Motor Skills Advice for Primary Schools

Solihull Specialist Inclusion Support Service
Sensory and Physical Impairment Team

Solihull Metropolitan Borough Council · Urbs in Rure

NHS

Heart of England NHS Foundation Trust · Solihull Community Services

pdnet · A network for those supporting learners with physical disability · Quality Assured 2018

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Getting Seating Right!

Good seating and positioning is essential to prevent back strain and poor posture. It is also important for good use of the hands, especially for tasks that require a high level of dexterity and concentration such as writing and cutting activities. A child who has poor sitting posture will use more effort to carry out these type of activities. If they have to concentrate on keeping a stable or comfortable sitting position they will be less able to concentrate on the task that has been set. They can also appear fidgety and distractible. Improving a child's sitting posture can have a significant impact on their academic attainment and confidence in the classroom.

A Rough Guide

Tables should be half the pupil height.
Chairs should be a third of the pupil height.

What does a good posture look like?

Hips, knees and ankles are at 90 degrees (hips can be a little higher than the knees if this is more comfortable and the feet are supported)

Appropriate seat depth so that the bottom is at the back of the chair and the thighs are fully supported. Make sure that the front of the seat is not digging into the back of the knees

Appropriate seat height so that the feet are flat on the floor or are supported in some other way

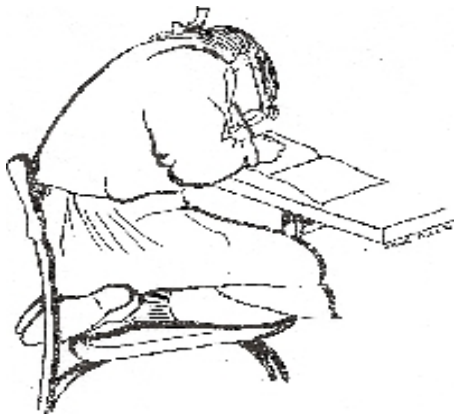
Forearms rest comfortably on the table, without shoulders being "hunched"

Chair can be pulled fully under the desk

Head should be up and in midline.

Sitting in this way means that hands can be used to the best effect.

Watch out for:



Children who sit awkwardly on their chair because it isn't the correct height. You might see them-

Sitting on the front edge of the seat

Kneeling on the chair

Wrapping their legs around the chair legs

Tipping the chair forward onto the front 2 feet

Hunched over the desk with their head too close to their work because the table is too low

Working with their elbows and shoulders raised because the table is too high

Seating for children with mild motor difficulties

The principles of good seating and posture are especially important for children with mild motor difficulties including those with dyspraxia. In addition to the tips for good posture provided above it may also be beneficial to provide the following:

A chair with sides or arms to provide guidance re trunk position

A chair with a full back rest

A chair with a straight, rather than angled seat and back

A good, heavy footrest (bound catalogues can be used).

A chair that can easily be moved in and out of the table.

A sloped writing board (a lever arch file is a cheaper option).

A “Movin Sit “ cushion

Sometimes a more suitable chair already exists somewhere in the school and should be used even if it doesn’t match the other furniture in the classroom!

Practical Ideas for the Primary Curriculum

Art

Adapt paint brushes by cutting them down to shorter length or adding pencil grip

Allow work on a larger scale

Give opportunity to rehearse techniques

Use appropriate software

If doing observational drawing ensure object is against contrasting background

Provide opportunity in art for big movement –large paper

Use Fingers to paint on washable desktop and press paper on top to get record of work done

Consider texture of clay for those with reduced muscle strength

Provide modelling activities with play dough

Promote finger isolation with poking, rolling peas and pressing

Promote co operative use of hands with rolling and use of cutters

Use cutlery with play dough to promote independence with cutlery

Try rubbing to develop pressure, hold paper still using blue tack

Provide chunky wax crayons as they can be easier to hold

Use roll on filled with paint.

Dropping ink from a pipette onto filter paper

Snipping art-make a fringe

Shaker pictures –use powder paint on wet paper.

Provide a variety of mark making tools to encourage children to make decisions as to best tool for the job.

Choose curriculum projects that are not always dependent on fine detail

Dance /Drama

Use of puppets and masks can allow children to demonstrate unfound confidence.

Use toys or video clip to demonstrate movement require such as rag doll for floppy movement

Provide a familiar scenario so child can best demonstrate movement

Give one instruction at a time

Practice life skills to aid independence such as crossing the road, dressing.

Teacher/child to provide model and encourage good looking

Praise process, effort, determination, individual progress rather than finished project.

Design Technology

Design of a product does not have to be a paper recording activity-designing is not recording. Explore all It opportunities for recording take photos, use Widgit, audio and video.

Provide meaningful design issues-could be around disability

Use dycem

Stabilise small objects using blue tack or Velcro

Use a variety of construction toys to promote motor skills-Duplo lego stickle Bricks popoids

To support skills in cooking practise grating, squeezing, mixing

Practise scissor skills using tweezers and tongs

Literacy

Enlarge text

Provide templates for recorded work to prompt appropriate layout

Keep copying and redrafting to a minimum

Provide specific, repeated, simplified instructions and clarify understanding or use buddy for this

Give shorter amounts of text at a time

Consider seating position within classroom and personal work space

Provide a visual cue for finished product (Keep a good copy of previous years work book).

For guided reading split desk into **V** shape, with adult in the middle of the **V**

Use a book mark in guided reading-could have direction arrow

Play games to promote memory- matching games for visual memory (put foam on back of flashcard for easy handling).

