



WRITING HANDWRITING

Assessment and Activities for Handwriting

Designed to address difficulties
with letter formation, legibility,
speed, fluency and presentation
skills in Key Stages 1, 2 and 3

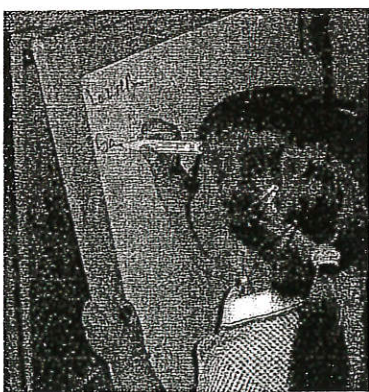
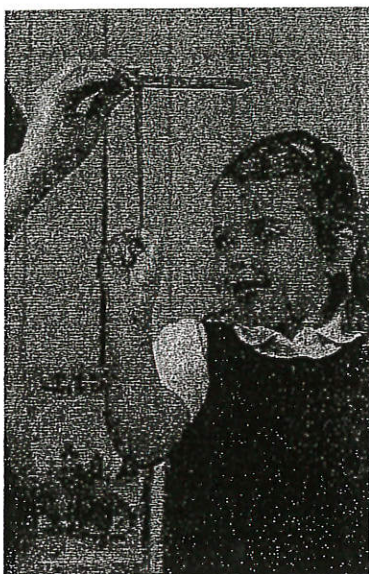
A Practical Guide For Teachers

Regional LA Support Services (ReLEASS)



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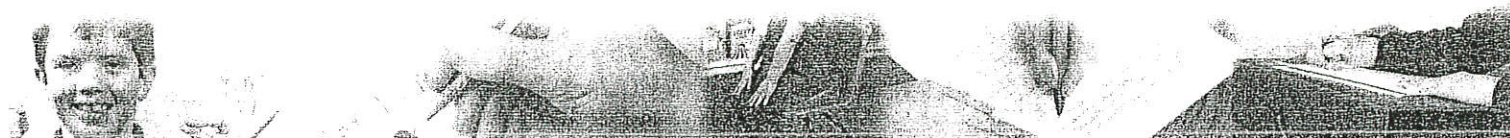
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INTRODUCTION

- This is the fourth in a series of publications designed to support pupils with co-ordination difficulties in mainstream schools.
- It has been compiled by ReLEASS (Regional LEA Support Services) a group of teachers from across the Yorkshire and Lincolnshire regions.
- It is written to address the needs of pupils of any age who have difficulty with letter formation, legibility, speed, fluency and presentation skills.
- It is a practical resource for use by teachers and support assistants.

It contains:-

- ▶ a photocopiable pupil assessment record
- ▶ practical activities to develop hierarchical skills for handwriting
- ▶ pointers to assist in writing individual targets or programmes
- ▶ guidance for developing alternative recording strategies
- ▶ suggestions relating to the use of ICT to support writing
- ▶ recommended resources and suppliers.

- Skills are addressed in an hierarchical order. However the book can be used as a 'dip-in' resource, therefore some overlap and repetition of strategies may be noted.
- It is intended to complement but not replace a school's handwriting policy.
- It can be linked with the Primary Strategy Wave 3 (DfES 2005) and the Handwriting and Presentation Key Stage 3 National Strategy (DfES 2004).
- For ease of reading 'he' has been used instead of he/she.

The booklet can be used in the following ways:

- to give the reader a greater understanding of the developmental nature of handwriting
- to help profile areas of difficulty in handwriting
- to support good classroom practice for pupils with handwriting difficulties by providing strategies for intervention
- to assist with targeted support for small groups and individuals.

N.B.

In this publication:-

- ▶ cursive script is promoted
- ▶ entry and exit strokes are recommended for all pupils
- ▶ all letters (except capital letters) are started on the line so that the pupil only has one decision to make about starting points.

N.B.

For some pupils a further referral and/or assessment may be necessary. Discussion with the SENCO and parents may result in a referral to paediatric therapy services via the school medical service or the family GP.

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PUPIL ASSESSMENT RECORD

(photocopiable sheet)

Name: _____ DOB:

--	--	--	--	--	--

 Year group:

--	--

School: _____ Date of assessment:

--	--	--	--	--	--

Assessed by: _____ Position held: _____


PRE-REQUISITE SKILLS

Can the pupil ...?

	hold objects in a palmar grasp	
	identify objects by touch	
	use the index finger in isolation	
	perform finger and thumb opposition using either hand (touch each finger independently with the thumb)	
	hold objects in a pincer grasp	
	show acceptable finger/hand strength	
	demonstrate shoulder stability	
	rotate wrists/forearms	
	demonstrate hand dominance	
	cross the midline of the body	
	demonstrate bi-lateral integration (use both hands together)	

PRE-WRITING PATTERNS

Can the pupil ...?

	understand language related to position and movement	
	track from left to right	
	draw horizontal/vertical lines and circles	
	draw combined vertical and horizontal lines eg L T + 	
	draw diagonal lines	
	draw 2D shapes using diagonal lines eg triangle, diamond	



PUPIL ASSESSMENT RECORD

(photocopiable sheet)

SITTING AND WORKING POSITION

Can the pupil ...?

	place his feet flat on the floor with bottom to the back of the chair	
	maintain an upright body position keeping his head in the middle	
	keep his head over the paper with eyes looking down	
	maintain relaxed shoulders with forearms resting on the table	
	angle the paper appropriately	
	fix the paper using the non-writing hand	

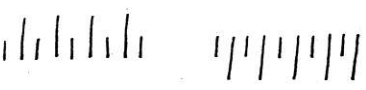
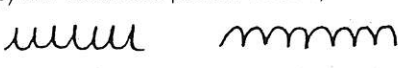

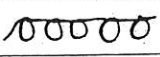


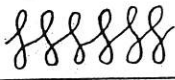
HANDLING PENCILS AND PENS

Can the pupil ...?

	use a tripod pencil/pen grasp	
	apply appropriate pencil/pen pressure to the paper	

MOVEMENT PATTERNS FOR WRITING

Can the pupil ...?

	copy and continue patterns using downward strokes which finish on the line and below the line 	
	start on the line and copy and continue a pattern made by combining a push and pull action 	
	start on the line and copy and continue a pattern which loops in a diagonal direction 	
	copy and continue an anti-clockwise circular pattern 	
	start on the line and copy and continue a pattern which combines a clockwise and anticlockwise movement 	
	start on the line and copy and continue a zigzag pattern 	
	start on the line and copy and continue a loop pattern 	

Writing Handwriting: Assessment and Activities for Handwriting by ReLEASS



PUPIL ASSESSMENT RECORD

(photocopiable sheet)

LETTER FORMATION INCLUDING PHONEME/GRAPHEME CORRESPONDENCE (the relationship between a sound and the letter/s)

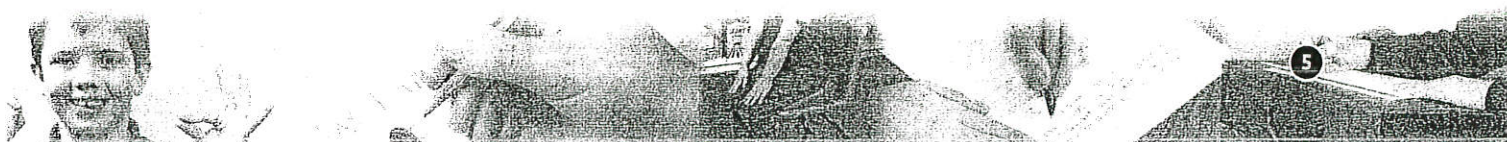
Can the pupil ...?

	link a phoneme to its grapheme (sound to letter symbol)	
	write a grapheme from an oral cue (letter symbol from sound)	
	form all lower case letters with entry and exit strokes starting on the line	
	size the body of letters to 'x' height	
	write ascending and descending letters correctly	
	show correct orientation of letters avoiding reversals and inversions	
	place words on the line	
	space words appropriately	
	identify and form capital letters correctly	

PRESENTATION

Can the pupil ...?

	write with fluency	
	maintain sufficient stamina for writing	
	align work correctly (starting at the margin) and continue across the page	
	stabilise a ruler correctly to underline	



PRE-REQUISITE SKILLS

The following skills need to be established before a pupil can successfully develop effective hand skills. Encourage the pupil to carry out the following activities in a variety of positions: sitting, prone (lying on the front), low kneeling (bottom on heels), kneeling on one knee, standing. Make a note of emerging hand dominance/hand usage.

