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HANDWRITING

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LETTER FORMATION ADVICE

Letter formation is part of the development of fluent handwriting and forms the foundation for joining letters in the later school years. It needs to become automatic so the child can concentrate on the content of their writing rather than having to use a lot of energy on how to write the letters. Lots of practice is the best way to help letter formation become automatic.

Helpful strategies

The sensory channels which can be used for learning to write are:

- ☺ Tactile channel i.e. sensation of touch
- ☺ Visual channel i.e. seeing
- ☺ Gustatory channel i.e. smelling
- ☺ Kinaesthetic channel i.e. sensation of movement (proprioception)
- ☺ Below are some suggestions to try and increase the multi sensory emphasis. Focus on these shapes:



Tactile activities

- ☺ Draw letters with the index finger in sand, paint or shaving foam.
- ☺ Practise writing the letters in the air.
- ☺ Trace letters or simple pre-writing shapes on child's back and let them guess the letter you have drawn.
- ☺ Practise writing the letters with their eyes shut as well as open.
- ☺ Write on paper that is hanging on the wall, and develop whole arm movements to formulate a pattern.
- ☺ Draw using crayons, chalk, pencils and pens and focus on the different feels of the writing when doing it.
- ☺ Use chalks to draw on the pavement.

Visual activities

- ☺ Writing on coloured paper, or black paper using silver or gel pens.
- ☺ Use aluminium foil to write on or construct the shapes or letters.
- ☺ Use different types of paper.
- ☺ Use special painting books where with a wet finger the colour appears by magic.
- ☺ Rainbow letters on to a piece of paper or chalkboard. Using a variety of colours draw the large letter and then to copy over it and make a rainbow.

Smell activities

- ☺ Writing with scented markers
- ☺ Add scented oil or essences to finger paints to make it smell.
- ☺ Use scented lotion for finger painting.

Proprioceptive activities

These activities would stimulate the joint muscles and provide feedback to the child brain regarding the movement they are making. They incorporate weight or resistance to the movement.

- ☺ Use a weighted brush to paint with or a heavy pencil.

Proprioceptive activities cont...

- ☺ Use a rolled up magazine as a wand to draw the letter in the air using both hands.
- ☺ Use wrist weights.
- ☺ Use a wobbling pen that is available from Boots, Asda or other shops.
- ☺ Draw on paper placed over sand paper or a textured surface to give a “bumpy” feeling about how the pencil is moving.

Letter spacing, sizing and placement

- ☺ Use a lolly stick / emery board to place after each word to assist with spacing
- ☺ Use a spoon – use small end for spacing between letters, and the large end for spacing between words.
- ☺ After completing work, ask child to highlight the over/under spaced words and letters.
- ☺ Use coloured writing lines to emphasise correct positioning



Letter Families

It is easier to teach the letters family by family. Each family is made up of letters with similar movements and directions so it will make it easier for your child to learn how the letters are formed. Try teaching them in the following order to make it easier for your child:

- ☺ Stick Family – i, l, t, f, x, z
- ☺ Curvy Family – v, u, w, y, j
- ☺ Clockwise Family – b, h, p, k, n, m, r
- ☺ Anti-clockwise Family – a, d, q, g, o, c, e, s
- ☺ All letters have a starting point and a direction. Discuss these with your child as they learn each letter (i.e. it starts at the top and goes down first)

Writing Programmes

- ☺ Handwriting without Tears is a multi sensory programme to help with learning letter and number formation. www.hwtears.com

- ☺ Teodorescu Percepuo-Motor Programme – Write from the Start (book 1 and 2) By Lois Addy and John Teodorescu (1996). Publishers: LDA: Camb. ISBN 1 88503 245 7. Tel: 0845 120 4776, web: www.ldalearning.com.



Helps develop fine motor and perceptual skills for effective handwriting.

- ☺ Speed up by Lois Addy is a kinaesthetic This programme to develop fluent handwriting for ages approx 8-13yrs.



HANDWRITING ADVICE

Below is some advice to enable your child to develop their handwriting skills.