Use picture prompts, objects and story maps for retelling

Make finger puppets and use to role play

Use green dot for start of story, arrows for what happens next and red dot for ending

Promote retelling of the middle part

Use whiteboard during carpet session so child can record their ideas immediately

(These can be photocopied and kept alongside written activity)

Use whole body movements for letter formation- in the air, on the back on playground using fairy liquid bottles.

Ensure kinaesthetic write in sand, corn flour use chalk and sugar paper

Draw box around shape of words to promote spelling

Use baking trays and lids of biscuit tins for magnetic letters

Use visual prompts for page layout

Allow pupil to write in every other line.

Use line width that best support the size of the child's writing

Geography

Consider mobility issues for field work

Use Wikki Stix for outlines and borders

Provide white board with grids for grid references

Do mazes to promote direction

Use photos around school to plan and describe routes (start with the familiar)

Use rhymes to promote memory for direction EAST SOUTH WEST NORTH

Use a high contrast to reinforce shapes/outlines- white on black

Fishing game with outlines of countries

Use templates /stencils

History

Use adults known to children as a resource

Use visual timetables

Use a circular strip to show the passing of time day/week/seasons

Timelines can be presented on washing line

ICT

See separate advice sheet

Numeracy

Use adapted ruler

Appropriate paper for recording

Estimate before counting

Highlight one question at a time on enlarged worksheets

Ensure all prepositions are understood before they have to be applied and provide visual prompt as reminders

Ensure children understand that there are different ways of defining number concepts and play games to reinforce this such as dominoes using for example two/2/ 2 dots

Use rol n write numerals

Create cards with raised number shapes-children can close eyes and still try to recognise numbers

Provide mathematical symbols stomper kit- children with dyspraxia find it difficult to draw diagonal lines so are likely to confuse + and x

Colour code symbols, especially those that look similar

Provide visual cue for shapes especially these with diagonal lines

Provide an arrow for direction when calculating

For place value use different colours for columns

Opportunities for lots of estimation activities

Use multi sensory activities for fractions

Introduce time by focussing on times that are significant to the child

Provide practical time activities using sand and digital timers

Use rhymes for remembering months of year, and seasons

Place blob of blue tack on ends of ruler

Use a calculator with large keys

Encourage sequence skills by asking child to thread following sequence card

Place paper on Dycem or use blue tack for measuring activities

Ensure prepositions are understood before they have

Ensure that the task is done practically before recorded

Provide concrete objects to support

Use a spinner as a dice to strengthen index finger

Play board games to develop sense of direction

Use Unifix or pegs to make bar graphs

Use abacus for counting or bead string

Use pegged number lines

Use real money or stick money on small lids

Play fishing game looking for numbers

Play will it fit games to develop spatial awareness, provide lots of practical experience

Provide see through pencil case for storage of equipment

Use ICT to create graphs

Hide money in play dough

Take and count beads from sand using tongs or tweezers

Use pegs on the side of biscuit or sweet tin to record answers to number bonds

Spoonfuls of sand in socks/glove

Place pegs on clothes they are wearing and counting as they take them off. Use timer once confidence increased.

Prioritise time and money-Important life skills.

Music

Adapt instruments for easier handling

Action songs to promote good looking ad body awareness

Suspend instruments on a line

Make instruments to develop motor skills –salad spinner shakers guitars and drums

Careful choice of instrument

Enlarge manuscript paper or use ICT

Buddy with competent student

Have words available for songs

PE

Allow plenty of time to change, allow child with difficulties to get their things first

Provide sequence strip for changing and use symbols or outline drawings

Provide chair to lean on and to sit on

Take time to teach strategies socks in shoes, turning clothes the right way out

Praise effort

For warm up use rubber spots to run around not hoops

Encourage all children to move without bumping into others

Place children with motor difficulties in small group so everyone gets a go even if a particular child is slower

Provide child with two mats

Allow alternative movement/parallel activities and focus on developing a movement they can do really well

Allow stretches to be done sitting down

Allow child enough time and enough space

Modify equipment balloons, koosh balls, grab balls

Use a bounce pass rather than chest pass

Use a T ball stand for rounders

Provide active and more passive parts of session

Encourage child to beat their own record rather than competing against others

Tie socks and use as ball for catching

Science

Mark containers clearly to show where fluid has to be poured

Use dycem to prevent slipping

Use digital scale or alternative measuring equipment that does not require such precise movements

Use a buddy system

Use pourer or funnel for liquids

Confine tiny items in a plastic tray

Adjust sand and water tray

Use anatomical models rather than rely on diagrams in books

Do not rely on tactile discrimination alone- allow visual and verbal description

Check seating position to ensure that child can reach

Use commercially produced stencils

Take photographs to aid recording

Teach safety techniques/ skills needed

Improving the Accessibility of the Curriculum through ICT

Using the checklists -
The following checklists are designed to help you work out how to make classroom ICT accessible to pupils with additional support needs and disabilities as well as others in the class. Keyboard and mouse skills are often a problem for those with fine motor difficulties.