Can the pupil hold objects in a palmar grasp? (Figure 1)

If not, try this:

- Hold a stick on a flag/puppet.
- Squeeze and release a soft ball/ball of tissue.
- Squeeze water from a small sponge.
- Pass a small ball from hand to hand using a whole hand grasp.
- Hold skipping rope handles or a joystick.
- Steer a bike.

Can the pupil identify objects by touch?

If not, try this:

- Show the pupil a small number of objects, select one object and ask the pupil to find the same object from a feely bag.
- Repeat the above using a feely bag without visual prompts eg 'Can you find a car/teddy?'
- Hide objects in a sand tray and ask the pupil to name the object found before it is revealed.



Figure 1: Palmar grasp

Can the pupil use the index finger in isolation?

If not, try this:

- Make finger patterns in dough.
- Make patterns in finger paint/shaving foam using the index finger.
- Use finger puppets on the index finger.
- Sing finger rhymes eg 'Two little dicky birds'.
- Pop bubbles with the index finger.
- Use the index finger to pop bubble wrap laid on the table.
- Pop Rice Krispies® with the index finger.

Can the pupil perform finger and thumb opposition using either hand? (Touch each finger tip independently with the thumb.)

If not, try this:

- Roll plasticine between thumb and each finger.
- Fasten press-studs using different fingers to the thumb.
- Touch each finger to the thumb in turn with guidance from the other hand.
- Pop bubble wrap between each finger tip and thumb.
- Perform finger and thumb opposition with the arms stretched out to the side to remove the visual cue.

Can the pupil hold objects in a pincer grasp? (Figure 2)

If not, try this:

- Take raisins/small objects out of an ice cube tray.
- Make collages with tiny objects.
- Peg number cards onto a line.
- Play tiddlywinks.
- Pop bubble wrap.
- Use tweezers to move objects from one container to another.

Can the pupil show acceptable finger/hand strength?

If not, try this:

- Knead dough with both hands.
- Roll dough/plasticine into sausage shapes using both hands.
- Roll dough/plasticine with a rolling pin.
- Squeeze water from sponges.
- Use a hole/craft punch (check the appropriate strength of the punch) with a variety of card/paper to make confetti/dotty pictures in the style of the artist, Seurat.



Figure 2: Pincer grasp

Can the pupil demonstrate shoulder stability?

If not, try this:

- Play with push/pull toys.
- Play 'Row, row, row your boat' song.
- Swimming actions on water or land.
- Commando crawling.
- Climb on play/PE apparatus.
- Clip pegs onto a washing line above head height.
- Bunny jumps across the floor.
- Animal walks eg spider/elephant walks.
- Chair press ups, see page 20.

Can the pupil rotate wrists/forearms?

If not, try this:

- Hit a balloon upwards with the palm of the hand.
- Play with 'rain maker' tubes/egg timers.
- Turn knobs on toys eg radios, cookers.
- Offer screw toys eg those with nuts and bolts.
- Sharpen pencils.
- Turn keys to open/operate toys.
- Fishing game with a reel line.
- Look through a kaleidoscope.
- Open plastic screw top jars.



Can the pupil demonstrate hand dominance?

Hand dominance is usually established by the time a child starts school. It is difficult to orientate letters correctly without hand dominance.

If not, try this:

- Encourage a dominant hand by:
 - placing an easel/blackboard (with a writing surface on either side) end on and close to the pupil (Figure 3)
 - then ask the pupil to make continuous circular patterns across the paper away from the body
 - repeat twice daily for a week and watch for emerging hand dominance.
- Determine the favoured hand:
 - ask the pupil to throw a bean bag/ball into a hoop (note favoured and most successful hand).
- ask the pupil to bounce and catch a ball (note the most accurate which should be regarded as the dominant hand).
- Develop the ability to name the left and right side of the body:
 - introduce the words left and right; give visual cues eg indicate 'L' for left by using a lemon wristband on left hand, red band on right.
 - give verbal cues eg for right handers 'I write with my right hand'.
- Reinforce knowledge of right and left: make up games eg with eyes closed, touch your right ear with your left hand.

N.B.

Some pupils may be truly ambidextrous and never develop a completely dominant hand.

Can the pupil cross the midline of the body?

If not, try this:

- Pick up beads placed on the right side with the left hand and vice versa.
- Play 'Hot potato': pass a bean bag around a circle crossing the arm in front of the body.
- Sit cross legged, pat the right knee with the left hand and vice versa.
- Join dots placed horizontally from one side of a large piece of paper to the other.
- Brain Gym™, 'Activate' activities.

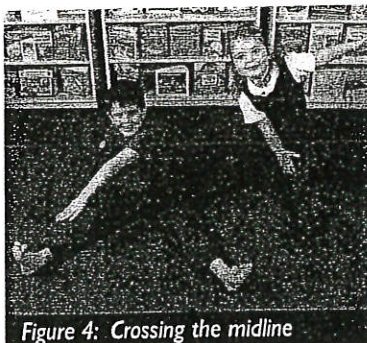


Figure 4: Crossing the midline

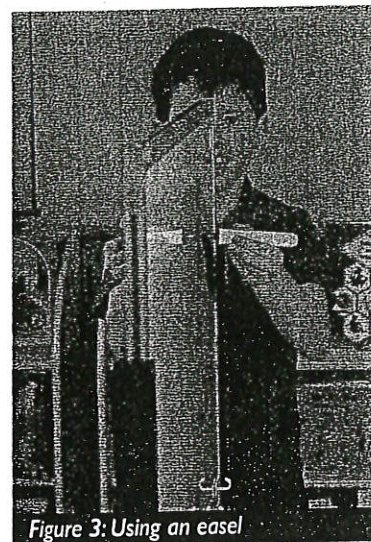


Figure 3: Using an easel

Can the pupil demonstrate bi-lateral integration (use both hands together)?

If not, try this:

- Thread beads (grade beads and leader according to ability: progress from dowelling to fine cord).
- Hold a container with one hand and pour rice/water from another container with the other hand.
- Hold the bowl and stir with the other hand when cooking.
- Peel a banana.
- Fasten a zip whilst holding the garment.
- Tear paper into strips.
- Use a knife and fork to cut playdough/food.

PRE-WRITING PATTERNS

Movement patterns are learnt initially in the whole arm and transferred down to the hand, where they are located when the skill of handwriting is developed. The large writing produced by children developing early skills is due to the domination of arm movements while standard writing is produced by wrist and finger movements. Control over movement is transferred down to the fingers in stages and this allows the writing to become smaller (this is a process which is normally completed by the time the child is seven or eight).

Can the pupil understand language related to position and movement?

The pupil needs to recognise and respond to round, up/down, across, forwards/backwards, stop, left/right, top/bottom.