Posture

- ☺ Feet flat on floor and hip width apart.
- ☺ Hips flexed at 90.
- ☺ Bottom and back supported.
- ☺ Chair tucked in under the table.
- ☺ Elbows supported on the table.
- ☺ If the chair has a deep seat, put a cushion behind the child's back to give him/her more support.
- ☺ Place a mirror on the wall beside the child so they can check their own posture.
- ☺ Tape a small picture of an upright sitting posture to the desk.
- ☺ Work out a simple physical reminder such as a slight stroke down the back or tap on the shoulder when posture is poor.
- ☺ Try an angled work surface using lever arch file.
- ☺ A smooth work surface (such as whiteboard) will provide less resistance to movement.
- ☺ Place something in palm of child's hand, to hold with little/ring finger. This encourages more isolated movements of the fingers when writing.

Pencil Grip

The way a child holds a pencil is important for a few reasons. A grip needs to be comfortable, not too tiring, and allow a child to move the pencil with the control needed to write neat letters. Always praise your child's efforts, particularly as handwriting can be so difficult.

The best grip for many of us is described below, although a child may find another way of holding the pencil which suits him/her better. It may be useful if you try to help your child to hold the pencil in this way, and remind him/her to check and correct his/her grip.

- ☺ Pencil balanced against hand
- ☺ The wrist is slightly extended (bent upwards)
- ☺ The tip of thumb and index finger are on the pencil with the index finger slightly flexed (bent)
- ☺ The side of the middle finger has the pencil resting on it at the level of the fingernail.
- ☺ A thick matt finish is easier than a thin shiny barrel surface.
- ☺ Pencil grips also can reduce the finger/pencil pressure by changing the relative tension of the fingers and thumb involved.

Paper position

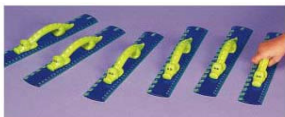
The position of the paper on the desk for writing is important. The paper should be principally on the same side of the body as the writing hand. The bottom of the paper then tilts down at the point, which is nearer the child's midline. (i.e.: slightly tilted to the right for right-handers, vice versa for left-handers). The child should stabilise the paper with the other hand.

Decrease fatigue / pressure

- ☺ Have short breaks between long periods of writing will help relieve the tension in hand muscles. Exercises can be done to help relax the hand.
- ☺ Hand relaxation techniques.
- ☺ Investigate nib type and flow of pen on paper.
- ☺ Larger barrelled pencils will reduce strain on finger joints.
- ☺ Propelling pencils with lead length long.
- ☺ Use carbon paper underneath work to write without making a carbon copy.
- ☺ Use mouse mat underneath paper, as excessive pressure will make a hole.
- ☺ Use different paper textures to encourage pressure awareness.

Equipment Available

- ☺ Rulers with handles: Alligator Easy Grip



Ruler -
approx £13.99
pack of 6.
Hope
Education, Tel:
08451 20 20
55

www.hope-education.co.uk

- ☺ Dycem Matting available in variety of colours and sizes. 20cm by 100cm roll.



Dycem Ltd,
Ashley Hill
Trading Estate,
Bristol. Fax: 0117
954 1194

Paper Position cont

- ☺ The optimum position is when a child's forearm is supported. The child should be encouraged therefore to move the paper up rather than her arm down.
- ☺ Tape paper at an appropriate angle on desk.
- ☺ Encourage frequent checking of paper position and body alignment.

Stick electrical tape on the table at 30° angle.

Equipment Available



Writing slopes can also be purchased from: IKEA, Phillip & Tracey Tel: 01264 332171 or

www.ldalearning.com

- ☺ Triangular Pencils: Homecraft Rolyan.
Description: pencil handhugger black



Tel: 08702 423 305

www.homecraft-rolyan.com

- ☺ Pencil Grips: Homecraft Rolyan. Description: pen & pencil grip pack of 12





HANDWRITING TIPS

Below is a list of top tips to consider when completing written work.

Position

- ☺ Consider position of the child within the classroom when copying from the board / book.
- ☺ Sit on the left side if right handed (right side if left handed) of the desk if possible, as this will allow space for the forearm to move without obstruction.

