

## Occupational Therapy Service for Children and Young People

### Pre-Writing Skills

#### **What are pre-writing skills?**

Pre-writing skills are the fundamental skills children need before being able to write. These skills contribute to the child's ability to hold and use a pencil, and the ability to draw, write, copy, and colour. The pre-writing shapes are a major component of pre-writing skills. These are the pencil strokes that most letters, numbers, and early drawings are comprised of. They are typically mastered in sequential order, and to an age specific level. The pre-writing shapes are made up of the following strokes: |, —, O, +, /, square, \, X, and Δ.

#### **Why are pre-writing skills important?**

Pre-writing skills are essential for children to develop the ability to hold and move a pencil fluently and effectively to be able to produce legible writing. When a child has not developed these skills, it can lead to frustration or resistance due to the child struggling to produce legible writing or 'keeping up' in class due to fatigue. This can then result in the child experiencing poor self-esteem and falling behind academically.

#### **What are the building blocks necessary to develop pre-writing skills?**

- **Hand and finger strength:** An ability to exert force against resistance using the hands and fingers that allows the necessary muscle power for controlled movement of the pencil.
- **Crossing the mid-line:** The ability to cross the imaginary line running from a person's nose to pelvis that divides the body into left and right sides.
- **Pencil grasp:** The efficiency of how the pencil is held, allowing age-appropriate pencil movement generation.
- **Hand eye coordination:** The ability to process information received from the eyes to control, guide and direct the hands in the performance of a task such as handwriting.
- **Bilateral integration:** Using two hands together with one hand leading (e.g. holding and moving the pencil with the dominant hand while the other hand helps by holding the writing paper).
- **Upper body strength:** The strength and stability provided by the shoulder to allow controlled hand movement for good pencil control.
- **Object manipulation:** The ability to skilfully manipulate tools (including holding and moving pencils and scissors) and controlled use of everyday tools (such as a toothbrush, hairbrush, cutlery).
- **Visual perception:** The brain's ability to interpret and make sense of visual images seen by the eyes, such as letters and numbers.

- **Hand dominance:** The consistent use of one (usually the same) hand for task performance, which allows refined skills to develop.
- **Hand division:** Using just the thumb, index and middle finger for manipulation, leaving the fourth and little finger tucked into the palm stabilizing the other fingers but not participating.

### **Difference between imitation and copying:**

**Imitating** is when a child watches you draw the line or shape before they try it. **Copying** is when there's already lines on a page and the child looks at it and then they figure out how to make those lines.

When a child is learning the pre-writing shapes it is easier for them to learn the right formations through imitation. Mastering the right formations is very important as this will impact how the child forms their letters as they get older.

If a child is unable to imitate a shape, they should not be expected to copy that shape.

### **What can be done to improve pre-writing skills?**

- **Hand dominance:** Determine and reinforce the dominant hand use in precision task performance.
- **Experience:** Encourage participation in activities that involve grasping and manipulating small objects such drawing, puzzles, opening containers, threading or other related tasks.
- **Poking and pointing:** Practice tasks that use just one or two fingers (not all at once) e.g. poking games.
- **Praise** and encouragement when your child engages in fine motor activities, especially if they are persistent when finding an activity difficult.
- **Hand and finger strength** (e.g. scrunching, paper, using tweezers, play dough, pegs).
- **Sensory play** activities (e.g. rice play, finger painting) to assist the development of tactile awareness.
- **Hand-eye coordination:** Practice activities that involve hand-eye coordination (e.g. throwing and catching) and crossing the mid-line (e.g. reaching across the body to pick up items).
- **Upper limb strength:** Encourage play activities that develop upper limb strength (e.g. climbing ladders, wheelbarrow walking).

## What activities can help improve pre-writing skills?

- **Threading and lacing** with a variety of sized laces.
- **Play-doh (playdough)** activities that may involve rolling with hands or a rolling pin, hiding objects such as coins in the play dough or just creative construction.



- **Scissor** projects that may involve cutting out geometric shapes to then paste them together to make pictures such as robots, trains or houses.
- **Tongs or tweezers** to pick up objects, games of sorting objects.
- **Drawing or writing** on a vertical surface.
- **Every day activities** that require finger strength such as opening containers and jars.
- **Pre-writing shapes:** Practice drawing the pre-writing shapes (l, —, O, +, /, square, \, X, and Δ).
- **Finger games:** that practice specific finger movements such as *Incy wincy Spider*.
- **Craft:** Make things using old boxes, egg cartons, wool, paper and sticky or masking tape.
- **Construction:** Building with duplo, lego, mobilo or other construction toys.



## When practicing the pre-writing shapes try the following:

### Give the child a variety of tools to use:

- Wax crayons - fat/thin.
- Chalks on paper or blackboard.
- Felt pens.
- Paint with brushes.
- Paint with finger, sponge pieces, rollers.
- Fingers in shaving foam.
- Food colouring mixed in shaving foam.
- Draw in wet sand or flour/cornflour mix.
- Charcoal. Draw and smudge with fingers.
- Mix paint with glitter, sand or other textures.



**Use a Variety of Surfaces to draw on:**

- Paper - white / coloured / black.
- Blackboard.
- White board.
- Shiny card.
- Textured wall papers.
- Tracing paper.
- Paper over textured surfaces - corrugated card / sand paper.



**Try to use a variety of positions to draw in:**

- Sitting at a table.
- Standing at a table.
- Vertical easel.
- Large sheets pinned on the wall. Standing or kneeling.
- Paper or blackboard or white board flat on the floor.

**Draw in a variety of sizes:**

- Big blackboards.
- Huge pieces of wallpaper etc.
- Tiny bits of card / squares or strips.