If not, try:

- Participate in action rhymes eg 'Grand old Duke of York'.
- Reinforce language in everyday activities eg the coat zip goes up and down.
- Incorporate positional language into PE lessons.
- Use gross motor movements, walking round circles drawn on the playground, walking forwards/backwards.
- Wipe the table eg round and round, across.
- Complete dot-to-dot activities: from top to bottom, across the page encouraging a left to right action.
- Programme the Roamer Turtle™ to make backwards/forwards movements.

Can the pupil track from left to right?

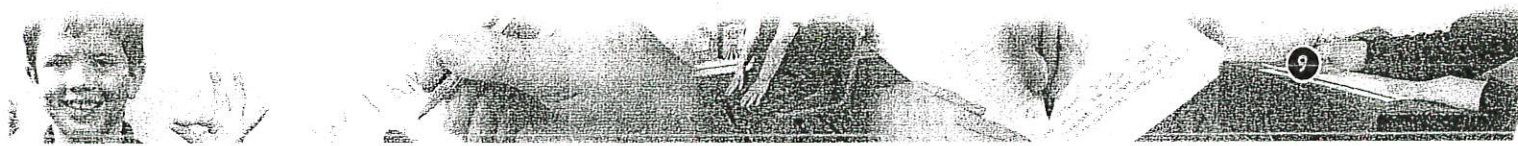
If not, try this:

- Use toy cars to track between 'road' lines made with string.
- Encourage visual tracking: follow a torch light from left to right, follow the action of a toy car moving from left to right.
- Use streamers (made by attaching crepe paper strips or ribbons to a tube or stick) from left to right.
- Make lines/circles with a wet paintbrush on a dry wall.
- Trace the finger along a textured line/circle made with string/sandpaper.
- Paint/draw lines from left to right without taking the brush/pencil off the paper.
- Make patterns in a line across a page using printing materials eg potato printing, rubber stamps.
- Complete dot-to-dot activities encouraging a left to right, top to bottom action.


Can the pupil draw horizontal/vertical lines and circles?

If not, try this:

- Demonstrate large arm movements making lines/circles/figures of eight in the air asking the pupil to copy (the adult needs to be aware when demonstrating that he should either stand with his back to the pupils or model the outlines if facing).
- Use 'Write Dance' (a progressive music and movement programme for the development of pre-writing and writing skills in children).
- Play 'Simon Says' to copy movements.
- Copy lines/circles on an interactive whiteboard with the finger.
- Make lines/circles with sticks/rakes in a sand tray.
- Copy/draw lines/circles on a small whiteboard.
- Encourage drawing lines within a template.
- Encourage stopping at the join of the circle rather than making continuous circles by making a stop with Blu Tack™.
- Track between widely-spaced parallel lines on large pieces of paper/whiteboards with big markers. Reduce the size of the paper, space between the parallel lines and the writing implement as skills improve.
- Use photocopiable resources eg 'Fine Motoring'.
- Progress to combining vertical and horizontal line and circles.



Can the pupil draw combined vertical and horizontal lines?

eg L T + 

If not, try this:

- Repeat above activities.
- Check visual perceptual skills if difficulty persists. Refer to 'Look, See ... Know and Understand'.

Can the pupil draw diagonal lines?

If not, try this:

- Make large diagonal arm movements.
- Make diagonal patterns with elastic bands on Geo boards.
- Complete dot-to-dot activities incorporating diagonal lines eg roof of a house, crocodile teeth.

Can the pupil draw 2D shapes using diagonal lines eg triangle, diamond?

If not, try this:

- Put stars on points of a triangle/diamond. Join up stars using mark makers.
- Offer tactile activities such as joining raised dots made by indenting with a blunt needle.
- Join holes that have been punched in the form of a triangle or diamond.
- Join the dots to make a triangle/diamond.
- Finish off lines in a triangle by going over dotted lines.

Be aware that children usually learn to copy shapes in the following order:

Circle 3 years

Cross 4 years 1 month

Square 4 years 6 months

Triangle 5 years 3 months

It is recognised that if a pupil can copy the following shapes

I - O L T +

(which should be developed in this order) they are ready to start learning to write letters. If a child reaches the age of five years and is unable to copy these shapes they may find it difficult to learn to write letters (reference Kate Ripley).



SITTING AND WORKING POSITION

Can the pupil place his feet flat on the floor with bottom to the back of the chair? ie with hips, knees and feet at a 90 degree angle (Figure 5)

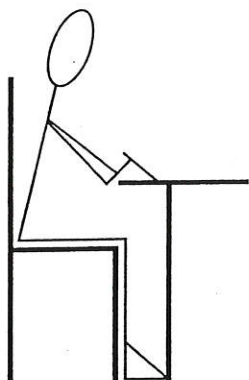


Figure 5: Sitting position

If not, try this:

- Use a foot block to help with stability if the pupil's feet do not touch the floor.
- Change the size of the furniture where possible to enable the pupil to rest his forearms on the table/desk.
- Encourage the pupil to sit upright with approximately equal distance between the eyes to the paper and the knuckles and elbow.

Can the pupil maintain an upright body position keeping his head in the middle?

If not, try this:

- Provide opportunities for the pupil to draw/paint in a variety of positions
 - lying on the stomach (prone)
 - standing at a painting easel or using a chalkboard
 - kneeling with the bottom off the floor and thighs and back in an upright position (high kneeling)
 - lying on his side, resting on one elbow.

These positions help the pupil experience pressure on different parts of the body and become aware of body parts in relation to each other (proprioception).

- Provide a cushion eg The 'Movin'sit' cushion, which tilts the pelvis forward. This results in a more upright sitting position and prevents slouching. (Figure 6)
- Use sloping boards or consider choosing desks with sloping tops when purchasing new furniture. These will encourage pupils not to lean forward and therefore reduce neck flexion.
- Ensure that the pupil's desk is approximately elbow height (when seated) to help maintain an upright position.
- Encourage the pupil to form a 'triangle' with the body. The head forms the apex with the hands on the table as the base. (Figure 7)

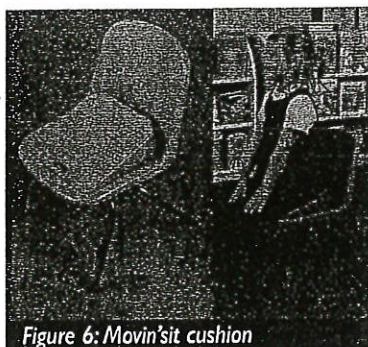


Figure 6: Movin'sit cushion

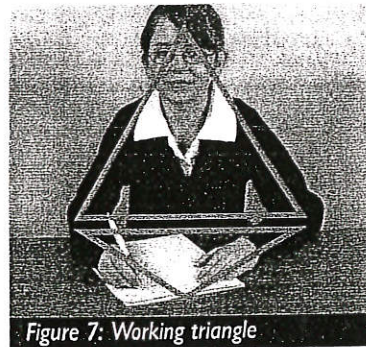


Figure 7: Working triangle

Can the pupil keep his head over the paper with eyes looking down?

If not, try this:

- Try an angled board/file of between 20° and 45° to aid stability and maintain the head in a good position thus reducing strain on the neck.
- Consider purchasing a commercially available angled board, such as 'Writestart Desktop', 'Write Angle®', or 'Posture Pack'. (Figure 8)
- Improvise by using an A4 lever arch file.
- Ensure that shadows caused by natural daylight or artificial light do not obscure the pupil's writing.