If ICT is to be used to promote inclusion the equipment needs to be accessible to all learners in the class. Access features are already built into the operating systems of modern computers and into software applications. Often this means that a range of users can access programs without having to add any extra software or hardware. The accessibility options mean that the computer can be modified to suit the user's individual needs. For example, the font can be enlarged making it easier for pupils to see the letters on screen, or the computer can be set to avoid sending strings of unwanted characters because the pupil can't get his or her fingers off the keys fast enough

ICT Check list

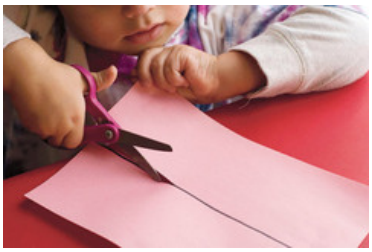
Problem	Possible solutions
Pupil can't see the font in the whole computer system e.g. can't read the menu bar or the names of icons are too small.	
Long – term solution	An individual ICT profile changes – the font and size, the colours of foreground / background for the whole computer system, there are 9 profiles available – see separate sheet.
Temporary solution	High Contrast settings are one of the options. Set a better contrast between the text and the background by changing their colours or selecting the computer's High Contrast

	setting (SHIFT ALT + PRINT SCREEN).
The cursor or screen pointer is too difficult for the pupil to locate.	Change to a larger / thicker pointer, and / or add a trail to the screen pointer using the Mouse Control Panel.
The glare on the screen from reflected light is uncomfortable.	Re-position the monitor or the pupil, especially making sure that light doesn't shine straight onto the monitor. Alter the lighting conditions.
Problem	**Possible solutions**
The pupil complains of fatigue when working at the computer.	Check the heights of the chair, table, monitor, keyboard and mouse to make sure they are appropriate for the size of the student, re-arranging or re-positioning if necessary. Tilt the monitor to a better angle if it is adjustable. Place a wrist support in front of the keyboard. Use a different keyboard / mouse Check use and ensure pupil is not working at the machine too long.
The pointer moves too quickly across the screen.	Change the mouse speed via the Mouse Control Panel.
Pupil can't double-click the mouse button fast enough.	Increase the setting for the time allowed via the Mouse Control Panel. Use a programmable mouse or roller ball to give a double-click when the button is pressed. Apply 'Sticky Keys' (Through control panel or pressing the shift key 5 times) eliminates the need for keys to be pressed down together, such as CTL,ALT, DEL
It is difficult for the pupil to hold down the mouse button and move it at the same	Turn on the click-lock access facility. Use a mouse or tracker ball that has a

time.	locking facility. Use a separate switch plugged into the mouse, trackerball, or via a switch interface.
Moving the mouse around the table to navigate is causing difficulty.	Use a different mouse mat to slow down or speed up mouse movement. Use a tracker ball, joystick or other pointing device rather than a mouse.
Strings of unwanted characters appear because pupil can't get fingers off the keys fast enough.	Use the Keyboard Control Panel or Accessibility Options Control Panel to switch off or slow down the keyboard's auto-repeat setting.
I can't make any of the changes because none of the Control Panels listed is available.	If the computer is on a network it is very likely that the Control Panels are 'hidden'. In order to make changes you (or someone else) needs to be able to open the Control Panels folder. How to tell if you can access the Control Panels folder: if you can click on Start then Control Panels (you might have to click Start > Settings) and the Control Panels folder opens up, you should be able to make the changes. If you can't access the Control Panels speak to the school technician or local authority ICT contact and explain what needs to be changed.
Pupil can't see the text in the word processor or other program.	Change the font size in the word processor. Change the font style in the word processor e.g. to bold. Set a better contrast between the text and the background by changing their colours. Use a word processor with a text-to-speech facility so that the pupil can get auditory support e.g. Textease with speech.
The keyboard is too complicated, with lots of keys that the pupil doesn't need.	Put a mask over the keyboard so that only the required letters are visible. Use a simplified keyboard or an overlay keyboard with a simple 'qwerty' keyboard

	overlay on it.
The keyboard has keys written in upper case and the pupil has difficulty recognising them.	Stick lowercase letters over the letter keys to make them stand out. Use an overlay keyboard and make a lowercase 'qwerty' keyboard overlay for it.
Typing every letter is slow and laborious for the pupil.	Teach keyboard awareness with a typing tutor program. Provide ready-made word banks of the key vocabulary the pupil will need for an activity, either on screen or on an overlay keyboard. Use a word predictor that runs alongside the word processor. Use paired writing with an adult or peer to share the task of scribing. Use a speech recording device for recording ideas or dictating notes
The pupil uses text-to-speech software but it distracts others.	Use headphones.
A pupil can see the font on screen but has difficulty reading the printout.	Change to a larger font before printing out. (CTRL + } KEY)

Fine Motor Activities for Schools



These activities will help to develop hand strength, dexterity and manipulative skills for classroom tasks, writing and self-help skills. Activities are organised as follows:

Upper limb strengthening

Hand and grip strengthening

Pinch isolation and strength

Manual dexterity

Bi-manual integration

Some practical ideas to help develop cutting skills are included, as are some ideas for using playdough for manual dexterity.

A list of resources that may help you to set up a "Fine motor activity station" in your class is also provided.

These activities will benefit all children by giving them the opportunity to develop the fine motor skills needed to many classroom activities and self-care tasks.

Specific advice is also available from the occupational therapy service for individual children whose fine motor development appears to be unusual.

Before we begin…

In order to develop upper limb strength and hand skills children need to have good trunk stability. Trunk stability affects a child's working posture, and affects their ability to position and move their limbs effectively and efficiently. Postural control is important when carrying out manipulative activities including writing, and to maintain the head in a good position to make eye contact or look at the board. Trunk stability is also needed when standing to draw at an easel or to walk and carry a tray.

Some schools carry out special motor skills programmes, such as the BEAM and Write Dance in addition to their regular PE classes for children who have been identified as having motor difficulties. These programmes focus in part on the development of postural control. For further information about these programmes and others like them please contact the occupational therapy or physiotherapy services.

