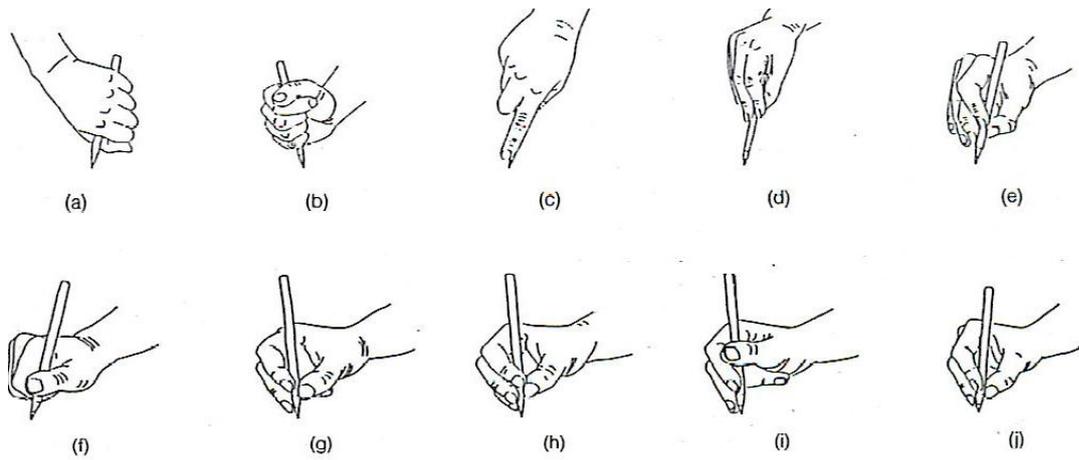


## Developing a pencil grasp

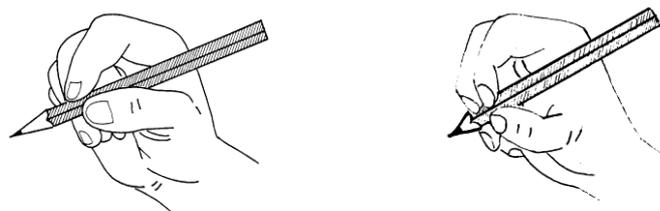
Children start making marks on a paper at around 12 months of age. Then, they progressively develop further control and better grasp of the pencil, resulting in increased quality of drawing and written work (see below for variations of pencil grasps). A pencil is a tool that works best when held properly. An inefficient grasp may negatively affect control of movements, flow, legibility and speed of written work.



It is advised that each school has a range of different equipment to use as an assessment kit to try with children who have handwriting difficulties. External pen/pencil grips may help with appropriate positioning of fingers, but this usually is a matter of personal preference and some children do not find the use of an external grip helpful, especially older children who have established a habit. A trial kit for schools could include items such as:

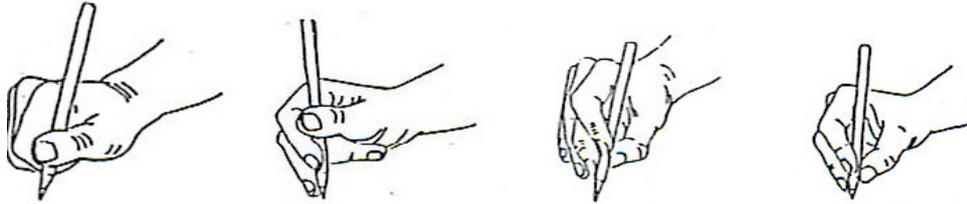
- A range of comfortable pen/pencil grips.
- A range of different pencils and pens, especially some with wider barrels or triangular shapes.
- An angled writing board
- Papers with different line formats (ie high visibility lines, double lines, 4-lines, different coloured lines/background, etc)
- A handwriting checklist

A **tripod pencil grasp** is considered to be the most efficient grasp for handwriting activities. Three fingers (index, thumb and middle fingers) are placed about 1.5-2cm from point for a right-hander, and 2.5-3cm for a left-hander (to increase visibility of the writing). The wrist and the little finger side of the hand need to be resting on the table at all times, in order to facilitate control of finger movements.



