

The Cool Kids programme is aimed at developing gross motor skills, concentration, confidence and the ability to self calm. It has also been shown to improve writing (Joy High, 2006). However some children require further direct input to develop their writing, particularly if they were not ready to write at the age that letter formation is initially taught.

The **Cool Characters** programme is designed for use with individuals or small groups of children, although principles could be applied as whole class activities. It enables children to develop fine motor skills in general, and supports the skills needed for fluent writing by improving body awareness, grouping letters for learning formation, all while enjoying a variety of sensory media.

In appendix 1 you will find a programme format; this is a guide only. Just like the Cool Kids programme, the Cool Characters programme can be implemented at the pace suitable for the age and ability of the children. It is perfectly acceptable to spend half a term or more on session 1 type activities.

Following an overview and 'grouping letters' are advice sheets giving further information on activities to supplement the programme through developing body awareness, processing of proprioception and finger isolation as well as practical tips like sitting position and position of paper. There are also links to useful websites.

It is recommended that sessions take place daily in order to reinforce new patterns. If this is not feasible, principles can be applied throughout the school day, such as hand presses and air writing groups of letters.

Like the Cool Kids programme, this should be fun for adults and children alike. It is when we are having fun that the neurotransmitters for learning are released by the brain -a scientific reason to enjoy ourselves!

Contents Page



- 3) Programme guide; Pre-session assessment & Session format
- 4) Sample sessions
- 5) Grouping letters
- 6) The four P's of handwriting
- 7) **Proprioceptive activities**
- 8) Body awareness
- 9) Encouraging finger isolation
- 10) Scissor skills
- 12) Finishing touches
- 13) Appendix 1 (session guides)
- 16) Appendix 2 (handwriting advice for parents)
- 17) Appendix 3 (fine motor resources)

Programme Guide

Establishing a baseline Body awareness Tactile activities Geometric forms Scissor skills Patterns *IIIIIII* and *eeeeeee* Posture awareness (cognitive training) Letter groups 'l', 'c', 'r' & 'x' Pencil control (dot to dots etc) Letter joins



Pre-session Assessment

Establishing the baseline. Depending on the child's age this could involve copying a sentence such as *'The quick brown fox jumps over the lazy dog'*, or may be copying lines and shapes following the developmental sequence of:



NB if a child cannot yet copy diagonals, they are not ready to write. Sessions will need to focus on pre-writing skills and sensory awareness.

Note the child's posture, letter formation, pen grip and position of the paper. With older, able children you can use this assessment to discuss the 4 P's (see page 6)

Session Format

Length: 15-20 minutes daily, else activities incorporated throughout the day.

Sessions to initially focus on warm ups – to increase body awareness and tactile processing, and fine motor skills such as cutting. As progress is made, move onto letter groups and cognitive training re positioning of self and paper (the 4 P's).

Sample Early Session

Warm-ups

- Shoulder circles their hands on their shoulders if limited room
- Table push ups
- Hand presses
- Star fingers and lemon squeezes

Tactile processing

- Feely bags, or a container filled with sand or rice Ask the children to identify what is in there by touch alone. (NB If the children have sensory issues don't force them to put their hands into textures they are not comfortable with instead encourage rubbing hands together to desensitise).
- Play dough work on squeezing, rolling and pinching. In particular concentrate on achieving a pincer grip between the index finger and thumb.

Writing Activity

 Practice top to bottom letters – I, i, j and t. Try using a variety of media such as sand tray, flour, felt tips, chalk and crayons. Horizontal lines can be added by staff to guide the children as to how tall and tailed letters are written.

Sample latter session

Warm ups

- 'Air writing' Practice the top to bottom letters previously learnt.
- Chair push ups.
- Hand presses.

Cognitive awareness

'How to sit properly' Get the children to think about their posture. Pretend they are a puppet with a string attached to the top of their head pulling them upwards. Encourage having an upwards stretch. Ankles, knees and hips should be at 90°. Try out using sloping writing boards for those with poor posture.