The chair

- ☺ Sit with your feet on the floor and your bottom well back in the chair.
- ☺ It is important that the chair is a suitable size, to provide stability whilst writing

The table

- ☺ Sit close to the table, making sure that the table is at the right height (e.g. elbows rest comfortably on the table).
- ☺ If you can have a sloping surface to work on; (e.g. an A4 file this helps you to sit up properly).
- ☺ Keep your work surface clear from clutter to allow room for the writing arm to move.

The Pen

- ☺ Handwriting can be made to look tidier by choosing a pen that suits the child.
- ☺ Fibre tip pens tend to blot the paper and so a roller ball pen may be better.
- ☺ It is best for the child to try a pen for a couple of weeks before trialling something different.

The paper

- ☺ Use lined paper to write on.
- ☺ Ensure that the paper is angled at about 30° - 45° (the paper should be parallel with the writing arm).
- ☺ Ensure that the child moves the paper up as the child nears the bottom of the page.
- ☺ The free hand should hold the paper steady.

The pencil

- ☺ Make sure that the pencil is sharp.
- ☺ Encourage the child to hold the pencil between their thumb, index and middle fingers. This can be helped by using a triangular pencil or pencil grip.
- ☺ The fingers should be placed approx 3cm from the tip of the nib, this will allow the child to see what they have written and avoid smudging work.

Developing Tripod Grasp, Pencil Driving

- ☺ Name the fingers: thumb is the "Dad," index finger is the "Mom", remaining fingers are the child and any brothers, sisters, friends or pets. (Use driver and passenger names to suit child's family).
- ☺ Say the pencil is the car. Just like in real car, Dad and Mom sit in front and the kids, friends, or pets sit in the back. For safe driving, Dad and Mom face forward (toward the point of the pencil).
- ☺ Dad shouldn't sit on Mom's lap (thumb on top of index finger) and Mom shouldn't sit on Dad's lap (index finger on top of thumb)! If children use an overlapping or tucked-in thumb, remind them that no one can sit on anyone's lap while driving!



HANDWRITING PREPARATION

Using touch & joint sensation

Touch and joint sense in the hands and fingers are important sense to develop when it comes to handwriting. Touch receptors in the skin and receptors in the joints help inform us about our immediate environment. The information gained is used to help guide our actions, making movements smooth and coordinated, for example, how much pressure we should use when writing so that we do not press the pencil too hard or too light on the paper.

Here are some activities to develop your child's awareness of his hands and fingers so that he can become more aware of the difference between heavy and light pressure when writing.

Arm activities

- ☺ "Pushing": place hands on chair, wall or table to do "push-ups"
- ☺ "Pulling": using monkey grip position, pull hands apart, keeping forearms horizontal and close to the chest (but not resting on the chest).
- ☺ "Praying": push palms and fingers together, keeping forearms horizontal and close to chest.

Hand & finger activities

- ☺ Brush hands and apply joint compression to fingers e.g. push each finger joint back into itself.
- ☺ Firmly but gently push/pull along the fingers from palm to tips e.g. put on/take off "magic writing gloves".
- ☺ Quickly slap all fingers, backs and fronts, using both hands together.
- ☺ "Piano": use both hands, tap fingertips on table and/or imitate sequence

- ☺ "Spider Push-ups": use both hands, spread fingers apart and match thumb and fingertips together, then "push" in and out.
- ☺ Clapping/slapping games:
 - hand pile-up game
 - name game
- ☺ Fill a hollow ballpoint pen with lead ball bearings to increase weight of pen for writing tasks. The extra weight gives greater stability and sensory feedback.
- ☺ Write with paper over a textured surface such as embossed plastic or sandpaper. A 2B pencil is very useful, as it will provide a visual cue for pressure going darker or lighter.
- ☺ Squeeze "stress ball" or a squash ball with heavy pressure, then light pressure to sense or feel the different pressures.
- ☺ Squeeze the ball with whole hand then each finger with thumb.