Please consider that not every child will have developed a correct tripod pencil grasp, and that some adapted grasps can also be effective, depending on the type of motor

coordination problem or medical condition presented by the child. It is not recommended to try to change to an alternative grasp for an older child (usually 9 years of age or older), especially if this is effective in terms of speed and legibility. Here are some examples of adapted pencil grasps that may still be appropriate and functional for a child:



Early promotion of a correct holding position on pencils and crayons is likely to decrease difficulties in the long term for the child, and an appropriate pencil grasp should be encouraged even before more structured writing activities are introduced in the classroom (ie during drawing or colouring sessions). Here are some examples of poorly developed grasps that tend to cause an increase in fatigue, pain, slow speed and poorly formed or illegible writing:

**INEFFICIENT GRIPS**

SUPINATE



THUMB TUCK



THUMB WRAP



\_\_\_ wrist flexed

TRANSPALMAR



INDEX GRIP



INTERDIGITAL BRACE



\_\_\_ wrist extended

### Unclear hand dominance

Hand dominance is usually established between three to five years of age. After the age of five, it is not advisable for the child to continue swapping hands all the time. Rather, he should be encouraged to use always the same hand for writing tasks, using the other hand in a more supportive role. In this way, sufficient skill will be developed in one hand in a faster way, facilitating the task later for the student.

To determine and establish hand dominance, consider observing the child using writing and other equipment/tools. Offer items to the child in the midline of their body, and then observe whether one hand is used more than the other for reaching out and grasping.

Consider which hand is used for the more automatic actions, ie using a brush or touching their nose/hair. You can discuss this with the child's parents to check their views on this matter at home (ie doing day to day activities, such as eating with a spoon, brushing teeth, etc). Try to observe over a period of time, to see if one hand appears to be used more consistently than the other. Even very young children will demonstrate a dominant hand, if carefully watched over a period of time.



Once a dominant hand is determined and the child is five years or older, then ensure he or she uses that hand consistently for pencil skills, while the other hand is used in a more supportive role (ie holding the page).

If the child complains about tiredness, let them rest or stretch the writing hand before continuing, rather than allowing swapping hands.

### The child is not holding the pencil appropriately yet

- Consider whether the child is ready for writing tasks. For a child with a more severe motor problem or learning difficulty, or for a child who is not aware of written language, the skills required for the task may be too high for them to achieve, often resulting in unsuccessful and meaningless attempts for the student. Simpler tasks where the child can practice using other tools should be encouraged in this case (ie finger paints, crayons, paint brushes, etc).
- Use shorter and thicker pencils/crayons to encourage a better hold. Beware of pencils or crayons that may be too thick for smaller hands, as this can also make it difficult for a younger child to hold.
- Make sure that all fingers are supported on the pencil shaft and near each other, with a small space between finger and thumb (around ½ cm.).
- There are many pencil grips and shaped pencils/pens on the market, so have a range for assessment and observe the child using them throughout the day, to see if they make a difference. It is essential to gather the views of the child as well, and whether he is comfortable and motivated to use a different pencil, as this will ensure compliance.





### Fingers too near or too far from the end of the pencil

Use a little tape or rubber band to mark finger position on the barrel. If the child's hand tends to slip, you will observe that the child has to re-position their fingers frequently on the barrel as they write. You can then use a pen with a non-slip grip or a soft pencil grip, such as the comfort grip available from Taskmaster.

### Pencil not resting back in the hand

Visual and verbal prompts may help with this, for example having a laminated card with a picture of a correct holding position.

A longer pencil may be difficult to manipulate in a small hand, so consider using shorter pencils for a younger child. A large rubber band around the child's wrist, then twisted and placed around the middle of the pencil can be used to get some light tension that pushes the pencil back in the hand.