Writing Activity

- Letter practice C shape letters c,a,d,g,o,q.
- Large drawings that include a wave pattern *ccccccc*

Grouping Letters



It can help children to know that rather than having to learn 26 different patterns for making letters, many start with the same shape. Prompting the child as to which letter another starts with helps to ensure correct letter formation.

The easiest group to start with is the 'l' group. As this is merely a vertical line, children who are functioning at around age 3 should be successful. This should boost the confidence of children who have not yet conquered diagonal lines and so who are not ready to learn the whole alphabet.

The 'l' group essentially includes the line type letters: l, i, t, j.

The second group is the 'curly c' group of letters. Show the children how you can write all of the other letters on top of c because they all start with the c shape. Your c shape should then have the flick of a & d, the curl of g and the line & diagonal of q.

Cousins - o loosely fits into the c family although should start at the top to allow for the horizontal join. Point out although e starts with a straight line it then follows the curly c pattern. S & f begin with the familiar curve of c, but may be more ideally introduced at a later session when c,a,d, g & q have been consolidated.

Similarly the exercise can be introduced with the r family – 'start at the top'. Point out that n, m & p continue on from r. b & h start higher but then follows the same pattern of down, up and around.

Cousins include u and u as they also start at the top.

Provided diagonals have been conquered, move onto k, v, w x, & z.

All these formations allow for teaching of correct joins which can be introduced in accordance with school policy.

The Four P's of Handwriting

- 1. **Posture** (position) sat fully supported by chair, feet flat on floor, table at elbow height; upright posture
- 2. **Paper** usually a 20' angle for right handers \sqrt{R}

& a 45' angle for left handers

Non-dominant hand to support the paper

- 3. **Pen** ideally a tripod grip, but it is very difficult to change a well-established grip. Practicing 'circular scribble' can encourage movement of the digits. Experiment with pen grips and different type of pen: ink flow, barrel diameter, surface texture (grip)
- Presses (proprioception) encourage hand presses prior to and during writing tasks to increase sensory feedback & so improve motor control and judgment of force

When discussing this with a group of High School children, they added **Practice** as a fifth 'P' – very commendable!

(I'd add in **Perseverance** for both child and adult!)



Proprioceptive Activities - 'Warm-ups'



Proprioception is the information that we get from muscles and joints to tell us where our body is in space. Activities that include heavy muscle work, such as pushing, pulling or carrying, give us lots of proprioception. These activities can help a highly sensitive student to calm, or to increase alertness in students who take their time to get going. They aim to get the student's 'arousal' levels just right. If they are seeking out excessive proprioceptive input, they are looking for a way to calm and organise their nervous system. They may seem disruptive, full of excessive energy, or even unsafe. They can be used to calm a student when they need to be more focused e.g. before doing fine motor tasks, or when they are becoming wound up or before having to sit for a period of time in class. They also help to improve body awareness.

- Lemon squeezes and star stretches for fingers Repeat 5 times.
- Hand presses interlock fingers, press together and release 10 times.
- Head presses interlock fingers on top of head and push down.
- Playing with play dough or using other resistive materials such as pastry.
- Sitting on hands, tense whole body and lift legs off the floor hold for 20 seconds then relax.
- Wall presses lean on the wall pressing firmly with both hands press for 20 seconds. Try to 'push the wall over'.
- Table push ups standing between two tables with a hand placed firmly on each. Lift legs to support full body weight with arms and hold for a count of 5 or 10.
- Carrying, pushing and pulling objects e.g. Sports equipment, classroom equipment, chairs/tables
- Crashing into beanbags or crash mats.
- Jumping on a trampoline supervised and only used if the child enjoys it!
- Chewing gum if allowed in school.
- Cycling; Climbing; Hopscotch; Monkey bars; Tug of War; Wheelbarrow walks if the in / outdoor environment permits this.

