, balancing and managing weight through hands, knees and feet, rotation of head and trunk, inhibition of reflexes

- Sensory skills ie stimulation and opportunity to explore and understand the world through all seven senses: touch, vision, taste, smell, auditory, vestibular and proprioceptive
- Appropriate fine motor play – which can be restricted at two.

At four years old the child should be able to:

- Have a preferred hand which is starting to develop slightly superior skills
- Thread small beads
- Move a small object from the palm of their hand to their finger tips
- (Use scissors without associated mouth or other hand movements)
- Cut around a symmetrical shape
- Use a digital grasp when holding a pencil though no dynamic finger movement
- Draw vertical, horizontal, vertical lines and a cross (+)
- Colour in a shape with reasonable accuracy (may need bold lines)
- Manage buttons at the front of clothing
- Screws on top of toothpaste
- Attempts to brush hair
- Pinches tissue off end of nose (and blows on request)

Because they have:

- Well developed trunk stability - which has developed in proportion to child's size and improved.
- Shoulder stability
- Isolated control of the elbow/forearm and wrist
- Consistent use of appropriate fine grasps, pincer, lateral/key, and tripod
- Emerging isolated use of the manipulation side of the hand for tasks
- Emerging manipulation skills (though not fully developed)
- Emerging palmar arches
- Emerging stabilisation of the joints of the fingers/hands
- Appropriate feedback from sensory systems, no conflicting information
- Visual attention

Key Point in Skills Development

- Allow opportunity to establish the building blocks before attempting a refined task that is too physically challenging
- Habits that are established when developing tool use are difficult to break, therefore if the child is motivated to use tools structure it to facilitate good habits.