The problem of postural control

Children with poor postural control often adopt a variety of working positions. These include:

Leaning forward over the table with rounded back

Sitting on the front of the chair, leaning back with arms away from the table

Resting head on hand

Resting head on forearms on the table

Wrapping feet around chair legs

Sitting on knees

Sitting on one leg

Constantly moving on the chair

Moving the whole body rather than just the head to look up or around

Postural control becomes more difficult when whole arm movements are required. Children with poor postural control continue to put extra effort into maintaining a stable trunk position while using their hands, long after their peers have developed stable trunk control. They tire easily and their arm movements are less accurate than those of their peers.

Are we sitting comfortably? Then we'll begin…

To minimise the effects of poor postural control make sure that the child is sitting comfortably with trunk, and if necessary arms stabilised. Try to ensure that the child's
chair is an appropriate size for the child and the table. The child's arms should rest on the table with shoulders relaxed, feet are flat on the floor. If necessary put a firm support under the feet, for example a heavy telephone directory or stool that won't b kicked away.

Bottom is back in the chair with hips flexed at 90'. A slightly larger angle between the trunk and the thighs is better than a smaller angle which tends to encourage children to hunch forward over the table.

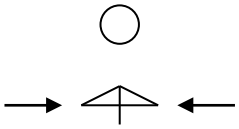
Upper limb strengthening activities

Sitting push-ups

Sit on a chair with feet resting on the floor. Hold the sides of the chair with both hands towards the front of the seat. Lean forward so that the arms are straight and take some of the body weight. Slowly bend elbows to lower body back to the seat again. Straighten arms to bring body weight back up to a forward sitting position again, then slowly shift weight back to sit on bottom again.

Hand pushes

Put hands together as if praying. Squeeze hands together and raise elbows. Relax and repeat.



Classroom activities

Wiping and cleaning tables and wring the cloth out afterwards. Encourage the child to move from the shoulders rather than the trunk.

Write or draw on a whiteboard with arms raised using whole arm movements.

Lift or carry equipment, for example moving chairs for cleaning, putting them up on the desk etc.

Push or carry weighty objects, for example a heavy tray or stack of books

Sweep or mop the floor

Stand and scribble over textured templates, holding the paper still with one hand

Other elevated activities, for example lifting books onto a shelf, hanging pictures onto a drying line

Outside activities

Digging, sweeping, mopping

Scoop sand into a bucket using a scoop or cupped hands

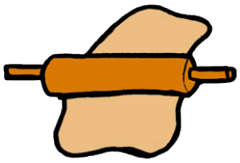
Pulling on climbing equipment

Pushing wheelbarrows etc.

"Animal walks" where body weight is put through the arms

Pull-along toys

Turning a skipping rope



Catching and throwing

Tug of war

Bowling

Tennis, other racquet games

Hand and grip strengthening activities

Paper scrunching

Using one hand ask the child to scrunch a sheet of paper into a ball and throw it into a waste paper basket. Try with both hands.

Paper folding and tearing

Paper folding and tearing requires good hand strength to be accurate. Children can tear paper along the side of a ruler (which requires strength to keep it still). The paper can be used to make paper mache or collage pictures. Older children may enjoy origami.

"Brass rubbing"

Provide a set of textured plates or other textured material and ask the child to scribble over it. The child has to hold the template still while pressing hard on the crayon to colour.

Playdough and baking

See extra activity ideas in appendix.

Also try cutting the dough with scissors or a plastic knife, and squashing the dough into a small container.

Mould scone dough into rounds then flatten to bake

Jars and lids

Collect together a selection of jars with different lids. Keep the lids and jars separate and ask the child to match them together before removing them ready for the next child.

Stickle bricks, Lego, Popoids and magnets

Push and pull together.

Stamps and stamp pads

These are available from craft suppliers and come with a variety of handles. Stamps can be linked to class themes.

Tongs or salad servers

These are operated with the whole hand and can be used to pick up medium sized objects, such as the toys from fast food outlets.

Classroom activities

Use a hole punch to make holds for art projects

Staple papers together

Keep regularly used objects in a screw-top jar eg biscuits for snack time, pencils, reward stickers etc.

Use trigger-spray water guns when wiping tables or chalk boards

Wring out cloths after wiping

Outside activities

Water relay - children transfer water from one bucket to another using a sponge. Vary the size of the sponges to increase resistance.

Tug of war - use an old towel

Spray gun activities - spray water or diluted paint on a large piece of paper or the playground to make patterns. Spray water at balloons to try and keep them in the air.

Pinch isolation and strength

Clothes pegs and bulldog clips

Children can help to peg out washing or paper shapes onto a washing line. A children's washing line can be bought from Ikea.

Pegs can be placed around the side of a box or around a paper plate

Have a race to see how quickly the child can place 10 pegs onto the side of a box with each hand, then try to beat their record.

Try a variety of pegs as some are harder to squeeze than others.

Use different coloured pegs and ask the child to match them together.

Write letters on the sides of wooden pegs and ask the child to sequence the pegs onto the side of a box to write their name.

Make a colour sequence chart and ask the child to copy this with their pegs

Colour the box sides, and ask the child to match coloured pegs to the appropriate box sides.

Place pictures around the edge of the box, and direct the child to place the pegs of specific pictures.

Put numbers around the edge of the box, and ask the child to match the pegs to the numbers that are the answers to simple sums.

Replace the pegs with, for example, bulldog clips, large paper clips, small pegs, plastic page markers.

Pop-together beads

Extend this activity by making colour sequence charts for the child to follow, or marking beads with letters or numbers to sequence.