Body Awareness



- A picture of our body and where it is in space is essential for the development of smooth, organised gross and fine motor control.
- This picture is made up of information from skin (tactile), joints & muscles (proprioception) and movement, letting us know which limbs are where, how much space we are occupying. The brain interprets proprioceptive information (regular repetitive muscle use through organised activity) developing a natural sense of space etc as an essential base for movement.
- If a child is not receiving sufficient proprioceptive information, he is likely to try to watch his limbs to ensure that they are doing what he wants them to do, and to seek more by being heavy handed and heavy footed.
- The understanding of 'left and right' on self and others is based on a good body awareness.

Some children will have difficulty with body awareness:

- The child may not know how to position him/herself on command/follow someone else i.e. 'lie on tummy' and the child tries several different positions.
- The child may be very disorganised in movement and space: bumping into others and into objects.
- The child may try to watch his/her limbs to ensure that they are doing what he/she wants them to do.
- The child may find it difficult to draw age-appropriate people.

Activities that help to develop Body Awareness:

- 1. Moving on the floor in creeping, rolling, crawling adds proprioception.
- 2. Pull/push (e.g. tug of war, wall push ups, sit ups) games give extra proprioceptive input.
- 3. Heavy impact form slow firm crawling, animal walks, jumping 2 feet together, walking on heels etc add proprioception.
- 4. Moving limbs in contact with the floor (e.g. angels in the snow or crawling) or holding beanbags, toys in hand while moving increases awareness.
- 5. Playing games such as 'move and freeze', jumping or limb and trunk contact with the floor increases awareness.
- 6. Games that include naming of body parts and what they are doing e.g. Simon says and action songs such as hokey-cokey, heads and shoulders, zombies.
- 7. Back rubs or massages (you may need to seek written consent from parents).
- 8. Whole body drawing making a collage
- 9. Making people from play-dough.

Many of these activities are more suitable to being incorporated into the complimentary Cool Kids programme.

Encouraging Finger Isolation



Isolation of the index finger is an important skill. It is a pre-requisite for developing a pincer grip. This is essential for performing activities of daily living such as feeding, dressing and writing.

Activities to encourage finger isolation

- 1. Finger painting
- 2. Pinching and prodding play dough/plasticine
- 3. Popping bubbles with index finger
- 4. Playing with marbles
- 5. Use tweezers to pick up paper/clips/ buttons
- 6. Open/close clothes pegs
- 7. Pegboard games
- 8. Put money into money box or toy cash register
- 9. Flicking frog games
- 10. Wind up toys
- 11. Finger puppets or hand puppets using thumb, index and middle fingers
- 12. Shadow puppets on a wall, copying animals and patterns
- 13. Developing a game where the child has to use two fingers to 'walk' across a board/table (e.g. finger football)
- 14. Use the keyboard of a computer or touch screen
- 15. Play musical instruments
- 16. Toy telephone, push button and dial ones
- 17. Sprinkle flour or lentils on a tray and let the child draw a picture using index finger.

Scissor Skills



Stages of Scissor Use

- 1. Child shows an interest in using scissors.
- 2. Child holds and manipulates the scissors appropriately.
- 3. Child open and closes the scissors in a controlled way.
- 4. Child cuts random snips
- 5. Child manipulates scissors in a forward motion (e.g. to get the other side of the paper)
- 6. Child can co-ordinate the lateral movements (e.g. can cut within a path without straying outside).
- 7. Child cuts forward in a straight line.
- 8. Child cuts out simple geometric shapes (straight lines in triangle, square or rectangle and moving to curved lines such as in a circle).
- 9. Child cuts out simple figure shapes (e.g. around a house or a flower).
- 10. Child cuts out complex figure shapes.