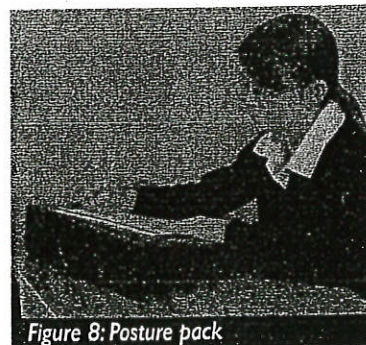


Figure 8: Posture pack





Figure 9: Relaxed shoulders

Can the pupil maintain relaxed shoulders with forearms resting on the table?

If not, try this:

- Encourage the pupil to write with elbows resting on the table. (Figure 9)
- Encourage the pupil to move the paper up as he writes rather than move the arm down.
- Check whether the seating position forms a triangle. (Figure 7)
- Check that the height of the table and chair is correct. Ideally, the table should be half the pupil's height and the chair a third of his height.
- Consider purchasing adjustable height tables available from a range of suppliers. (Resources section)

Can the pupil angle the paper appropriately?

If not, try this:

- Use an angled writing mat eg My write-well mat®. This mat is suitable for left and right handed pupils. (Figure 10)
- Encourage the pupils to angle the paper to 30°-45° (roughly the same angle as the forearm). (Figure 11)
- Position the paper slightly offset to the midline of the body (to the right for right handers/left for left handers).
- Provide a visual cue by sticking a template of a book to the table.
- Use a strip of masking tape to indicate the correct angle.

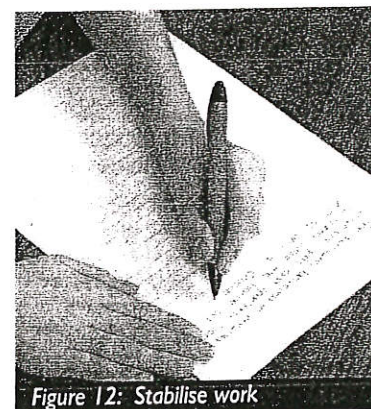


Figure 12: Stabilise work

Can the pupil fix the paper using the non-writing hand?

If not, try this:

- Encourage the pupil to rest the non-writing hand on the edge of the paper. (Figure 12)
- Use a template of a hand correctly positioned as a visual prompt.
- Place the paper on a non-slip surface eg Dycem® or fix with Blu Tack®.
- Use a clip board.

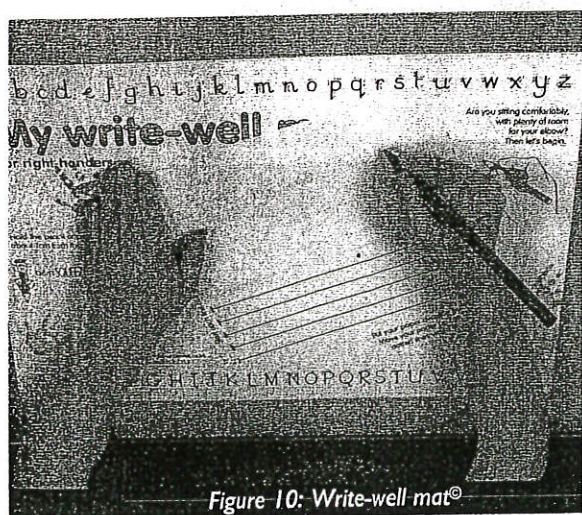


Figure 10: Write-well mat®

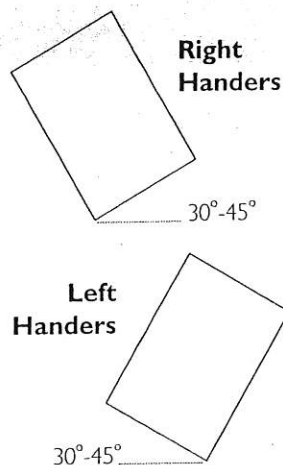


Figure 11: Angle the paper

HANDLING PENCILS AND PENS

Can the pupil use a tripod pencil/pen grasp?

If not, try this:

- Offer a range of pencils, including maxi and triangular, on each desk so that pupils can select one which is comfortable.
- Offer a selection of moulded grips which require the pupil to position his fingers correctly.
- Encourage pupils to experiment with different sized and shaped barrelled pens.
- Ensure that writing is not obscured by holding the pencil/pen too low. If necessary, use coloured tape or a rubber band to indicate the correct position.
- Exercise thumb and index finger joints by making a circle, then the shape of a bird's beak. (Figure 13)
- Exercise the thumb and index finger joint by pulling down on a secured elastic band, using a pincer grip. (Figure 13 - inset)
- Pick up small objects with the thumb and finger to encourage a pincer grip eg sorting beads by colour, placing pegs into a peg board.

NB

If a pupil uses an irregular pencil grasp which is effective, consistent and comfortable, allow him to continue.

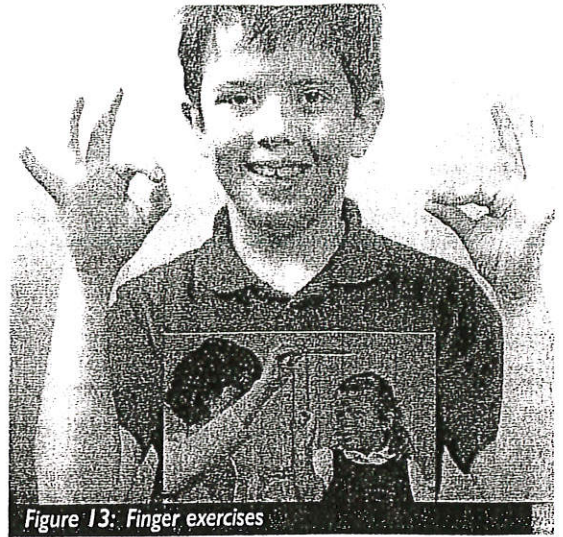


Figure 13: Finger exercises

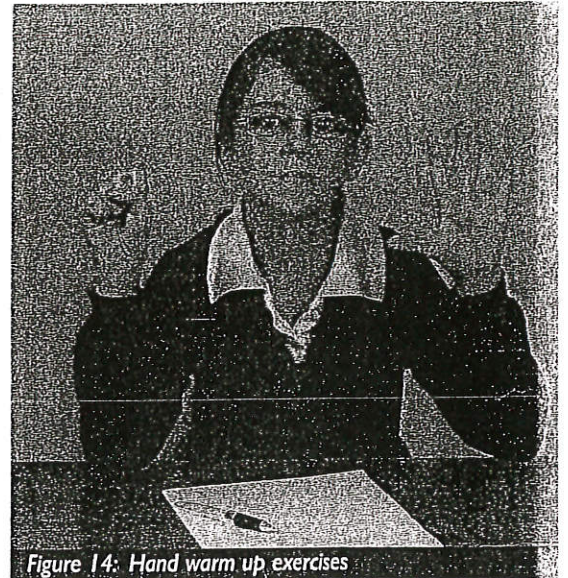


Figure 14: Hand warm up exercises

Can the pupil apply appropriate pencil/pen pressure to the paper?

If not, try this:

- Avoid over-sharpening pencils.
- Experiment with different height angle boards.
- Try offering pencils of different hardness.
- Perform hand warm up exercises before writing to trigger the sensory stimulation required for adjusting pressure:
 - shake, flap or rotate hands
 - clench fist and release with alternate hands (Figure 14)
 - walk fingertips along desk
 - touch thumb to each finger with arms held out at side
- finger tip presses on table top
- pincer grip exercises as outlined above.
- If too much pressure is used try:
 - encouraging appropriate pressure by playing games eg 'tickling the paper' to make light marks, secret messages, detective notes
 - layering paper/carbon/paper/carbon/paper to make a sandwich and ask pupils to write whilst moderating their pressure to avoid marking the bottom layer of paper.
- If too little pressure is used try:
 - developing finger/hand strength using suggestions on page 7
 - drawing inside a box lid, pushing against the edges
 - drawing inside/outside templates
 - using fibre tip pens or gel pens
 - layering paper/carbon/paper/carbon/paper as above and ask pupils to write with sufficient pressure to mark the bottom layer of paper.