Sugar tongs

Provide a small pair of sugar tongs and a container or small objects. The child can pick these up and sort them into another container/containers by shape, colour etc.

Film canister games

Hide small objects such as little toys, or Cheerio breakfast cereal inside old plastic film canisters. These are often given away freely from film processors on request. The child should be encouraged to reach his/her thumb and first finger into the pot to retrieve the object. Objects could include dry cereal, small cubes etc.

Flip top lids

Collect together a variety of containers with flip-top lids. Keep glitter etc in these for craft activities.

Squeezy paint tubes

Use commercially available tubes of paint with sponges or brushes on the end. The child has to keep squeezing the tube (encourage a good hand position - not a full hand grasp!) so that the paint comes out.

Tug of paper

For children with weak grip strength, insert a piece of paper into the jaws of two clothes pegs, one on each side of the paper. With a partner encourage the child to tug on the clothes peg to see who keeps control. Alternatively, ask the child to hold the peg with the paper hanging down, and squeeze the peg open so that the paper drops to the floor.

Matchsticks and playdough

Push Hobbycraft matchsticks into a lump of playdough and pull out again.

Golf tees and Styrofoam

Push golf tees into a block of Styrofoam and pull out again

Perforations

Draw a picture outline onto paper and place on top of an old mouse mat. Use a push pin to make small holes around the outline, so that the picture can be pushed out.

Other commercial games

Tiddly Winks

Pop up Pirate game

Honey bee tree game (ELC)

Kerplunk

Manual Dexterity

To increase hand awareness:

Have a go at activities that put weight through the upper limbs or stimulate the hands before starting fine motor activities. Activities include:

Wheelbarrow walks

Crab walks

Clapping games - clap loudly, quietly, pat the knees, clap together

Catch soap bubbles between the hands

Sensory activities - "drawing" with the fingers in sand/rice/cornstarch/shaving cream

Rub lotion into the hands

Try making pencil/crayon rubbings over different textures e.g. sand paper shapes

Raise it up!

Working on a vertical surface puts the wrist into an extended position. This encourages thumb movements and the development of refined hand control.

Try the following:

Putting a piece of paper on the wall

Using a whiteboard or blackboard

Using a magnetic board or felt board raised on an easel

Trying using stickers, magnetic shapes, re-usable stickers or rubber-stamping in this position.

Money Boxes

Place 10 coins on the table in a line across the table in front of the child's right hand. Ask the child to hold a money box on the table with his / her left hand and as quickly as possible, pick up each coin in turn using just the thumb and first two fingers, and post them into the money box. Try posting with the left hand. Remember that the child must not change hands during a go, and must keep hold of the money box.

Sorting

Place a variety of small objects in a tray in front of the child. Ask the child to sort the objects out, placing them into small boxes, margarine tubs etc. Objects can include buttons, toy farm animals, different sorts of pasta etc.

Pipe cleaners and Wikki Stix

Twist pipe cleaners or Wikki Stix together to make patterns, shapes and objects.

Pegboard kits (Hanna beads)

These come in a variety of sizes to suit different levels of dexterity. Some kits can be melted together to make permanent decorations (you could also add a magnet to the back).

Textured paper collage

Ask the child to tear up some tissue paper into approx. 2cm square pieces. These can then be scrunched up in the fingers and stuck onto card shapes to make textured pictures.

Finger Lifts

Ask the child to sit with both hands palm down on a table. Ask the child to lift up their right thumb only, keeping all other fingers and the other thumb still. Lower the thumb down and try to lift the first finger. Lower. Repeat this with each finger in turn, with each hand.

Finger Loops

With the right hand, ask the child to gently touch the tip of the thumb to the tip of each finger in turn. When the little finger has been reached, come back to the ring finger, the middle one and then the index finger again. Repeat this exercise 3 times. Try with the left hand. Now try the same exercise with eyes closed. Make sure that the child's thumb touches the tip of each finger, and not the side.

Tied-up Fingers

Wind an elastic band around the four fingers on each hand. Ask the child to try to "wriggle" the elastic band and free their fingers: thumbs may be used to push the elastic band initially. Practice each hand separately, and then both together.

Scoops

Use a melon baller to scoop small objects (e.g. dried beans) from one container to another.

Making links

Make chains from paperclips (including larger plastic ones) or from link-together toys which are often found in the maths section of education supply catalogues.

Other activities include:

Origami

Weaving

Playdough

Card games

Marble games

Fuzzyfelt

Sticker books

Bi-manual integration

Bilateral arm and hand use is the ability to effectively use the two hands/arms together during an activity. With practice the child will be able to use each hand to perform a different part of a task at the same time. Most children have established hand dominance by around 5-6 years of age: they develop finer co-ordinated, manipulative skills in this hand, and use the non-dominant hand to help with manipulations, to stabilise activities and to position objects.

Musical instruments

Use maracas, cymbals and drums to make rhythms by moving alternating hands

Clapping games

Like those that used to be played at school!

Ball games

Activities include bouncing, dribbling a ball with one hand then the other. These games require alternating arm movements.

Cutting

Encourage the child to use one hand to hold and manipulate the scissors, while the other hand manipulates the scissors. Encourage the child to keep the scissors pointing away from the body while the paper is turned.

Using a ruler

Use the ruler to help when completing word-search puzzles, or to draw a timetable or calendar. Using the ruler to draw lines on an upright or angled surface (e.g. a slope) means that the child has to use the other hand to hold the ruler steady.

Sharpening pencils

Hold the sharpener steady with one hand while turning the pencil with the other. Bear in mind that most sharpeners are designed for right-handed people.