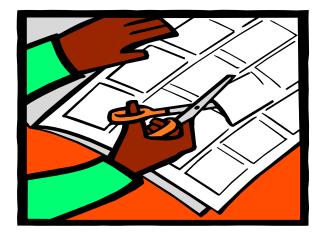
How to help a child to progress through these stages

- Help the child to develop fine motor skills especially using the lateral pincer grip used to open and close scissors (see page 10).
- Choose scissors that the child feels comfortable with (left hand scissors for left handed children, spring scissors)
- Use different types of paper e.g. cardboard, wax paper, aluminium foil, sugar paper (card is easier to begin with as it is easier to handle).
- Practice snipping with scissors by cutting through straws, thin strips of paper, play dough, snip the edge of piece of paper.
- Help the child to control the direction of their cutting by giving them a target e.g. a sticker at the end of a line, a thick path to cut along to follow, use a small piece of paper.
- To stay within a path, glue lolly sticks or string to form edges of path.
- Vary the width between the two lines, starting with wide path and then bring the lines closer as the child's co-ordination develops.

- Punch a line of holes into card or paper and then ask the child to cut along the line of holes.
- Start using the above ideas for diagonal or curvy lines or lines that change direction.
- When cutting around simple shapes/ figure shapes use thick lines at first (use a marker pen to make the lines thicker).

Other activities that will help develop the skills needed to use scissors well

- Play relay games where you have to pick up small objects (e.g. aluminium foil balls, marshmallows, cotton balls, small toys, blocks) using tweezers, salad servers or tongs to place them into a container.
- Play with squirt guns or water pistols (you may wish to set this as homework!). Get the child to aim their water spray at a target drawn with chalk on a brick wall or aim for a hanging balloon.
- Use pipettes (turkey basters or medicine droppers) during craft activities to pick up and then drop paint onto paper.
- Lacing activities.
- Card games
- Thumb wrestling.
- Games such as Jenga, operation, Kerplunk, pick-up sticks.



Finishing touches - Strategies to discuss with students

Once letter formation is conquered further issues may surface!

Leaving a space between words

- Traditionally, leaving a space, by child placing left index finger at the end of the last word then starting the next word on the other side of your finger.
- Alternatively use a lolly stick with sticker or a face drawn on it to make a space between each word.
- Use grid paper or graph paper.

Writing pressure

- The child may need to teach themselves how to monitor the pressure they apply to the pencil or to the page. If they use too much pressure, they could play games using carbon paper placed between pages and see if they can only go through to one sheet. If they use too little, try to go through more sheets with carbon paper or try using sandpaper underneath the page.
- Use light up pens to show pressure is being used.
- Practice using refillable lead pencils as the lead will break if there is too much pressure applied.
- Remind the child to do activities to send messages from the muscles to the brain (proprioception), like wall press ups, chair press ups, hand presses, lemon squeezes.

Speed

- Practice drawing fluency patterns (loops, waves, zig-zags, spirals) on an upright blackboard or paper taped up onto a wall.
- Continue to do hand presses to moderate pressure and so free-up writing style.

Appendix 1

<u>Stage 1</u>

Warm ups

- Windmills
- Table push ups
- Hand presses
- Star fingers and lemon squeezes

Dexterity

- Feely bags, or a container filled with sand or rice Ask the children to identify what is in there by touch alone. If the children have sensory issues don't force them to put their hands into textures they are not comfortable with.
- Play dough work on squeezing, rolling and pinching. In particular concentrate on achieving a pincer grip between the index finger and thumb.

Stage 2

Warm ups

- Play dough Squeezing, rolling and pinching. Try using cutlery to cut up the play dough. Trainer cutlery encourages finger isolation of the index finger to point down the cutlery.
- Hand presses.

Assessment

• Observation of the children drawing geometric shapes as a precursor to letter shapes. If the child gets stuck on basic shapes such as circle, diagonal lines or squares, then allow them to continue practicing these rather than moving onto more complex shapes.

Stage 3

Warm ups

- Wall presses Ask the children to try to push the wall over.
- Hand presses.

Writing activity

- Tracing over geometric shapes. Or for those more able pictures that incorporate lots of geometric shapes. Try cutting out the shapes (see Scissor Skills).
- Dot to dots of letter shapes.

Stage 4

Discussion

'How to sit properly' Get the children to think about their posture. Pretend they are a puppet with a string attached to the top of their head pulling them upwards. Encourage having an upwards stretch. Ankles, knees and hips should be at 90°. Try out using sloping writing boards for those with poor posture.

