

Pre-Writing Skills and Development

A guide for parents,
preschools and schools



Introduction

Young children use their hands to explore and learn about the world around them. By developing good gross (larger body movements) and fine motor skills (smaller actions) you will prepare your children for their next steps, which include writing. A child who is physically well-developed will have a stronger frame, increased focus and will have the fine motor control necessary for holding a pencil and writing

This booklet has been created for parents, preschools and schools. It is intended to give information on the developmental stages a child goes through to acquire the skills necessary for writing. The booklet outlines the importance of all the skills and gives tips and suggestions of activities to help the child learn these skills.

Remember, young children mature in every area of development at their own pace and in their own individual ways.



**Broadstone First
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**Broadstone
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Hoppers



**Merley First
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Physical Stages of Development

Taken from Alistair Bryce Clegg, Best Practise in the Early Years

The development of pre-writing, colouring and handwriting skills rely heavily on the development of upper limb joint stability at the shoulder, elbow and wrist. Without good upper limb joint stability, it will be difficult to control the writing tool in their hand effectively.

Stage	What is it?	How can we support?
The Shoulder Pivot	<p>Children will have stiff wrists and straight elbows, most movement coming from the shoulder.</p> <p>They will often make long, straight or large and circular movements. Movement is restricted to the larger muscle group in their shoulder. Usually with a palmar grip.</p> <p>Good shoulder stability is necessary as the muscles on either side of the shoulder joint controls smooth movements of the arm.</p>	<p>Provide lots of space! Easy to hold markers.</p> <p>Activities like brushing and mopping, scribbling on boards and spraying foam across the ground will help.</p>
Upper Body Workout	<p>Use the shoulder pivot on horizontal and vertical surfaces. This will encourage the children to reach and stretch as well as use their full circular motion</p>	<p>Offer opportunities like:</p> <ul style="list-style-type: none"> *washing walls *painting with mops *swing ball *lolly stick race tracks *swing painting (tights and teabags) *painting trees with shaving foam *foam bike tracks *big digging in sand/soil
Elbow Pivot	<p>As the muscles in the upper body develop there is usually more movement further down the arm, in the elbow.</p>	<p><u>Emergent Pivoters</u></p> <p>Encourage full range of movement, bending elbows – moving up and down. Use rollers and brushes.</p> <p>Sweeping motions are good – create foam tracks with brushes and fairy liquid on the ground. Sawing is another idea.</p> <p><u>Proficient Pivoters</u></p> <p>Develop circular ‘push/pull’ movement with upper and lower arm.</p> <p>Other ideas:</p> <ul style="list-style-type: none"> *pull body up on ropes *ribbon or scarf twirling *throwing and catching *sawing wood *making patterns in sand with lolly sticks *sticking and pulling plungers
Wrist Pivot	<p>As the arm muscles develop further the point of pivot changes again, this time to allow an even smaller range of movements. The elbow tends to tuck into the body and the shoulder movement is now minimal. Movement and balance tends to be more fluid. At this stage you may see a change in grip from palmar supinate to digital pronate (grasp with the palm down).</p>	<p>Encourage a whole range of wrist movement, decrease the size of activities for more precise movements</p> <ul style="list-style-type: none"> *threading *sewing *dabbing with a sponge *popping pictures *fishing games *splatter painting

Activities to Develop Joint Stability and Hand Strength

Note: If the child has a medical condition or restricted mobility, advice should be sought before completing any of the activities outlined.

- Try working on a vertical surface to develop the muscles in their shoulders. Use a blackboard/whiteboard, or paper placed on the wall.



- Animal walking – walking with hands and feet on the floor.

- Crab walking-sitting on the floor with hands behind the back and knees bent, push with arms and lift bottom off the floor and walk.

- Bunny hops-putting weight through arms and kicking with legs



- Playground activities – climbing, hanging from monkey bars etc.
- Hands on a bench, jump over side to side of bench

- Daily home activities which require weight through the shoulders
i.e. carrying in the shopping



●● Pushing and pulling activities e.g. Tug of War, moving furniture around in the classroom or at home.

●● Squirty water bottles during water play.