MOVEMENT PATTERNS FOR WRITING

Cursive handwriting is made up of a group of movement patterns. The following patterns are pre-cursors to developing joined script and are necessary to develop fluency and flow. It may be necessary to establish/re-establish writing patterns.

Can the pupil copy and continue patterns using downward strokes which finish on the line and below the line? eg



Can the pupil start on the line and copy and continue a pattern made by combining a push and pull action? eg



Can the pupil start on the line and copy and continue a pattern which loops in a diagonal direction? eg



Can the pupil copy and continue an anti-clockwise circular pattern? eg



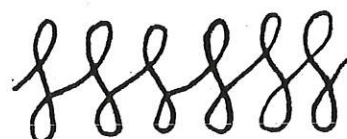
Can the pupil start on the line and copy and continue a pattern which combines a clockwise and anticlockwise movement? eg



Can the pupil start on the line and copy and continue a zigzag pattern? eg



Can the pupil start on the line and copy and continue a loop pattern? eg



If not, try this:

- Make the patterns in the air (in the above order).
- Make patterns in sand for pupil to trace over with a stick.
- Make patterns in tactile material eg shaving foam for pupil to trace over with the finger; copying patterns in finger paint.
- Trace over patterns on paper with a variety of markers.
- Copy larger patterns on white boards/paper with various markers.
- Reduce the size of the patterns.
- Copy the patterns between parallel lines (reduce the width of the lines as skills improve).
- Highlight the line to indicate where to stop.
- Use commercially produced programmes which address movement patterns eg 'Write from the Start' (age 4-8), 'Speed-Up' (age 8-13).

LETTER FORMATION including PHONEME/GRAPHEME CORRESPONDENCE (the relationship between a sound and the letter/s)

- Ensure that pupils can produce movement patterns proficiently before embarking on this section. (Page 14)
- Handwriting must be taught in context.
- A conscious decision has been taken by the authors to recommend that pupils start every letter on the line. Experience has shown that pupils benefit from having to make only one decision about where to position the pencil at the beginning of each letter.
- Whilst this may be true for most pupils there may be some who are unable to cope with the directional changes. Others with visual perceptual difficulties may be confused by entry and exit strokes. In these cases printed script may be used with entry and exit strokes being added once letter shapes are internalised.
- In the context of this publication it is recommended that the formation of lower and upper case letters is taught separately.
- Handwriting schemes vary greatly therefore individual establishments will have to make decisions about which style of letters to use. (Figure 15)
- The handwriting fonts used in this publication are available in 'Handwriting for Windows™'.
- It is assumed that 't' is crossed and 'i' and 'j' are dotted after the whole word has been written.



Figure 15: Lettering with a choice of styles

Can the pupil link a phoneme to its grapheme (sound to letter symbol)?

If not, try this:

- Ensure hearing and/or vision has been checked if pupils have difficulty hearing/discriminating/articulating sounds: problems commonly occur with p/b, k/g, th/v, t/d, d/g.
- Sort objects that start with the target sound eg bat, ball, bag, bell, bun.
- Colour the animals which start with the 'c' sound eg cat, camel, cow.
- Guess a letter by its shape using a feely bag.
- Play memory games such as Kim's game with letters instead of objects.
- 'I spy something beginning/ending with...'
- Make rubbings of letters emphasising feel and shape.
- Match a phoneme to a written letter/picture.
- Sort letters into straight/curved forms.
- Find the letter/s that represent a given sound.
- Practise alphabet sequencing in upper and lower case letters.
- Match upper/lower case letters.

c a d g q - oval (stop at 2 o'clock)

e s f s - similar to oval pattern

i u t l - straight line

h b k - ascender and forward movement

r n m p - straight line with forward movement

i u y j - cup letters

w x z - diagonal letters

o - (stop at 12 o'clock)

Watch out for the tricky e

Note: you can't start an e on the line if it follows o r v w

Figure 16: An example of letter formation family groups

Can the pupil write a grapheme from an oral cue (letter symbol from sound)?

If not, try this:

- Assess the pupil's ability to write a letter in response to an oral cue using Appendix 1.
- Link letter formation to multi-sensory activities eg reading and spelling card routines, wooden or plastic letters, verbal description.
- Incorporate regular overlearning.
- Revise all lower case letters concentrating on letters identified above.
- Introduce graphemes grouped according to formation as in Figure 16. Teaching letters with similar formation in family groups helps to reinforce movement patterns.

continued over

continued

- Use verbal descriptions when demonstrating letter formation.
- Ask pupils to copy the demonstration with air writing, sand writing, finger writing on another child's back, before progressing to pencil and paper.
- When working on paper, provide visual cues eg start point, directional arrow, grapheme written in yellow for overwriting - then fade cues. *NB Monitor this stage carefully as bad habits are difficult to undo.*
- Handwriting for Windows™ software could be used to prepare practice sheets.
- Introduce capital letters that are the same shape as the lower case followed by those which are different. (Figure 17)
- Practise forming letters by tracing, copying and writing with eyes open and then with eyes closed.
- Use pupil self-evaluation eg pupil writes a letter three times then selects the best.

N.B. Watch constantly for correct letter formation and joins.

- There may be difficulties with visual perception, refer to 'Look, See ... Know and Understand'.
- If a pupil has difficulty manipulating a pencil, refer to Pre-requisite skills section page 6.

cC oO pP sS uU vV wW zZ

Figure 17a: Capital letters with same formation pattern

aA bB dD eE fF gG hH iI jJ kK lL mM nN
qQ rR tT xX yY zZ

Figure 17b: Capital letters with different formation pattern

Can the pupil form all lower case letters with entry and exit strokes starting on the line?

If not, try this:

- Use a multi-sensory approach to work on letters groups. (Figure 16)
- Always use a 'model' of the target letter as a visual reminder. (Appendix 2)
- Form letter shapes using whole arm movements for 'air writing'.
- Form letter shapes using play dough, string, rope.
- Use finger paints to trace over letter shapes.
- Use a filled water pistol or squeeze bottle to write letters on an outdoor wall or on the ground.
- Paint on the ground with water and decorating paint brushes.
- Encourage the pupil to walk the pattern of a letter incorporating language such as 'stop' or 'change direction'.
- Play a sensory letter game where pairs of pupils (or up to four children) sit in a row facing the front. The pupil at the back is shown a letter and has to finger draw it on the back of the pupil in front of him. This continues until the letter reaches the front pupil who then writes the letter on a piece of paper.
- Prompt the pupil to think, 'Where do I start? ... On the line'.
- Use lined paper with a dot to indicate the starting position.

Can the pupil size the body of letters to 'x' height?

'x' height is the term used to describe the height of the body of a letter. (Figure 18)

If not, try this:

- Provide a visual prompt in the form of a letter card or alphabet strip.
- Reinforce formation with a verbal description.
- Use a white board with coloured guidelines to aid sizing eg 'Alphabet Write 'n' Wipe' boards.
- Mark a line with a broad highlighter pen and ask the pupil to keep the body of the letter within the highlighted area.
- Try forming individual letters within small squared paper to regulate the size.
- Make lined paper on the computer grading the width of lines according to the pupil's ability.
- Try writing between tramlines.
- Try using triple lined paper: one line for the letters to rest on, one to indicate the height of the body and one for the ascender/descender of lower cases letters.
- Use handwriting programmes which address sizing eg 'Write from the Start' Book 1 Booklet 4C.
- Ask the pupil to circle letters that are not correct in a sample of his work.
- Encourage the pupil to evaluate his own work eg place a ruler along the top of the body of a letter and see how many are the right size.