Writing Activity

- Encourage hand presses to start.
- Practice top to bottom letters I, i, j and t. Try using a variety of media such as felt tips, chalk and crayons. Lined handwriting paper may be of benefit to guide the children as to how tall and tailed letters are written.
- Practice with the sloping boards and trial pen grips for those with poor grips.

Stage 5

Warm ups

- 'Air writing' Practice the top to bottom letters previously learnt.
- Chair push ups.
- Hand presses.

Writing Activity

- Letter practice u and y.
- Using a chalk board, sand tray and shaving foam to do large letter patterns IIIIIII and eeeeeee

Stage 6

Warm ups

- Making play dough letters.
- Finger isolation activity- such as the frog flicking game, finger painting or using tweezers or pegs.

Writing Activity

- Letter practice C shape letters c,a,d,g,o,q.
- Large drawings that include a wave pattern ccccccc

Stage 7

Warm ups

- Table push ups.
- Lemon squeezes and star fingers.

Writing Activity

- Letter practice r,n,m,h,p,b
- Colour in a page of paper using rainbow strips from left to right. Then rub over with a white wax crayon. Scratch out the above letters to reveal rainbow letters.

Stage 8

Warm ups

- Hand presses
- Pegboard games or threading challenge.

Writing Activity

- Recap of Stage 7 and 8 letters Practice in different media such as sand or shaving foam.
- Use the 'Marble Letters'. Try tracing fingers over them, then letting the marble run. Try a blind fold challenge to see who can identify the letters by touch alone.

Stage 9

Warm ups

- Clapping and knee slapping games Ask the children to copy a pattern. Helps to encourage bilateral coordination.
- Chair press ups.

Writing Activity

- Circular scribble challenge. Ask the children to hold their pen/pencil and draw the largest circular scribble they can Without moving their wrist but only stretching their fingers.
- Letter practice s, f and e. Try using a chalk boards.

<u>Stage 10</u>

Warm ups

• Rolling playdough into sausages, then using it to make recently practiced letters, then move onto x, k, w, v & z

Writing Activity

• Perform letters on chalk boards or in sand.

Appendix 2

Handwriting Advice for Parents

- Continue to develop shoulder strength and stability and body awareness: climbing frames, monkey bars, rock climbing, martial arts, wheelbarrow walks, shoulder circles
- Continue to improve sensory awareness and control of muscles in hands through resistive activities: play dough, modelling clay, pastry, hand squeezes
- Scribble repeating patterns using fun activities such as in sand, flour on a tray, chunky chalk on a patio:



- Practise one pattern of movement at a time beginning with the line letters that all begin at the top: I, I, j, t
- Once these are mastered, move to the next pattern of letters that all begin with the 'c' shape: c, a, d, g, q. Later add in o and e which although starts with a line continues with the c pattern
- Check that these first two groups are becoming easier then move onto the other letters that begin at the top: r, n, m, h, p, b. Later add u and y
- Practise the remaining letters, always checking firstly that the earlier letters are now familiar and are being written with ease: v, w, z, x, f, s
- Do letter patterns on the air. This will help develop shoulder stability and reinforce the pattern
- Practise pencil control, again using fun activities such as dot to dot and wordsearches.
- Finally, practise the letters using a pencil. For best work, ensure that feet are supported and table is about elbow height. Encourage hand presses before writing. Reward good effort.

Appendix 3

Fine Motor Resources

Puffin Books & Activities;

http://www.puffin.co.uk/static/puffinplayground/childrensactivities/index.html#Eric%20Carle

General Activity Sheets;

www.printactivities.com

www.activityvillage.co.uk

http://www.dltk-kids.com/

http://www.kidslearningstation.com/fine-motor-skills/

http://myworksheetsforkids.com/

http://www.superteacherworksheets.com/printing.html

Activities aimed at Pre-Schoolers;

http://www.tlsbooks.com/preschoolfinemotorskills.htm

With thanks to Wolverhampton Children's Occupational Therapy who designed this programme.