Lacing, sewing or threading beads

Bottle top sorting

Gather together a range of plastic bottles and their screw tops for the child to sort and place/remove.

Newspaper stuffing

Tear newspaper into strips, crumple the pieces and stuff them into, for example a sock to make a soft ball or puppet head.

Stretch scrunchies

Gather a collection of hair scrunchies for the child to stretch over cardboard tubes or (empty!) crisp tubes.

Flour/bean sifter

Mix together some flour and dried beans. Give the child a sieve and two bowls. Ask the child to hold and shake the sieve with two hands, and tip the beans into the empty bowl.

Sorting with tweezers

Give the child a plate of objects to hold in the non-dominant hand. Using tweezers held in the dominant hand the child picks up an object and sorts it into piles or pots of similar objects. Objects can include Lego pieces, buttons, seeds, buttons etc.

Hand Stars

Sit the child with his/her elbows bent, and palms facing away from their body. Ask the child to close both hands at the same time, making sure that only the hands move (not the head, elbows, trunk etc). Ask the child to open and close their hands ten times, keeping the rhythm regular and making sure that all the fingers are stretched out when they open. When this pattern is fluent and reasonably quick, ask the child to practise the same exercise with eyes closed.

The next stage is for the child to start with one hand fisted, and the other with fingers extended. Close the open hand, and open the fisted hand simultaneously, making sure that only the hands move. Repeat this pattern twenty times. When the child is confident, try with eyes closed.

Hand Turns.

The child should sit on a chair, resting both hands on their lap with palms down. Keeping elbows relaxed and still, the child should turn both hands over so that the palms are now upwards. Turn back again. Repeat this ten times, making sure that only the forearms are moving and that the trunk and head are still. When this is fluent, try with eyes closed.

The next stage is to start the exercise with one palm facing up and one down. Turn both over simultaneously, and then turn back again. Make sure that the hands are lifted a little rather than rolled over, and that the body remains still. Repeat this sequence ten times, and then try with eyes closed.

Classroom activities

Keep items (such as snacks or pencils) in twist-top jars or draw-string bags.

Keep reward stars/stickers in small containers, like those that are often used to hold cosmetic creams when travelling

Developing Scissors Skills

It is suggested that the child completes the following exercises (to stimulate sensation and finger mobility) and then one Pre-cutting Activity (to promote integration of the two hands) before beginning to cut.

Exercises

Rub hand together vigorously for a slow count of three.

Clench and unclench the hands five times.

Shake the hands for a slow count of three.

Pre-cutting Activities

These activities reinforce the motor pattern of holding and turning with the non-dominant hand, while the dominant hand simulates the finger action of opening and closing scissors whilst keeping the forearm and wrist in a fairly static position.

Sorting

The child holds a saucer or tray in his/her non-dominant hand and sorts, for example, the yellow beads from a mixed pot, and places the yellow beads on the saucer with the dominant hand.

Replace the saucer with a small tray that has different compartments, so that the child can sort several different colours/objects into separate compartments.

Give the child a pair of tongs (e.g. sugar tongs), and ask him/her to use these to pick up and place the objects.

Pegs on a box

The child holds the lid to a shoebox in his/her non-dominant hand and selects clothes pegs with the dominant hand. The pegs are then placed around the edge of the box lid: make sure that the child turns the box lid to place the pegs, rather than turning the dominant hand.

If the child has difficulty organising his/her hands to squeeze the pegs or lack the required strength, try placing the pegs on the box sides and asking the child to remove them.

Play dough

Cut a thick circle out of play dough. Ask the child to hold the circle in his / her non-dominant hand, and turn it while pinching the edge between the finger and thumb of the dominant hand.

Strategies for Coping with Cutting Difficulties

Difficulty starting off

Acquire an old “mouse mat” or thick place mat and put this on the table in front of the child. Put the paper on the mat so that it extends over the front of the mat. Ask the child to gently place their non-dominant hand on the paper where it is resting on the mat. The child should now slide the lower blade of the scissors into the gap between the table and the paper and make a cut. Once the first cut had been made the child can pick up the paper and continue cutting.

Child turns the cutting hand rather that the paper

Verbally remind the child to always cut away from the body.

Physically prompt the child to keep the elbow of the non-dominant arm in to the side.

Practise cutting around a corner: the child should stop cutting at the end of the first line, turn the paper with the non-dominant hand and continue to cut along the second line, keeping the scissors pointing away from the body.

Child has difficulty cutting along a line

Encourage the child to keep looking at the blades of the scissors by putting a blob of paint or a sticker on the end.

Make a series of holes along the line to be cut, so that the child can feel when he / she is cutting accurately.

Copy the shape to be cut onto a black background.

Enlarge the shape outline.

Child has difficulty holding the paper

Copy the shape onto stiff paper or card.

Child has difficulty managing ordinary scissors

Different types of scissors are available. Make sure that a child who is left hand dominant uses left handed scissors. Children who have difficulty managing the open / close hand movement may find Stirex scissors helpful: these are available from Taskmaster and NES Arnold and have a plastic loop attached to the ends of the scissors (rather than finger holes) so that they spring open with no effort. Scissors that cut interesting patterns are often more motivating to children than ordinary blades.

If frustration really sets in…

Provide the child with pre-cut shapes to stick and arrange so that he / she successfully completes a task. Practise the skills needed to manipulate scissors at another time.

Play Dough Exercises for Manual Dexterity

Stage 1

Take a lump of dough and "warm up" by starting to squeeze it between both hands.