Can the pupil show correct orientation of letters avoiding reversals and inversions eg b/d, n/u, p/q, m/w, t/f?

If not, try this:

- Ensure pupils are aware of their confusion.
- Use a visual prompt on the desk or at the top of a page.
- Prompt pupils to stop and think when they need to use one of the confusing letters.
- Highlight similar letters in different colours eg colour all the 'bs' blue and all the 'ds' red.
- Use handwriting programmes which address orientation and directionality eg 'Write from the Start' Book 1 Booklet 4A and Book 2 Booklet 6B.
- Use physical/visual prompts and verbalisation:
 - bd to represent bed
 - make letter shape with hands (Figure 19)
 - use thumbs and fists eg left fist with thumb up for 'b', saying 'here's the bat and here's the ball'; right fist with thumb up for 'd', saying 'here's the drum and here's the drum stick'
 - a small 'b' is hidden in a capital B.
- When a pupil has ongoing difficulties refer to 'Look, See... Know and Understand' for detailed advice regarding visual perception.



Figure 18: 'x' height.

Can the pupil write ascending and descending letters correctly?

If not, try this:

- Check that pupils understand the language that is being used.
- Revise letter groups which go under the line: g, j, p, q, y.
- Revise letter groups which go above the line: b, d, f, h, k, l, t.
- Use triple lined paper to indicate the size of the body of the letter as above.
- Use handwriting programmes which address sizing eg 'Write from the Start' Book 1 Booklet 4C.

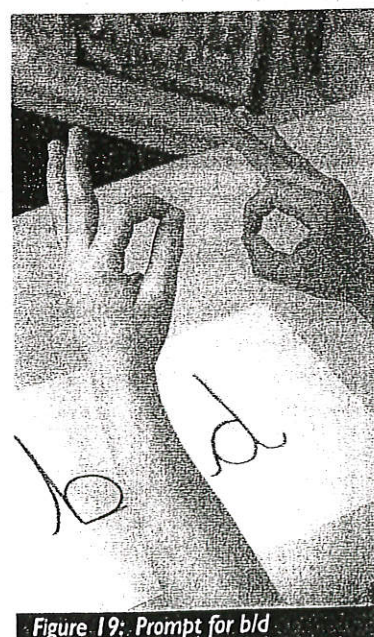


Figure 19: Prompt for b/d

Can the pupil place words on the line?

If not, try this:

- Use raised lined paper eg 'Right-Line'.
- Make perforated lined paper using an unthreaded sewing machine to provide sensory feedback.
- Stick a 'window' guide over lined paper so that the line is centrally positioned. (Figure 20)
- Use tram lined paper and highlight the bottom line.
- Make a slightly raised line by running a thin bead of glue along the line and allowing it to dry before use.
- Offer a range of styles and textures of paper so that the pupil can select his preference.

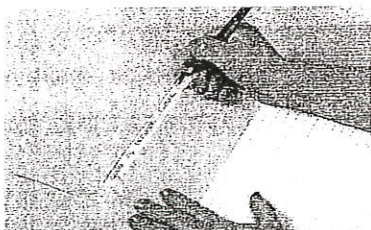


Figure 20: Window guide

N.B. ● Capital letters are never joined.

- Pupils need to be able to discriminate between upper and lower case letters to avoid substitutions.
- Pupils must understand when to use a capital letter eg at the beginning of a sentence and for proper nouns.

Can the pupil space words appropriately?

If not, try this:

- Use 'Write from the Start' Book 1 booklet 2B and Book 2 Booklet 5 & 7B.
- Use finger for spacing.
- Use a decorated lolly stick as a prompt. (Figure 21)
- Adapt for left handers by inserting the space stick from above the text.
- Try a card space prompt for older pupils. (Figure 22)

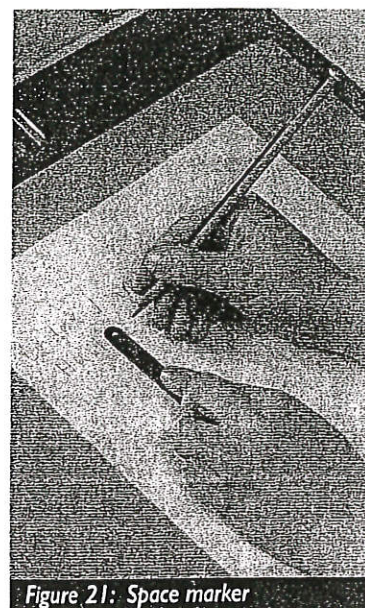


Figure 21: Space marker

Can the pupil identify and form capital letters correctly?

If not, try this:

- Check the pupil can link the phoneme to its capital grapheme/letter.
- Check the pupil can match upper case to lower case letters.
- Ask the pupil to circle capital letters in a sample of written work.
- Identify incorrect formation of capital letters using checklist. (Appendix 1)
- Revise letter strokes required eg parts of a circle, vertical, horizontal and diagonal lines.
- Teach capital letters that are the same as lower case letters first, and then introduce the capital letters that are different. (Figure 17)
- Check that the pupil can identify and write the capital letter alongside its lower case equivalent using triple lined or tram lined paper if required.

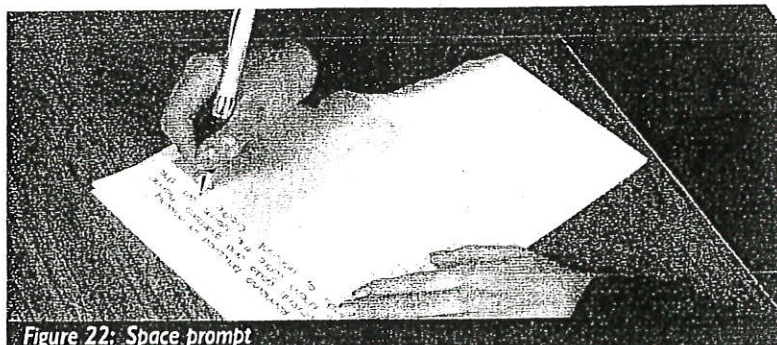


Figure 22: Space prompt

PRESENTATION

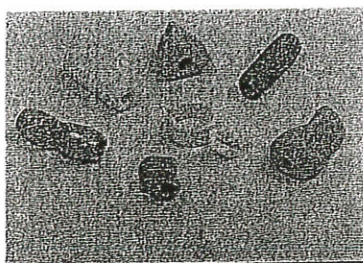


Figure 23: Range of pencil grips

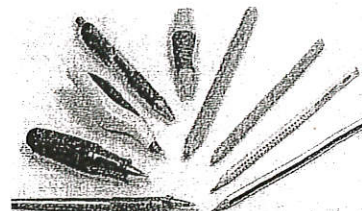


Figure 24: Selection of pencils and pens

Can the pupil write with fluency?