PENCIL AEROBICS

The following are exercises encourage the development finger and hand strength:

Popcorn ride

☺ Bounce your body up and down whilst sitting on your chair. Try 15 bounces.

Hand muscle stretch

☺ Make a tabletop with your fingers, bend your knuckles and keep fingers straight. Then close them up making knuckles straight and fingers bent. Try this 10 times.

Pencil pickup

☺ Put your pencil down facing right, pick it up and be ready to write.

☺ Put your pencil down facing left, pick it up and be ready to write.

☺ Don't forget, only use one hand – try this 3 times each side.

Pencil roll

☺ Place your palm facing up with your pencil on it. Roll your pencil from your palm into your fingertips 10 times – using movement of your fingers and wrist only.

Pencil push ups

☺ Hold onto the pencil as if you were going to write – using your fingers only, walk up the pencil! And when you get to the end walk back down. Try this 5 times.

Finger pull

☺ Make a circle with your thumb and fingertips – have your partner do the same – link your circles – now try to pull your partners circle apart!



HANDWRITING AS A SENSORY-MOTOR/PERCEPTUAL SKILL

Heavy Pressure

Heavy pressure through the writing instrument can slow writing without output significantly. We know that many children struggle to monitor pressure through their limbs due to what is termed poor proprioception, therefore we need to help the child to develop an awareness of the amount of pressure placed through the limbs, the upper limbs in particular. The following will help:

- ☺ Regularly undertake a series of exercises whereby pressure is placed through the upper limbs, ie crawling games, wheelbarrows, ladies press-ups, elephant walks etc. these should ideally be incorporated into a daily schedule.
- ☺ Provide a light-up pen which can be bought cheaply from stationery shops. Challenge the child to write so that the light does not come on.
- ☺ Play a game of MI5; provide a pad created by placing a layer of paper alternately with carbon paper. Ask the child to write a secret message so that only one agent can read it. Initially the pressure may make the child write so that the message can be seen on 3 or 4 copies, but by encouraging the child to self-monitor, pressure will reduce.
- ☺ Use a hard leaded pencil such as HB so that writing is not easily smudged.

Writing Alignment

Many children struggle to plan and organise their movements, they will also find writing across the page in a left to right horizontal direction very difficult. Guidance is therefore needed to help them with writing alignment:

- ☺ Always use lined paper rather than a line guide which easily moves.
- ☺ Mark a margin at the left hand side in a clear colour or place starting points at the left margin to reiterate where each line of writing should start.
- ☺ Create coloured lines on plain or pastel coloured paper encouraging the child to write on a different colour each line (this can be done easily using a computer with colour printer).
- ☺ If a child has significant difficulties in this area, create coloured bands across the paper (rather than lines) encouraging the child to write within each band before proceeding to the next.
- ☺ Provide 'Right line' or 'hint-print' paper which incorporates lines which are slightly raised giving a tactile reference when writing each letter or use glue.

