



### **Stages Of Pencil Grasp Development**

Toddlers and preschoolers need to move through different stages of pencil grips in order to develop good fine motor skills. **Do not force** your toddler to hold the pencil the way a school child does, with 3 fingers on the pencil – you will do more harm than good. It is very hard to "unlearn" a poor pencil grip later in life! Although some young children may be able to imitate a three finger grip demonstrated by their parents, many are not yet developmentally ready to do so, and may well become frustrated with any pencil-and-paper tasks.

In this handout, you will be able to see the various stages of pencil grasp development your young child should move through. Each stage of crayon grasp is dependent on how "steady" the shoulder and arm muscles are. As your child develops physically, and takes part in lots of fun gross motor activities such as crawling, climbing and pushing, the shoulder and arm muscles will get stronger and steadier, and you should notice the pencil grasp change and mature as well.

There are principles of development called "big to small" and "proximal to distal" – basically this means that children develop the larger muscles of the trunk and arms before the smaller muscles of the hands, and that the proximal muscles closer to the body centre (i.e. shoulder muscles, upper arm muscles) develop before the distal muscles which are further away (i.e. hand muscles)

When a child is encouraged to use a "proper" pencil grasp before the shoulder and arm muscles are ready to support it, you may find fine motor problems emerging, such as holding the pencil in "weird" ways, messy work and even avoidance of drawing and colouring tasks. So don't force your child to hold a pencil "correctly" before he/she is developmentally ready to do so.

If your child has underlying developmental delays or other difficulties, he/she will need additional help and encouragement, so consult your local health professional if you are in any way concerned.

As it is really hard to take good photos of toddler hands in action, most of the stages on the following pages are demonstrated by adult hands holding the pencil.











#### **Stage 1: Fisted Grasp**

When your toddler first grabs a thick crayon and puts it to paper (hopefully not to your walls!), this is the grasp you should be seeing. It is a "fisted grasp", and your toddler will be using movement from the **shoulder** to get the crayon to move across the paper.



#### **Stage 2: Palmar Grasp**

As your toddler gains more control over arm and hand muscles, you will see this "palmar grasp" being used.

Here, the pencil lies across the palm of the hand and your child's elbow is held out to the side a bit. The shoulder muscles are steadier, and your child is using the **arm muscles** to move the crayon around, as well as the shoulder muscles.



This toddler is using a palmar pencil grasp.





The next stage is often misleadingly called an "immature" 5-finger pencil grasp.



It is considered to be immature because it is not the 3-finger grasp that is used in school, but it is a **perfectly mature** grasp for a 4-year old!

There are 5 fingers holding the pencil, and the child usually uses **wrist movements** to draw and colour. The wrist is sometimes held off the table while working, as shown in the second photo. The crayon is usually held very tightly initially, but as the hand muscles develop, you should see a few finger movements emerging.











This left-handed toddler has developed a **Five Finger pencil grasp** that is appropriate for her age.





### Stage 4: Tripod Grasp

Around 5-6years, or even a bit later with some children, your child should be comfortable using a **mature tripod (3 finger) pencil grasp**.

At first, the fingers will be held stiffly and your child will still use **wrist movements** to draw and colour, but as the finger muscles become more skilled, your child will be able to use **finger movements** for drawing and handwriting.



### Alternative Pencil Grasp

A child with low muscle tone and/or hypermobility of the finger joints may benefit from using the D'Nealian Pencil Grasp, as shown alongside, where the pencil is held between the index and middle fingers for more stability.

Don't be surprised if you see your young child **switching between pencil grasps** – as the shoulder and arm muscles become stronger and steadier, your child should switch less and less. We can liken this to a baby learning to walk – when his legs are tired of walking, he goes back to crawling, but as his endurance and skill improves, he will walk more and more! Likewise, as your child's endurance and skill at fine motor tasks improves, he/she will be able to use a more mature grip for longer at a time.

So don't discourage your child from going back to an earlier grasp; instead encourage participation in gross motor games and age-appropriate fine motor activities to develop the underlying skills.









#### Why Are We Concerned When Children Write With Poor Pencil Grasps?

When the fingers are grasping the pencil incorrectly, the hand and finger muscles (and even the forearm muscles) are not being used in a way which is efficient and effective, and the child may tend to tire more easily. This may result in **any or all** of the following:

- > untidy work, when the child cannot control the pencil properly to work within the lines;
- incomplete work, when the child writes so slowly with a poor pencil grip that he/she is unable to complete the work in time
- ➤ incorrect work, when the child is concentrating so hard on controlling the pencil that he/she does not pay attention to correct letter formations or other instructions given by the teacher.

#### Some Examples Of Poor Or Inefficient Pencil Grips











Remember that every child develops at his or her **own pace**. There are many factors that contribute to a poor pencil grip and poor fine motor skills. Toddlers may imitate an older sibling's pencil grasp, or a well-meaning but ignorant adult may cause confusion by forcing a 3-finger grip before the child is ready.

An **Occupational Therapy evaluation** would be recommended in order to analyse why a child's pencil grip and/or fine motor skills are poor.

To help your child develop the foundation for an efficient pencil grasp, check out these activity ideas and tips on my website:

- Gross Motor Activities: www.ot-mom-learning-activities.com/gross-motor-activities.html
- Fine Motor Activities: www.ot-mom-learning-activities.com/fine-motor-activities.html
- Hand Exercises: www.ot-mom-learning-activities.com/kindergarten-hand-exercises.html