If not, try this:

- Incorporate arm movements in PE lessons that emulate movement patterns using selected activities from page 14. The movements can be taught discretely eg in PE, movement, dance. If music is played then the fluency of movement will be established more easily.
- Follow a programme of activities to strengthen and improve flexibility in wrists eg turning a skipping rope.
- Use handwriting programmes that help to develop fluency, eg 'Write from the Start' Book 1 Booklet 4b, Form constancy, Book 2 Booklet 8B, Fluency, rhythm and flow.
- Use Handwriting for Windows™ to prepare teaching materials with a cursive script.
- Offer a range of pencil grips eg triangular, soft foam, Ultra, Tri-go, Solo, Stetro or Stubbi moulded. (Figure 23)
- Offer a selection of pencils eg thin, chubby or triangular barrels, soft/hard lead or sensory. (Figure 24)
- Allow the pupil to experiment with different pencils and grips to see which one is comfortable and enables him to produce his best writing.
- Provide a selection of pens for the pupil to try eg pens with triangular or rubber grips, 'gel'/biro pens, roller ball pens. (Consider the width and quality of the nib.) Ensure the ink flows smoothly and the pupil does not have to exert too much pressure.
- Observe how the pupil holds the pen/pencil. If the pupil holds it too high or too low, it may be difficult to gain fluency and to see his writing.
- Encourage the pupil to change his pencil grasp if tension/pain is felt in the wrist/hand.
- Encourage left-handers to place the pen/pencil below the writing line position to avoid hooking the wrist. (Figure 25) If the wrist is hooked the pupil may experience tension/pain and lack fluent arm and finger movements.
- Ensure that the writing is not obscured by holding the pencil/pen too low. If necessary, use a coloured tape or a rubber band to indicate the correct position.
- Practise writing initially with eyes open and then with eyes closed in order to internalise movement patterns.
- Check that the movement of the pencil is being generated by the fingers and wrist rather than the whole arm/shoulder. If the pupil cannot demonstrate shoulder stability, refer to the section on 'shoulder stability', in the Pre-requisite Skills Section page 7.
- Seat left-handers to the left of right-handers so the pupils' writing arms are not in contact with each other.
- Try improving posture by using an angled board Write Angle® or the 'Posture Pack' or a large A4 file with the pupil's work resting on it. (Figure 27)
- Investigate the use of handwriting programmes which improve fluency and writing speed (see references for examples). NB Check the speed of the writing prior to any intervention and at least yearly following this.
- Monitor the pupil's writing speed using a standardised test eg Hedderly Sentence Completion Test.
- Refer to the Joint Council for Qualifications (JCQ) guidance on access arrangements for pupils who use additional time, specialist equipment or software.

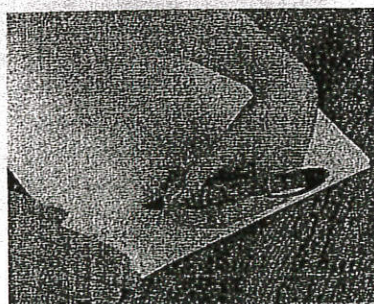


Figure 25: Hooked wrist position

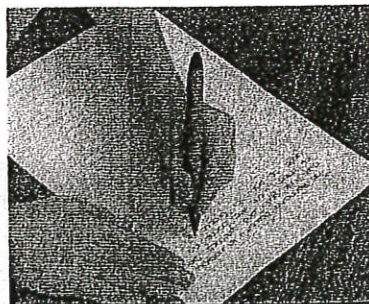


Figure 26: Relaxed wrist position

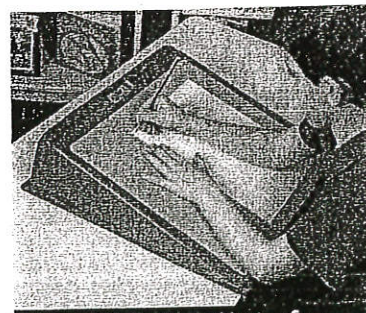


Figure 27: Sloping writing surface

Can the pupil maintain sufficient stamina for writing?

If not, try this:

- Prepare the muscles involved by doing two to three minutes of hand exercises before all writing activities:
 - wall press ups
 - shake, flap or rotate hands
 - 10 finger tip presses
 - clench fists and release x 10
 - 'walk' finger tips along the desk
 - touch thumb to each finger as quickly as possible.
- Ask the pupil to do 10 to 15 chair/desk, 'press ups' prior to writing activities. (Figure 28)
- Provide a softer pencil/fibre tip/gel/roller ball pen if the pupil applies light pressure.
- Raise the desk or provide an angled board for pupils whose pressure is too light on the paper and lower the desk for those who press too hard in order to avoid the hand becoming tired.
- Consider scribing part of the work for the pupil.
- Consider providing handouts.
- Consider alternative recording strategies, see page 21.

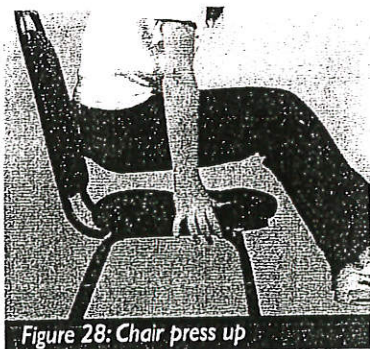


Figure 28: Chair press up

Can the pupil align work correctly (starting at the margin) and continue across the page?

If not, try this:

- Use the traffic light system eg put a green dot at the left side of the page to indicate 'start here'. Put a red dot at the right side of the page to indicate 'do not write beyond this spot'. If necessary, put an orange dot 2 cms before the red dot to indicate 'do not begin a long word beyond this point'.
- Use a coloured margin at the left hand side of the paper to remind the pupil where to start writing.
- Use appropriately ruled paper in preference to line guides or plain paper to provide clear visual guidance as to where writing should be placed.

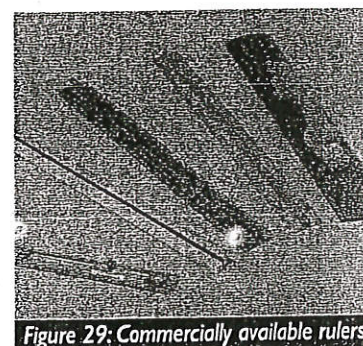


Figure 29: Commercially available rulers

Can the pupil stabilise a ruler correctly to underline?

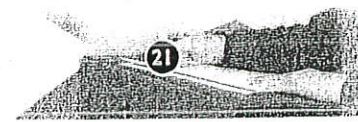
If not, try this:

- Show the pupil where/how to hold the ruler correctly.
- Mark the beginning and end of where the line should be drawn so the pupil knows where to position the ruler.
- Use a ruler to draw between horizontal tramlines that gradually reduce in height.
- Use a ruler with a handle eg 'My First Ruler'.
- Use a shorter ruler before progressing to a longer one.
- Use a ridged ruler.
- Use Dycem® strips on the back of a ruler or a line of Copydex.
- Have a selection of rulers for pupils to use in the Foundation Stage.
- Encourage the pupil to draw random lines so that he acquires the physical skills of holding and fixing the ruler with one hand and drawing with the other one.

ALTERNATIVE RECORDING STRATEGIES AND USE OF ICT TO SUPPORT WRITING

A small number of pupils may never produce legible handwriting at an appropriate pace. These pupils could benefit from alternative strategies for recording work.

- Allow the pupil to dictate to an adult scribe.
- Encourage pupils to dictate into a tape recorder for an adult to transcribe.
- Use cloze procedure which allows the pupil to demonstrate knowledge without laborious sentence writing eg prepare worksheets with pictures/words which the pupil circles/copies/sticks in the appropriate spaces.
- Encourage paired writing activities.
- Ask the pupil to circle the correct answer in multi-choice questions.
- Allow the pupil to use word banks to compose a sentence to copy or stick in his book.
- Duplicate worksheets which let the pupil demonstrate his level of knowledge by filling in the gaps.
- Scan worksheets and/or a copy of Powerpoint presentations, in order to reduce the amount of writing required in a lesson..
- Consider alternatives for pupils who have difficulty with notetaking. Provide handouts, photocopies of a peer's notes, use a dictaphone or save the information on a memory stick.
- Type and print labels for the pupil to stick onto his work.
- Include use of a keyboard when introducing the letter of the day. Pupils can type a row of 'c c c c c' as well as writing (by hand).
- Use an on-screen word bank such as 'Clicker' for building sentences.
- Encourage pupils to use a word processor to produce well presented work.
- Teach the pupil how to touch type from a programme/program. Those pupils with very poor co-ordination might have to use a two fingered approach. Downloadable sites include www.sense-lang.org/typing www.bbc.co.uk/schools/typing
- Use appropriate software for mind mapping and thinking skills eg Kidspiration, Inspiration, Kidspark.
- Introduce word prediction software to support writing eg Penfriend, Wordbar, Co:Writer SOLO™.
- Refer to mind mapping books. eg 'Mind Maps for Kids' by Tony Buzan.