●● Games such as:
Operation or picking up objects with tweezers

●● Small Lego

●● Wind-up toys

●● Clothes peg games

●● Small peg board



●● Modelling clay, play dough using cutters



●● Small nuts & bolts

●● Chair push ups



●● Paper punches



●● Tearing paper

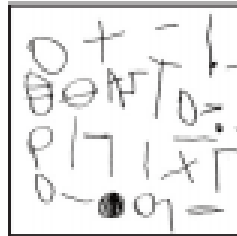
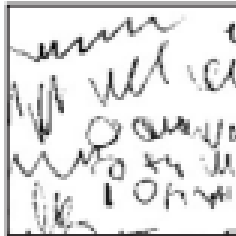
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Road to Writing

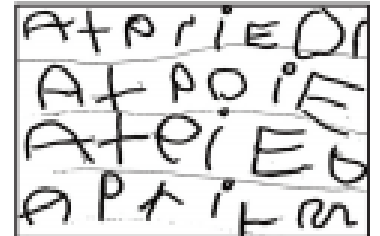
When learning to write, young children exhibit different stages of development. This is a natural progression that occurs as children gain an understanding of what written language is and how it is used.

 <p>1. Pictures</p>	 <p>2. Random Scribbling</p>	 <p>3. Scribble Writing (Written in linear fashion to mimic real writing.)</p>	 <p>4. Symbols That Represent Letters</p>
 <p>5. Random Letters (No relationship between sounds of letters and what the child is trying to say.)</p>	 <p>6. Letter Strings (Progresses from left to right and top to bottom when the child "reads" his writing.)</p>	 <p>7. Letter Groups (The groups have spaces in between to resemble words.)</p>	 <p>8. Environmental Print (Child copies print found in the room, often without knowing what the words are.)</p>
 <p>9. Beginning Sounds (Child begins to write simple sentences using sight words and just the beginning sounds of words.)</p>	 <p>10. Early Inventive Spelling (Includes the same elements as the previous level, but with more consonant sounds represented and spaces between words.)</p>	 <p>11. Inventive Spelling (Has the same elements as the previous level, but with more sounds per word written, including the vowels. Some conventional spelling patterns may appear.)</p>	 <p>12. Transitional Writing (Includes all of the previous elements, plus some real spellings of words with silent letters and other spelling patterns. Punctuation is beginning to appear.)</p>



1. Pre-Writing

Includes: Drawing, scribbling, symbols that represent letters, and random letters with no relationship between letters chosen and the sounds in a word. Random letters do not progress from left to right.



2. Letter Strings

Letters progress from left to right and from top to bottom as the child "reads" their paper back to an adult. Letter sounds have no relationship between letters chosen and the sounds in a word.

the I is 1 2 3 4 5
see I like onb mt

3. Environmental Print

Child copies words from the room around him. He usually does not know what words he has copied, and they do not form a sentence.

I see the pig

(I see the pig.)

4. Sight Words in a Sentence

Child writes a sentence that he or she can read back. Spaces between the words are not necessary, nor is end punctuation. Any other words included that are not sight words were found as environmental print in the classroom.

Thehcanr

(The horse can run.)

We wn to the s

(We went to the store.)

5. Beginning Sounds

Sentence includes sight words and some beginning sounds of a word that the child can read back. Vowel sounds and ending sounds in the words written with inventive spelling are not necessary. Spaces between words and end punctuation are not necessary.

6. Early Developmental Spelling

Uses sight words and some beginning sounds of a word in a sentence that the child can read back. Some ending sounds of words may begin to appear. There are spaces between most words. Punctuation is not necessary. Child also draws a matching picture to go with the sentence.

To daye i wat to play
withf the white board and
the shapex and I won
to play with my fen

(Today I want to play with the white board and the shapes, and I want to play with my friend.)

One day I saw my
Frid it was Israel and
Antonio and Thay got
lost I fad Thim.
The end

(One day, I saw my friends. It was Israel and Anthony and they got lost. I found them. The end.)

