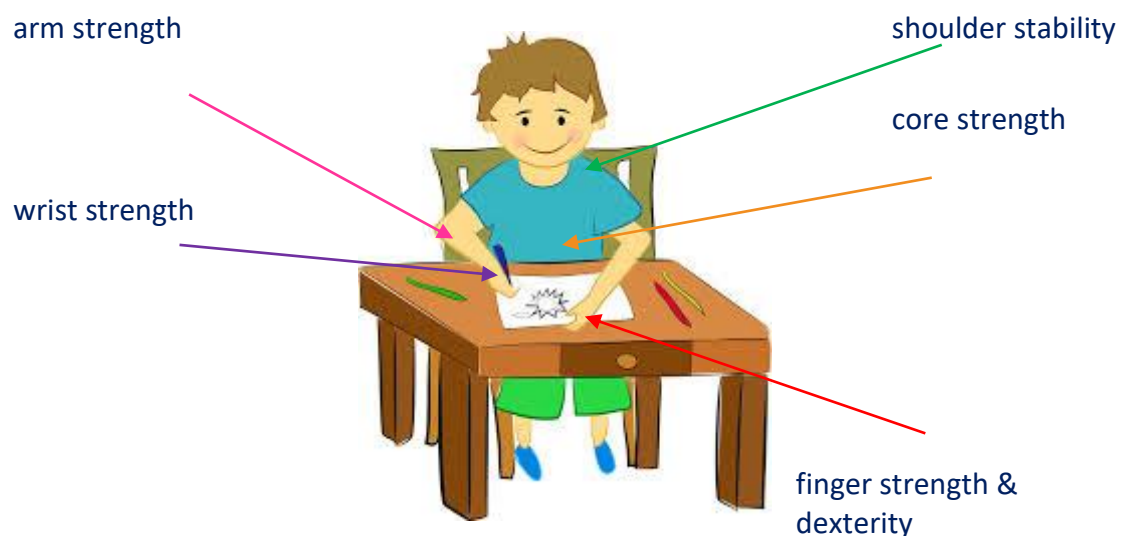


Development of a Tripod Pencil Grip

A **dynamic tripod grip** generally helps children to write efficiently. Once a child or young person has mastered holding and controlling the pencil, they can spend more time concentrating on what they want to write rather than how to go about writing it. Developing the correct skills required for using a pencil efficiently will also help to develop other fine motor skills, including typing skills.

Let's begin by defining what skills are required for using a pencil efficiently.

Typically, the larger (gross) muscles will develop before the smaller, (fine) muscles. Furthermore, the muscles that are closer to the centre of the body will develop before the muscles that are further away from the core. Therefore, children start developing postural control, shoulder stability, arm strength, wrist stability, hand strength then finger strength and manipulation.



All of these abilities are required in order to develop a pencil grasp.

So, before teaching a child how to hold a writing tool, start by developing the skills that are required.

- Build their postural strength through activities to strengthen their tummy (core) muscles such as floor activities where they lie on their tummy and prop on their arms to colour, read a book, play with toys etc.
- Play push/pull games or hang from monkey bars to develop shoulder and upper arm strength and stability so they can hold their arm steady whilst they write.
- Strengthen their wrists through painting on an easel or using a rolling pin so they can stabilise their wrists whilst writing.

- Use trigger spray bottles or hole punches to develop hand grip strength so they have the strength to maintain the arch of the palm whilst writing.
- Use finger puppets or sing rhymes e.g., Incey wincey spider, Tommy thumb to encourage independent finger movement so that their fingers can move dynamically and independently in a tripod grasp.
- Encourage use of pincer grip by threading small beads, using pegs or pinching playdough. Continue doing these activities whilst a child is developing their pencil grip.

Young children usually move the pencil using whole arm movements, chunkier writing tools may help. As their strength and control develops, the movement of writing will move from the whole arm, to the wrist, and finally to the fingertips.

Below is a guide to the different **developmental stages of a pencil grip**.



1.

1. **Fisted grip or Palmar Supinate Grip.** Children often hold their writing tool like a dagger, scribbling using their whole arm.



2.

2. **Digital Pronate grip.** All fingers are holding the writing tool but the wrist is turned so that the palm is facing down towards the page. Children begin to stabilise their shoulders, so that movement now comes mostly from the elbow. At this age, children should start being able to copy a horizontal, vertical and circular line.



3.

3. **Quadripod grip** or **4 finger grip**. 4 fingers are held on the writing tool, beginning to form the arc between the thumb and index finger (web space). Movement will occur mostly from the wrist and the hand and fingers move as one whole unit. At this age, children should be able to complete simple dot-to-dots, imitate zig-zag and crossed lines, trace dotted lines and draw simple humans (e.g. Head, stick body and one other body part such as arm or leg).



4.

4. **Static Tripod grip**. This is a 3 finger grasp, where the thumb, index finger and middle finger work as one unit. At this age, children should be able to copy a diagonal line, a square, a diagonal cross, a circle and a triangle. Pictures of humans become more detailed, including both arms and legs and even facial features.



5.

5. As the fingers begin to move independently, the ring and little fingers gently curl into the palm, the web space opens and becomes more circular, the writing tool is held closer to the nib and movement of the writing tool comes from the fingertips (the hand, wrist, elbow and shoulder are stabilised) the static tripod grip develops into a fully matured **Dynamic Tripod Grip**. Children will consistently be using only 3 fingers to hold the writing tool. This is the ideal grip to help move the pencil efficiently, accurately and at a good speed.

Your child is now ready to starting practicing and perfecting their letter formation. Most children will master the tripod grip by the age of 6 or 7, so there's no need to worry if your child isn't holding their pencil properly as they start school.



Occupational Therapy Service for Children and Young People
Aneurin Bevan University Health Board