GRAPHEME ASSESSMENT SHEET

(photocopiable sheet)

Name: _____

Date:

--	--	--	--	--	--

Assessed by: _____

Post held: _____

Instruct the pupil to write the grapheme (letter) from an oral cue.

		Score: ____ /26 Work on: Reversals: Orientation: Formation:	

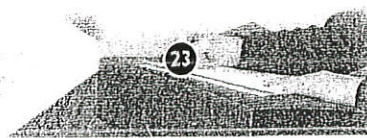
ALPHABET STRIPS

(Using Fonts from Handwriting for Windows™)

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



RESOURCES

NATIONAL ORGANISATIONS

Dyspraxia Foundation
www.dyspraxiafoundation.org.uk

National Handwriting Association
www.nha-handwriting.org.uk

TEACHING RESOURCES

A Hand for Spelling
 Charles Cripps
www.ldalearning.com

Activate
 Val Sabin Publications
www.valsabinpublications.com

Assessment and Activities for Hand Skills and Fine Motor Development
 Regional LEA Support Services
 (available from local RELEASS contacts on back cover of this publication)

Beat Dyslexia
www.ldalearning.com

Brain Gym
www.braingym.org.uk

Building Blocks
 SENSS: North East Lincolnshire Council
www.nelincs.gov.uk/education

Easy Type Book 1 & 2
 Ros Kinloch, Egon Publishers
www.egon.co.uk

Fine Motoring
 Easy Learn Ltd.
www.easylearn.co.uk

Graded Activities for Children with Motor Difficulties
 James Russell
 ISBN 0521 338 552
www.dyspraxiafoundation.org.uk

Handwriting the Way to Teach it. (Second edition 2003)
 Rosemary Sassoon,
 ISBN 07619 43110
www.paulchapmanpublishing.co.uk

Hedderly Sentence Completion Test
www.dyslexiaaction.org.uk

Jolly Phonics
www.jollylearning.co.uk

Left Hand Writing Skills
 Stewart & Stewart
www.robinswoodpress.com

Look, See ... Know and Understand! Developing Visual Perception
 Regional LEA Support Services
 (available from local RELEASS contacts on back cover of this publication)

Nelson Handwriting Font
www.nelsonthornes.com

Occupational Therapy Approaches for Secondary Special Needs
 Jill Jenkinson, Tessa Hyde, Saffia Ahmad
www.whurr.co.uk

Pencil Fun
 B Squared
www.bsquaredsen.co.uk

Penpals for Handwriting
 Cambridge University Press
www.cambridge.org

Pindora's Box
www.pindorasbox.com

Read and Type
 Patricia Mayhew
 Gift for Life Publications
www.gfl.org.uk

Ready, Steady - Go to PE! Assessment and Activities for Early Gross Motor Skills
 Regional LEA Support Services
 (available from local RELEASS contacts on back cover of this publication)

Roamer Turtle
www.r-e-m.co.uk

Rol 'n' Write
www.ldalearning.com

Soundstart Handwriting
 Warwick & Jackman
www.nelsonthornes.com

Speed Up
 Lois Addy
 ISBN 1855033860
www.ldalearning.com

The Handwriting File
www.kber.co.uk

Thrass
www.thrass.co.uk

Write Dance
 Lucky Duck publishing
www.luckyduck.co.uk

Write from the Start
 Teodorescu & Addy
www.ldalearning.com

Write Well
www.writewell.co.uk

SOFTWARE

Downloads

www.bbc.co.uk/schools/typing
www.sense-lang.org/typing

Programs

Co:Writer SOLO™
www.donjohnston.co.uk

Clicker
www.cricksoft.com

Five Finger Typist (for right or left hand users)
 Inclusive Technology
www.inclusive.co.uk

Handwriting for Windows™
www.inclusive.co.uk

Inspiration
www.dyslexic.com

Kidspark
www.inclusive.co.uk

Kidspiration
www.dyslexic.com

Penfriend
www.inclusive.co.uk

Penpals for Handwriting
 Cambridge University Press
www.cambridge.org

The Handwriting File
www.kber.co.uk

Touch Type
www.inclusive.co.uk

UltraKey
www.inclusive.co.uk

Wordbar
www.cricksoft.com

FURTHER READING

Developing a Handwriting Policy (2005)

National Handwriting Association
ISBN 1 872832 210
www.nha-handwriting.org.uk

Dyspraxia – a guide for teachers & parents

Ripley et al
David Fulton
ISBN 1 85346 444 9
www.fultonpublishers.co.uk

Handwriting – A Teacher's Guide

Jane Taylor
David Fulton
ISBN 1 85346 765 0
www.fultonpublishers.co.uk

Handwriting and Presentation Key Stage 3 National Strategy

DfES 0223-2004
www.standards.dfes.gov.uk

Handwriting in the Secondary School...not a secondary skill

Beverly Scheib et al
The National Handwriting Association
ISBN 1 08728 3289X
www.nha-handwriting.org.uk

Keyboarding Skills for Children with Disabilities

Dorothy E Penso
Whurr
ISBN: 1-86156-101-6
www.whurr.co.uk

Mind Maps for Kids

Tony Buzan
www.buzanworld.com

QCA Guidance
www.qca.org.uk

Supporting Children with Motor Co-ordination Difficulties

Hull Learning Services
David Fulton
ISBN 1-84312-227-8
www.fultonpublishers.co.uk

EQUIPMENT

Furniture

Adjustable height tables
www.vari-tech.co.uk
www.keytools.co.uk

Positioning

Movin'sit cushion
www.norlite.co.uk

My Write-well mat®
www.writewell.co.uk

Posture Pack
www.backinaction.co.uk

Write Angle® Desktop Writing Aid
www.philipandtacey.co.uk

Writestart Desktop
www.ldalearning.com

Paper and accessories

Alphabet Write and Wipe boards™
www.ypo.co.uk

Dycem® Non-slip material on roll and self-adhesive non-slip strips

www.nrs-uk.co.uk
www.homecraft-rolyan.com

Right-Line® paper
www.taskmasteronline.co.uk

Writing Cards 3 line
www.nesarnold.co.uk

Pencils, pens and grips

Berol Handhugger pencils
Berol pens
www.berol.co.uk

Comfort grip
Solo pencil grip
Stetro pencil grip
Stubbi pencil grip
Tri-go pencil grip
Ultra grip
www.taskmasteronline.co.uk

Staedtler Norris Triplus
Triangular pencils
www.nesarnold.co.uk

Stabilo pens
www.stabilo.com

Writestart pencils
www.ldalearning.com

Yoropen
www.yoropen.com

Rulers

Easy Hold Ruler
Finger Tip Ruler
Linex Non-Slip Ruler
My First Ruler
www.ldalearning.com
www.taskmasteronline.co.uk
www.ypo.co.uk

Websites and products correct at the time of publication.

PRACTICAL GUIDES FOR TEACHERS

ASSESSMENT AND ACTIVITIES FOR HAND SKILLS AND FINE MOTOR DEVELOPMENT

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per copy, including
postage and packing.

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