Stage2

Start to roll the dough into a straight sausage. Try to make the sausage even in thickness.

Stage 3

Squeeze along the top of the sausage between the index finger and the thumb to make "spines" , using the right hand.

Stage 4

Using the index finger of the right hand, squash each spine down.

Stage 5 and 6

Repeat with the left hand.

Stage 7

Pull a piece of dough off the end of the sausage, and roll between the two hands to make into a “pea”. Make 10 peas.

Stage 8

Arrange the peas into two lines of 5 peas on the table.

Use both index fingers at the same time to squash the peas.

Now squeeze each pea between the index finger and the thumb.

Now use your thumbs to squash each pea.

Stage 9

Collect all peas together and squeeze into a big lump.

Stage 10

Hold the dough in the left hand. Pull small pieces of dough off with the right index finger and thumb, and replace into the pot.

Fine Motor Resources for Schools

Examples from educational suppliers e.g. Hope Educational, Espio, Yorkshire Purchasing, LDA

Lacing animals

Nuts and bolts

Sticklebricks

Magnetico

Interstar

Lego

Big peg board

Magnet activity bolcks

Popoids

Cut and play fruit and veg

Counting links

Sequencing beads

Tools to help children with fine motor difficulties at school

Taskmaster LTD www.**taskmaster**online.co.uk
0116 270 4286

Freehand Desk Clamp

Handiwriter

My first ruler

Guide-write paper

Pencil grips

Scissors

Sorting counters

Card stands

LDA - www.**lda**learning.com

Cutting Skills

Write from the start

Speed Up

Supporting Children's Motor Skills- Ideas for Home

Dressing

Practice dressing skills with school uniform and PE kit at weekends and in the holidays. Share the strategies you use at home with school. Adapt clothing if necessary such as Velcro for buttons, elastic tie, sew in a bigger loop for child to hang coat or a key ring on a zip.

Independence Skills

Practice all the skills needed in a school day. These could be folding PE kit, opening packets for packed lunch, putting straws in drink cartons, using cutlery, scraping plate carrying plate/tray etc.

Reduce Frustration

Provide see through easy zip pencil case. Choose a lunch box that is easy to open. Wrap sandwiches in foil rather than cling. Choose easy open packages or part open and secure with a clip or peg.

Get organised

Help and support your child with organisation. Have a laminated timetable for their week at school and activities at home. Have a prompt or checklist by the front door to remind them of what needs to be taken on each particular day. Help them to manage their time with homework tasks and encourage them to work in low distraction place.

Activities to help develop skills and coordination

The following pages include some suggestions to help develop your child's skills and coordination at home. They are activities that you can incorporate into your daily lives. Many of the activities are fun to do. You can also encourage brothers and sisters to join in.

The activities aim to support in -

Developing posture and internal stability

Developing body awareness

Developing shoulder and arm strength

Developing hand and grip strength

Developing finger skills

Using two hands together

Developing posture and internal stability

Many young people with motor skills difficulties have low postural tone which means they have difficulty holding a position against the force of gravity. They often lean against furniture or people when sitting or standing, and when working at a table they will slouch forward or prop their head in their hands. People with low postural tone can tire easily.

Good posture is important to help children carry out movements using their hands. It means a child can sit up straight with their hands free for drawing, or can walk steadily while carrying their lunch tray. The following activities will help to develop the middle section of the body, the trunk, as a stable base from which to position and move the head, arms and legs.

Encourage the child to lie on their tummy and prop themselves with their forearms. They could use this position while watching TV, reading a book or doing a puzzle.

When reading at a table encourage the child to use both hands to hold the book while resting their elbows on the table.

Encourage reaching-up activities such as placing magnets on a fridge at shoulder height, painting at an easel and passing shopping up for an adult to put onto a shelf, reaching up to pop bubbles.

Swimming is great for developing trunk stability, particularly when swimming on the front.

Encourage the child to lie across a swing while lifting their feet off the ground to swing gently.

Ball games where the child has to lift a large lightweight ball and throw it up will help with trunk extension.

Developing body awareness

Many children with motor difficulties don't seem to know where their body is in space and where parts of their body are in relation to each other. They may bump into things; have difficulty putting their foot into their shoe or over-reach when trying to pick up a drink.

Poor body awareness is often found in children who have low postural tone. This is because they don't receive good feedback from their muscles and joints to tell them where their limbs are and how they are moving. Good body awareness helps us to adapt our movements to match the demands of our environment. It also helps us to develop spatial awareness.

Activities that put pressure through the joints and which make the muscles work against resistance are good for developing body awareness. These can include:

Pushing a loaded shopping trolley

Digging in the garden

Carrying the laundry basket into the kitchen or pushing it along the floor

Wearing a backpack whilst walking to school (not too heavy!)

Sweeping leaves in the garden or sweeping the kitchen floor

Many playground activities including swings, the see-saw and climbing frames

Activities that help a child to "feel" different parts of their body include:

Crawling through a play tunnel

Squeezing through spaces that are only just big enough

Talk about the arms/legs/back as you rub them dry after a bath.

Sing songs that mention body parts and touch those parts as you sing Head Shoulders Knees and Toes.

Playing “Simon says” – getting the child to move different body parts and to copy your body positions.

Developing shoulder and arm strength

Children with poor shoulder stability find it difficult to hold their arms in different positions while they use their hands to move toys and objects. They may also find it difficult to make smooth, controlled arm movements away from the centre of their body, for example to move a pencil across a page or to pour a glass of water. Children will often hold their elbows into their sides for extra stability.