7. Developmental Spelling

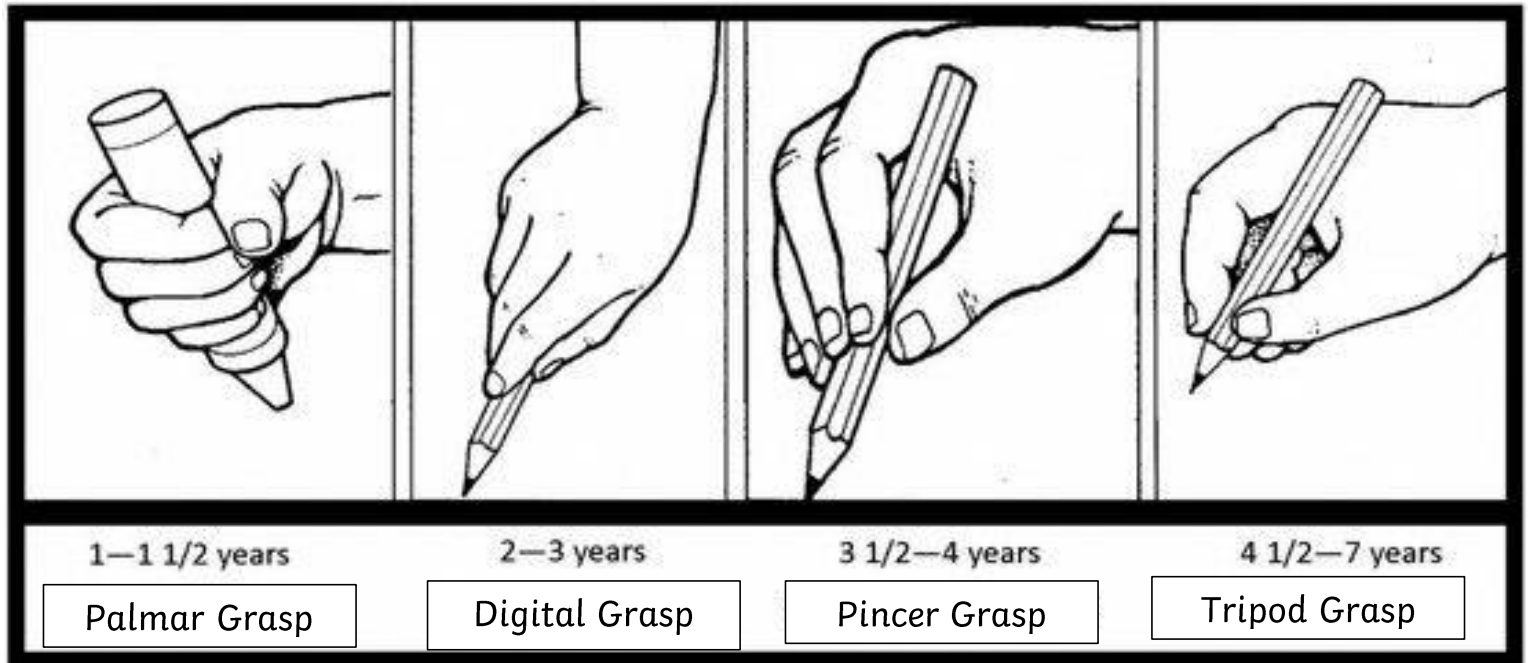
There are spaces between all of the words. When using inventive spelling, some medial and ending sounds are written, including some vowels. Punctuation may be added but is not necessary. Child sticks to one topic, and also makes a matching picture.

8. Transitional Spelling

Child writes two or more sentences, using some real spelling that includes words with silent letters. Capitals and punctuation and spaces are used correctly at least some of the time. Child sticks to one topic, and also makes a matching picture.

Grasp Development

The overall aim is to achieve a dynamic tripod grasp where the tool is held between the pads of the thumb and index finger (Taylor, 2001).



STAGE 1

The first stage of grasp development is a gross palmer grasp. Children will usually hold items with their whole fist. When holding crayons they will often have their pinkie finger nearest the paper.

STAGE 2

As children gain fine motor control, they typically progress from using a fist grip to a four fingered grip. With a four fingered grip, a child uses all four fingers together to hold an object against their thumb. This grip gives a child greater control when holding small items.

STAGE 3

Once children develop stronger fine motor skills, a pincer grip emerges. With this grip, a child uses only his thumb and index finger to hold and manipulate small objects. With pincer grip, a child can twist dials, turn pages, pen and close zips and use crayons on paper with precision.

