

# Manipulation skills

Manipulative skills are the skills we need for moving balls and objects around. It is important that we develop our manipulative skills as small children because:

- We require manipulative skills in many areas of life e.g. hammering a nail, writing, knitting etc. These skills are influenced by what children have been exposed to when young.
- Manipulative skills are involved in sport and recreation.

## There are many different manipulative skills



*Effort- All of these manipulation skills can be done with different levels of effort- hard/soft, fast/slow, smooth/ jerky etc. E.g. kick softly or hard, depending on the situation and activity.*

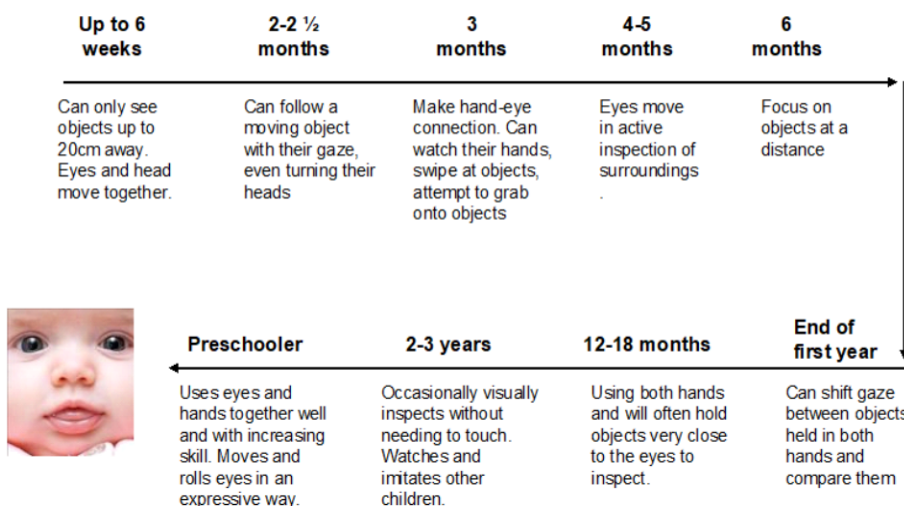
There are 3 skills needed for manipulating objects: **Eye development, hand-eye/foot-eye coordination and tactile, touch experiences.**

## Eye development

The eyes are a muscle and we need to train them. Under 5's eyes are still developing so by using slow moving objects this gives the eyes time to track the object, send the information back to the brain and then for the brain to send information out to the body to have an appropriate reaction e.g. catching – sending information to the hands.

Tracking skills also are vital for reading. By using slow moving objects and playing/ experiencing things children gain strength in their eyes to be able to control their eyes alone without moving their head. So when it comes to reading they can read across their page with just their eyes and with their head still (later on when reading books some children will move their whole head to read, or move the book to read). Lying on the ground looking up and watching objects is a great way to practise this.

## Timeline of Eye Development



## Hand-eye/foot-eye coordination

This is the ability of the vision system to co-ordinate information received through the eyes to control, guide & direct the hands and feet. Hand eye & foot eye co-ordination uses the eyes to direct attention and the hands/feet to execute a task.

Hand eye/foot eye coordination involves eye control, timing and skill development. The eyes are dominant and they talk to the hands and feet. By using slow moving objects e.g. balloons, feathers, bubbles, scarves, light balls – give the child time to practice those skills and achieve.

### Throwing

Use soft items. Children learn to throw with a small ball, catch with a large ball.

1. Children must become familiar with the throwing action first. (Make a muscle man; point with your finger and toe, where you want it to go; make a big arm circle; step and let it go. Strong arms, point & throw past ear)
2. Throw at a wall, then large target.
3. As child becomes more proficient, decrease the size of the target.

### Bouncing

Begin with large playground ball or small beach ball.

1. Bounce and catch with two hands, vary the number of bounces between catches.
2. Bounce continuously with both hands.
3. Bounce with dominate hand.
4. Bounce with non-dominant hand.

### Manipulation of an object with their feet

1. Use a beanbag to start with.
2. Later, use a small beach ball or a large playground ball. Encourage use of inside and outside of foot.
3. Provide a pathway to dribble through, e.g. two ropes lying parallel on the ground.
4. Obstacle course to dribble through. Encourage them to alternate feet.

### Striking

Use large soft balls to begin with

1. At first object and child should be stationary, e.g. striking a large ball off a cone or tee.
2. Next the object moves, but the child remains still, e.g. hitting a pitched beach ball with a bat.
3. Both child and object are moving, e.g. keeping the ball in the air with a paddle.

## Tactile and touch experiences

Before children can use their hands for fine motor movements they need TACTILE experiences everyday.

This helps them to develop their hands.

Messy play- encourage whole hand immersion, not just the finger tips. Ideas for developing the senses in the hands- round and round the mulberry bush, feathers, feely bag.

ECC's are great for tactile experiences, all these things help build the muscles in the hands so children can eventually pick up a pencil and write – before this there is lots of play with paints, crayons, manipulating objects, finger painting, messy play etc.

Fine motor skills involves the ability to use fine muscle movements in your hands and feet

