

Fine Motor Development

The Basics

Children require building blocks to lay the foundation before acquiring fine motor control. These building blocks include:

- Stability - strength and balance allowing one part of the body to stay still while the other moves
- Sensation - awareness of the placement of your fingers, hands and arms and how they are moving
- Bilateral co-ordination - both hands being involved in separate aspects of a task.

Children also need to be able to plan, be aware of what they are doing, have co-ordination, and develop a properly matured nervous system and strong muscles in their back, stomach, neck and shoulders to support refined hands and finger skills.

Once the building blocks have been established, children develop dexterity. They will be able to use small, accurate, and precise movements to complete various day-to-day tasks.

Fine motor tasks that children in early years aim to achieve include opening containers, picking up tiny objects, stacking blocks, cutting out shapes with scissors, drawing lines or circles, tearing paper, buttoning a button and holding and writing with a pencil.

Children can develop their finger and hand muscles by using playdough, water and sand play, tearing paper, beading, dressing dolls, painting (large hand painting to music), puzzles, sorting toys and arts and craft activities.

Fine motor ability is also reliant on bilateral coordination

Factors affecting children's fine motor development:

- Poor joint stability
- Poor arm strength
- Poor motor planning
- Low muscle tone
- Poor fine motor co-ordination
- Poor postural development
- Inefficient bilateral hand use
- Lack of isolation of individual finger movements
- Poor grip strength
- Poor pinch strength



Muscle strength

It is also important to develop shoulder muscle strength, which provides stability for the smaller muscles in the hand and arms. This will prevent children from getting tired when writing and cutting with scissors so get those babies on their stomachs and children active.

Children should have access to large equipment which, not only develops the gross motor skills that underpin fine motor skills, but also develops skills such as gripping, turning and manipulating.

Give children ribbons, scarves or fabric to move when moving to music. This will encourage them to move their arms from their shoulders, developing their shoulder muscles

Reluctant Children

Many young children, particularly boys, would rather be playing outside with a ball than sitting still drawing or threading beads.

It is therefore wise to let children burn off energy before sitting down to do fine motor activities or slip fine motor activities into or in-between gross motor activities.

Include a fine motor move or activity in a gross motor activity, such as in an obstacle course include a section where they will need to thread a number of beads or pick up the same colour of pompoms with tongs and place in another container, etc.

Use active stories that will get children moving. Children can pretend to be a character or animal that will do large energetic moves as well as fine motor task – a monkey swinging through the trees then eating a banana, or squirrel scampering over the ground to his supply of acorns.

Fine Motor Foundation Skills

In preparation for school, children will need a solid foundation of fine motor skills in order for them to be able to write and use scissors.

Foundation skills to prepare children for writing

- Posture & Balance for hand and arm control
- Grasp strength and finger control for appropriate grip on a writing implement
- Ocular motor control in order for hand and eyes to move together
- Being able to following instructions
- Being able to pay attention
- The ability to recall correctly
- Spatial organisation



Foundation skills to prepare children for cutting with scissors

- Postural control
- The ability to open and close the hand
- Bilateral co-ordination where the one hand is the 'doing' hand and the other is the 'helping' hand
- Being able to isolate fingers to move independently from each other
- Hand-eye co-ordination
- Stability

The Impact

How physical activity impacts the development of children's writing skills:

- Alphabet games
- Phonic games
- Active stories
- Spatial Awareness activities – spatial awareness impacts on placement of written work on a page
- Gross motor skills underpin fine motor development
- Brain development through play
- Children can create their own active stories, writing them down or writing key words such as the main character, the animals, the names, etc.
- Large painting – it will be easier for children to write on a large scale before they are expected to become dextrous with their fine motor skills
- Painting and drawing to music