STAGE 4

In this hand grip, a utensil is held between thumb, index and middle fingers. They might have tense fingers at first and continue to use wrist movements as they did with the pincer grip. They will eventually gain more fine motor control and will use finger movements to make shapes and letters.

TIPS FOR DEVELOPING A PENCIL GRASP:

- Use a very short chunky crayon. Break a regular chunky crayon to a size of approximately 2 cms. Using crayons of this size prevents the child from using a palmer grasp to hold their crayon.
- A thick pencil/marker/crayon is better as this encourages a better grasp – try to avoid long slim colouring pencils/markers.
- Adult sized pencils can be difficult for children to control. It is better to use a shorter pencil.
- Rubber band on pencil as a visual guide of where to hold pencil
- Mark a spot/place a sticker on the pencil to guide the child where to hold it.

Hand Dominance

When one hand is consistently used more than the other hand and has more control and skill then it is considered to be the dominant hand.

There are differing views on when hand dominance emerges but some children start to show a hand preference by ages 2-4 years. It would be preferable if most children have a consistent hand dominance established before entering school. It is much more beneficial for a child to develop strength and dexterity in one hand as this will develop accuracy and speed with fine motor tasks especially handwriting.

The other non-dominant hand plays an important role as the “helper” hand and this should be encouraged. The helper hand is important for stabilising the page.

Note: Activities that require using both hands together in a controlled manner allows the child to understand which hand is more dominant (Bilateral activities). Exposure to these types of activities is essential in assisting the child develop hand dominance, for example threading, Lego, and craft activities.

Pencil Control



When your child is ready you could move on to developing their pencil control by having a go at doing some pencil mazes, colouring within boundaries and drawing simple shapes. To help your child gain pencil control it is a good idea to start with a series of pencil mazes, working from simple to more complex. Asking the child to colour particular parts of a picture e.g. colour the dog's nose, also helps develop pencil control.

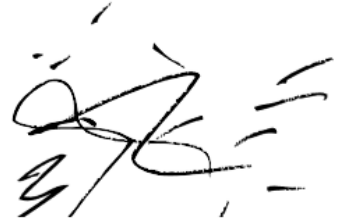
Note: Encourage the child to rest their forearm and wrist on the table for stability.

Stages Of Colouring Development

All children love to colour. This is an important skill as it can be used to help develop pencil grasp, pencil control and awareness of boundaries within a picture and prepares the child for handwriting.

STAGE 1

Children show an interest in colouring on surfaces e.g. paper, walls and tables.



STAGE 2

Children develop an understanding of colouring on paper – often reinforced by adults. No attention is given to colouring within lines and colouring strokes are random. * During stage 1 & 2 the child will show no regard for colour.



STAGE 3

Children are developing better stroke control and will start to use more stroke directions. Children will start to show awareness for boundaries of the picture. The child will often change the position of the page while colouring and will begin to use various colours, some appropriately.



STAGE 4

The child has now developed sufficient stroke control to colour in various stroke directions while keeping the page still. The child can now colour a small single picture within lines. The child will use colours appropriately.



TIPS

- Always encourage the child to stabilise the page with their non writing hand.
- Present the colouring tools in front of the child rather than either side
- Start with small simple pictures so the child will not tire and will be more successful.

Switching Hands

Switching hands is often seen in children. They may swap hands for painting, eating etc. It is not a concern when a young child swaps hands as they are still learning how to use their hands well together and what feels right for them. It is helpful if your school-age child has a dominant hand as that becomes specialised at doing the job of controlling the pencil.

Fine motor activities to increase strength and endurance and shoulder stability are beneficial, as difficulties in these areas may lead to excessive hand swapping due to fatigue.

Activities which require the child to cross their midline (an imaginary line through the centre from head to toe separating the right and left halves of the body) are important. Midline crossing helps to develop consistent dominance and means the child will reach across their body to get a crayon i.e. not use the hand closest to the crayon/pencil. A child who avoids crossing the midline will use both hands in equal amounts. This can contribute to delayed development of true hand dominance and fine motor skills may not be as developed as they could be.

Left Hand Writing

Adults can play an important role in supporting children who are left handed as they may experience a few additional challenges.