Light Pressure	Letter Formation
<p>Some children will have the opposite problem to that described above in that they will not apply enough pressure through the writing instrument. This will affect control and will make writing appear 'spidery' and poorly formed. To help with this:</p> <ul style="list-style-type: none"> ☺ Provide an angled board. The angle should be approximately 25°. This will ensure that the wrists are positioned on the writing surface. ☺ Provide weighted wrist-bands which would provide additional sensory feedback to the wrist area, increasing the child's awareness of their hand, wrist and arm position. ☺ Lower the table slightly so that the hips are flexed more than 90°. This enables the child to obtain the assistance of body weight to assist with pressure through the writing instrument. ☺ Use softer leaded pencils such as 2B so writing appears darker. <p>Fine Motor Control</p> <p>The combination of poor sensation, inadequate tactile sensation and poor pressure awareness will result in poor motor control and the child may need to practice simple motor tasks to develop an ability to track and scan ahead.</p> <p>To develop this:</p> <ul style="list-style-type: none"> ☺ Introduce puzzles such as mazes; grade these in complexity. ☺ Use electronic tracker games where a buzzer sounds if the wire is touched, these usually come with 3 levels of difficulty. ☺ Use dot to dot puzzles. ☺ Button and bead threading games. ☺ Cutting out complex outlines with scissors. ☺ Pattern making using geoboards. ☺ Construction activities such as Lego and Knex. ☺ Encourage creative activities such as collage and papier-mâché. 	<p>It may seem incomprehensible why certain children cannot seem to reproduce familiar letter shapes and forms even when these are placed directly in front of them. This is due to poor form constancy, a vital perceptual skill. To develop an appreciation of form it is important to use variety of multisensory activities to reinforce the child's appreciation of shape and size:</p> <ul style="list-style-type: none"> ☺ Play games which reinforce shape and size, ie, sorting boxes, ball games, shape stencils, Spirograph. ☺ Create shapes using dough or clay encouraging the child to mould and knead the material into a clear shape (this reinforces tactile sensation). ☺ Create letter forms out of Play-Doh and see if the child can detect what the shape or letter form is with their eyes closed (this reinforces proprioception and tactile sensation). ☺ Encourage the establishment of individual shapes before introducing new ones, ie; clearly produce a circle before an oval or square. ☺ Use 'Rol n Write Alphabet' sensory forms to help with direction. www.ldalearning.com ☺ Using an index finger, create letters and shapes in trays of sand, shaving foam or silly soap. ☺ Write letters on rough sandpaper using a variety of medium, ie, soft leaded pencil or wax crayons (the fine vibrations reinforce Kinaesthetic sense). ☺ Develop an appreciation of form using sections from the 'Write from the Start Perceptuo-Motor Handwriting Programme' especially sections 1A-2A. ☺ Encourage sequencing in respect to size (jigsaw puzzles can be bought from LDA Ltd). ☺ Use outlines to reinforce letter shapes, ie, broken lines, dot to dot. ☺ Use the Charles Cripps 'A Hand for Spelling' programme to reinforce letter shapes.

Spatial Orientation

Children who struggle to judge distances and assess space will not only affect gross motor skills, but will also have a bearing on handwriting. Spaces between words may be omitted or placed erratically. This results in text becoming increasingly illegible. It is therefore crucial to teach the child how to provide adequate space between words and to space letters appropriately. To do this:

- ☺ Use the 'Write from the Start Perceptuo-Motor Handwriting Programme', especially section 2B.
- ☺ Practice writing on grid paper, placing each letter in a square and a space between each word.
- ☺ Introduce joined writing very early in the child's education, this is guaranteed to improve spatial organisation.
- ☺ Place a finger tip after each word before writing the next word.
- ☺ Play games which involve judging distances, ie, obstacle courses.
- ☺ Use board games which involve spatial organisation such as Connect 4, peg board patterns etc.
- ☺ Play 'How many steps?' standing with the child, ask, 'How many steps will it take you to reach that chair?' The child then guesses. They are then encouraged to take those steps and monitor their own movement. Initially the child may grossly under or over-estimate the distance, but with time the estimations gradually become more accurate.

Letter Orientation

It is often a common complaint that children frequently invert or reverse letter forms so that confusion arises between p/d, b/d, p/q, t/f, m/w, u/n. In addition, letters may be formed in reverse with the letter 'o' being produced in a clockwise direction rather than anti-clockwise. To help this:

- ☺ Use 'Rol n Write' forms which help the child to appreciate the direction of writing: www.ldlearning.com
- ☺ Introduce Finger Phonics books from the Jolly Phonics series which provide an indented image of each letter to help formation.
- ☺ Provide a starting arrow to show which way a letter should be produced, ie, the letter 'c' is orientated in an anticlockwise direction and the letter 'b' requires a clockwise orientation.
- ☺ Join letters as early as possible even in Reception), this significantly helps with orientation.
- ☺ If the 'p' and 'b' continue to be used interchangeably open formation to **b p**
- ☺ Use odd one out games to help the child to determine discrepancies in orientation.
- ☺ Write letters in the air using whole arm movements with eyes closed to reinforce kinaesthetic appreciation of letter orientation.
- ☺ Develop a sense of directional orientation using games such as 'Bop it Extreme II' available from most Argos stores.