

Pencil Grip

To hold a pencil effectively children need to have not only sufficient control and coordination of the muscles in their fingers. They also must have developed postural control and strength, and stability in their shoulder, arm, wrist and hand. This means that when children climb, carry, push and pull, throw balls, do practical chores, build with bricks, model in clay, thread beads or pick small objects, they build the muscles needed for handwriting.

Before and around the age of three, children usually hold a pencil with the whole hand, by the fist (1) (palmar grip) or the underside of the hand (2) (digital pronate grip), with the movement coming mostly from the elbow.

A grip which may appear before an effective grip is adopted is one where the pencil is controlled by the fingertips, mostly from the movement by the little and ring fingers (3). The movement is from the wrist, which may be bent upwards.

If children are to develop a fluent and fast handwriting style, and be able to use their cognitive energy on the content of their writing, they must hold the pencil with a grip that allows them to control it.

Efficient grips

The most efficient grip is the dynamic tripod grip (4). The pencil is held between the thumb and index finger, with the pencil resting on the middle finger. The hand is open and relaxed to enable the thumb and forefinger to move.

Another functional, but less efficient, grip is the quadropod grip (5) where the tip of the middle finger is on top for stability.

Adapted tripod grip (6, bottom right) is an efficient grip for those with weak hand muscles. The pencil is placed in the space between middle and index fingers, supported by the thumb, index and middle fingers.

Inefficient grips

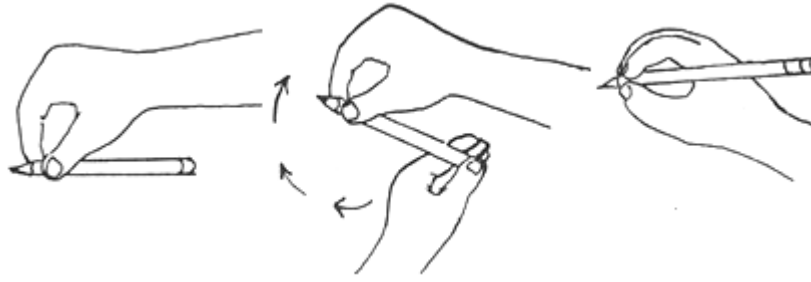
Thumb wrap (7), thumb tuck (8) and inter-digital brace (9) below:



Children may adopt an inefficient pencil grip when they are asked to form letters before their fine motor skills have developed sufficiently. They will lock their joints and use any grip that gives them the stability needed to control a pencil. This puts strain on their fingers and in some cases even the wrist, elbow and shoulder. The child tires when writing and possibly becomes unwilling to do it.

A child's grip will usually improve as their hand movements become more controlled. However, as it is difficult to change pencil grip in older children, it is important to help them to correct it when young.

To help a child hold a pencil correctly:



Left-handed children usually need to have the paper slightly to the left of the centre of their body and should be encouraged to tilt their work clockwise so they can see what they have written. They should be encouraged to position their fingers about 2 cm away from the end of the pencil to avoid smudging their work.

Writing from left to right is more difficult for left-handed children, so they need help to prevent bad habits of posture and pencil grip which will hinder the development of fast, fluent and legible writing.

Developing a good posture is as important as developing a good pencil grip. The height of table and chair should allow the child to sit comfortably, with their feet flat on the floor. Their legs should be free and not come into contact with the underside of the desk top. They should be able to sit up at the table without having to lean over it or stretch to reach it.

A hooked instead of a straight wrist may be used by someone with weak muscles in the hand or fingers, or who is left-handed not to cover their writing, and is likely to lead to soreness in the wrist.

Children should use their non-writing hand to steady the paper and bear some body-weight. The wrist and the little finger side of the hand need to be resting on the table. The paper should be tilted slightly.