- Some left handed children may require help when writing as they may have a natural tendency to write from right to left.
- In writing from left to right, the left hander must push the pencil across the page instead of pulling it as a right handed person would do.
- The left hander's hand covers what has been written sometimes causing the finished product to look smudged.

Top Tips to support

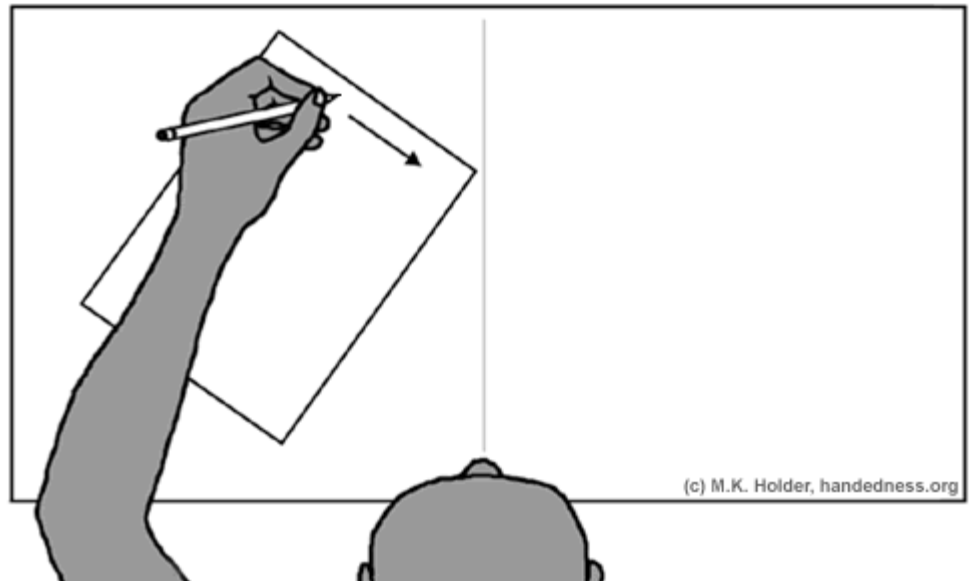
- The position of the writing paper
- The position of the arm and wrist
- The grip on the writing instrument

Paper Position Teaching Tips

1. Tilt paper so that arm is at right-angle to bottom edge of paper / slate (and the top right corner of page is toward writer). This is the same for colouring a picture or completing pencil control mazes.

2. Grip the pencil approximately 2.5 cm to 3.5 cm from the point.

3. Ensure the child keeps their wrist straight (not hooked) and their hand below the area where they are writing.



USEFUL TIPS:

- Left-handed children should be seated on the left side of a double desk, or next to another left-hander to avoid elbow clashing.
- Place a coloured star or strip at the left hand margin to prompt the child where to start. Left handed children will tend to start at the right of the page.
- Do make allowances for clumsiness, smudging and untidiness and emphasise their achievements with lots of praise.
- Ensure that the desk and chair are at a suitable height for the child. A low table makes a child raise his shoulders, leading to the “hooked” writing style. Left-handers adopt this posture because they are trying to see what they are writing and not smudge what they have just written with their hand.



Adaptive Pre-Writing Equipment

The development of a functional pencil grasp can be difficult to achieve, there are materials available to support this when your child is developmentally ready. Alongside this approach it is important to develop stability and strength within the upper limb and hand as this is the best precursor to developing a functional pencil grip.

Writing Aids

Triangular/other pencil grips:

These are often useful to help direct an immature pencil grasp to a more mature one as the grips often guide the thumb, index and middle finger into an appropriate position.



Triangular pencils:

As these pencils tend to be wider they make grasping easier as well as guiding the fingers into place around the pencil.



Weighted pencils/pens:

Extra weight on pencils can be a great assistance for hands that are slightly shaky.

Slant boards:

Slant boards are often useful for a child that has difficulty copying from the board as it reduces the distance they are required to visually track from the table to the board and visa versa. They often assist a child that tends to have a stooped posture over the table as it encourages a more upright position in writing.



Additionally, a slant board often supports the wrist and encourages the forearm to rest on the table more naturally thus giving extra stability within the hand. (P.S. you can firstly try a lever arch file sloped towards the child to identify if a slant board may work).

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