Improving shoulder stability and upper limb strength will allow the child to make more accurate and controlled movements with their arms and hands. Activities that involve putting weight through the shoulder joints are especially helpful.

Crawling through tunnels, pulling up a slide and climbing up a rope ladder.

Ball games such as swing-ball and racket games can also help as the sensation of the ball hitting the bat/club stimulates the shoulders- use a large lightweight ball or a balloon to start with.

Encourage your child to dig with a spade, pull a rake or push a wheelbarrow

Ask your child to help you wash your car, reaching high and to the sides, and wringing the sponge out when it is too wet

Ask your child to help you unload the washing machine then reach up to put the washing on the line.

Games that require the child to hold their arms away from their body, such as magnetic fishing games, hoop-la or make skittles with empty plastic bottles.

Painting at a easel or chalkboard at eye height is good for sustaining shoulder movements against gravity

Water games such as pouring are also good for shoulder movements

Give your child the job of wiping the table after dinner, encouraging movements from the shoulders rather than the trunk

Playing skipping games with another member of the family, asking your child to help turn the rope with each hand and in each direction

Developing hand and grip strength

Children and young people with motor difficulties may have weak muscles in their hands and fingers. They often find fine motor activities difficult and avoid doing them. This means they don't develop hand and grip strength at the same rate as their peers.

Children with poor hand and grip strength tend to use awkward whole-hand grasps to pick up and manipulate objects. This affects the accuracy of their hand movements and means they have difficulty with the more refined fine motor movements needed to, for example move a pencil or do up buttons. They also have difficulty open packets, turning a door handle, holding objects securely and pulling up a zip.

Activities that involve pinching or gripping against resistance will improve hand and finger strength. Many activities can be incorporated into the child's daily life so that strength is gradually built up. These can include:

Wringing out wet clothes, a flannel or a sponge when washing the car.

Pegging washing onto the line

Moulding scone or biscuit dough into rounds and flattening to bake

Pressing shaped cutters into play dough

Rolling dough into a sausage and slicing rounds with a knife

Paper folding activities – make a paper fan, boat or hat

Use Rubber stamps from the pound shop

Keeping frequently-used items (e.g. cutlery or biscuits) in containers with flip-top or screw-top lids. Practice un doing jars and plastic bottles

Scrunching paper into balls before throwing it into a bin

Using trigger-action spray guns to water plants

Using salad tongs to serve out lunch or sort objects such as cotton wool balls

Games for younger children include:

Stickle bricks

Magnetic blocks

Pop and lock beads

Nut and bolt construction sets

Developing finger skills

The development of fine finger skills is dependent on a person's ability to stabilise their trunk and shoulders while moving their hands. Over time movements become more controlled, developing from the shoulders to the elbow, the wrist, and then the fingers. Some children with motor difficulties are slow to develop the fine motor control needed for writing, managing buttons and using scissors. Hand movements are often larger than necessary and are therefore less accurate. They often use unusual grips to hold their pencils and other tools.

Children with poor fine motor skills will benefit from activities that put weight through their shoulders and arms before carrying out fine motor tasks. You should also make sure that your child is sitting on an appropriately sized chair with their feet supported. This allows them to concentrate on their hands rather than their balance.

Activities to stimulate the hands include:

Clapping games

Catching soap bubbles between the hands

"Drawing" with the fingers in a tray of sand, rice or shaving foam

Activities for finger isolation (pointing) include:

Popping soap bubbles that land on the floor

Pressing stickers onto a page

Poking holes into a lump of dough

Finger painting

Finger puppets

Playing with push-button toys, calculators or an old typewriter

Pointing out hidden objects in a picture book

Activities for developing a pinch grip include:

Using tweezers to sort out small objects such as buttons and coins

Using a plant sprayer to wet sand, walls or the pavement

Pinching pieces of dough from a large lump

Sorting out the change from your purse

Make a hedgehog by pushing used matchsticks into a lump of dough

Dealing cards

Using two hands together

Many young people with motor difficulty find it hard to use both hands together. They have often been late to decide which their dominant hand is, so don't get used to using one hand actively while supporting the activity with their other hand. They find it difficult to use scissors, do up buttons, tie laces and use a knife and fork.

Often these young people don't support the paper when writing – sometimes they press down hard with their writing hand to stop the paper from slipping. They may also find it difficult to reach their hands across the middle of their body.

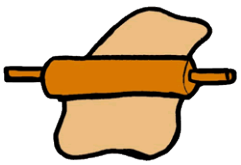
The following activities will help young people to use both hands to perform different movements at the same time.

Playing musical instruments such as the maracas and drums or make and play homemade instruments.

Ask your child to mix batter or beat eggs while holding the bowl steady with one hand.

Lego bricks encourage pushing and pulling with both hands together.

Use clay or play dough to roll snakes with both hands. Encourage your child to adjust their hand pressure to make sure the snake is even in size. Rolling pins can also be used with two hands together.



Lots of water toys encourage two-hand use. These include squeezing objects to squirt water and using pumps or levers while holding the toy steady.

Lacing and sewing activities using plastic canvas, cards with holes in.

Provide stencils or templates for your child to draw around while holding the shape steady. You can make these out of card.

Practice cutting using stiff paper and straight lines before moving on to thinner paper and curved lines. Make sure your child is sitting on an appropriately sized chair. Use old birthday cards and zigzag scissors to cut interesting shapes for gift tags or collages.

When playing in the sand provide a two-handled sieve. Put some objects (e.g. shells) into the sand and ask your child to find the shells by shaking sand through the sieve.

Make bead necklaces using small dried pasta tubes and laces.