

## Developing Hand Skills



This pack provides hints and tips to help you develop hand skills in the children/young people you work with.

**Please use the advice and strategies contained in this pack before you make a referral to the Occupational Therapy service. If you feel you require further information please click [here](#) where you can also book onto one of our education sessions.**

Hand skills include the ability to do the following things with your hands:

- Touching & feeling
- Reaching
- Grasp and release (this can involve pushing or swiping at an object, use of the whole hand or picking things up with more precise grasps)
- Coordinating both hands together
- Construction
- Manipulation
- Tool use (Use of scissors, cutlery, crayons, etc. These are more complex skills requiring more advanced grasps and thinking skills such as motor planning, sequencing and spatial awareness).

Please refer to the resource pack [Encouraging Play](#) for advice on developing the abilities to touch, feel and reach in children/young people with complex learning and physical disabilities.

### **Underlying Skills**

In order to develop these hand skills, children/young people need to have underlying skills in:

- Sensory and perceptual skills
- Postural control and shoulder stability

- Control and Movement of hands
- Attention and Motivation
- Understanding the task

Children/young people often have difficulties developing hand skills because of a deficit in these areas, and therefore advice and suggestions are made under each of these headings.

### **Sensory and Perceptual Skills**

In order to be able to interact with objects, children/young people need to be able to tolerate and recognise the feel of them. It is also important to recognise that different objects and activities need to be handled with different degrees of force or pressure (such as holding a pencil not too loosely and not too tight).

#### **Activity Suggestions:**

- Warm-ups using heavy pressure e.g. squeezing playdough, pushing hands together, pushing down on table or against a wall.
- Recognising objects through touch e.g. guessing the item in a feely bag, selecting a specific object (from a choice) hidden in a tin of dry rice or pasta, textured dominoes (matching textures).
- Sensory play experiences e.g. gloop (cornflour and water mix), finger painting etc.
- Practise grading use of force, e.g. pick up sticks (carefully!), putting items in a jar with tweezers, poking shallow and deep holes in playdough, squeezing playdough hard and gently, crayon rubbings gently and hard. Also in P.E. try taking big steps and little ones, light steps and heavy ones.



### **Postural Control and Shoulder Stability**

Postural control refers to the ability to maintain a stable position, usually sitting, from which hand skills can develop. Similarly, shoulder stability is important to control movements of the hands whether they are small and accurate or large and strong.

Activity suggestions:

- Climbing, crawling, swinging
- Tug of war, pushing, pulling, digging
- On tummy over peanut ball, standing on wobble board
- Press-ups & shoulder spirals
- Lying with tummy on floor, propped up on elbows to watch TV, look at books etc.
- Working on a vertical surface (e.g. whiteboard or blutacked to wall)
- Working in high kneeling at the table
- Sit on gym ball/sitfit cushion



Make sure the child/young person has a good sitting position at the table (chair tucked in, bottom back in chair, able to rest elbows on table and feet on floor)

### **Control and Movement of the Hands**

In order to control hand movements, children/young people need both mobility and stability in their elbow, wrist and finger joints. The best position of the wrist for fine finger movements (e.g. when writing) is one of slight extension - the wrist is bent slightly towards the back of the hand. When the wrist is bent or hooked, strength and movement are reduced.

Tool use (such as pencil and scissors) often requires the more advanced skill of being able to manipulate with the thumb and first two fingers

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while using the other side of the hand (ring and little fingers) to stabilise. This is sometimes referred to as a blended grasp.

Activity suggestions:

- To strengthen hand grasp - Squeeze playdough / theraputty / stress ball; hammering activities.
- For a weak grasp or hypermobile finger joints, tools with thicker or padded grasping areas can help, e.g. chunky crayons, wide handled cutlery.
- For weak wrists - practise activities that involve pushing or weight bearing through hands; try writing on a vertical surface or sloped writing board.
- To develop a pinch / precision grasp - activities that involve squeezing or picking up very small objects e.g. dropping coloured water from a pipette, squeezing clothes pegs between thumb and first finger to put on edge of an ice cream tub, poking small pegs into a ball of playdough and pulling them out (make a hedgehog)
- To develop a blended hand grasp - squeezey scissors, squirting with a water spray; try picking up small items with the thumb and first two fingers while holding a small piece of blu tak in the ring & little fingers.
- To practise use of 2 hands together - threading beads, threading cards, building with stickle bricks or lego, holding bowl while stirring, holding tub / jar / pen in one hand while taking lid on / off with the other hand.
- To develop in-hand manipulation skills - rolling small balls out of paper or playdough, flicking them into a goal; moving a penny from palm to fingertips and back again, shifting fingers up and down a pencil.



### **Understanding the Task**

Sometimes children/young people struggle with hand skills because they just don't understand how to go about doing the task. In this case, there is a lot an adult can do to help them.

#### Hints & tips:

- Demonstrate the activity, slowly and clearly, several times if needed. Emphasise where to start.
- Give hand over hand guidance to help the child/young person to feel movements they need to make. Try exaggerating them in extra large movements, for example by forming letters the size of a dinner plate!
- 'Chaining' - the child/young person does either the first or last step in the sequence, (or maybe both), with the adult completing the rest. For example, child/young person ties a knot or pulls the ends tight if learning to make a bow. Gradually build up to the child/young person doing more and more steps by themselves or with minimal assistance.
- Break the task down into small steps and teach a little bit at a time. For example, if struggling with doing buttons, just practise posting buttons through a narrow slot first.
- Talk it through simply - may just guide with key words like 'down....up'
- Don't talk too much! This can confuse a child/young person who needs to spend so much effort on listening that they can't think about what they are doing.
- Give extra practise, and allow the child/young person extra time to complete the task.

### **Attention and Motivation**

#### Hints & tips

- 'Readiness' - remember that if a child/young person is not ready developmentally, they may need to practise other skills first.
- Make sure the task is achievable.
- Keep tasks short and try using timers to show when it will finish.
- Prepare the child/young person's sensory system - if they look sleepy, do some quick whole body movements first; if they are too alert, calm down with some heavy pressure activities such as slow regular walking, squeezing a ball, pushing against a wall.

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- Introduce variety if needed, with multi-sensory experiences, movement, or changes of position (e.g. do activity lying on tummy, in high kneeling at a table, sitting or standing).
- Reduce distractions - within the child/young person's field of vision (e.g. by creating a work station facing a wall with no clutter on table and blank wall in front of them) and within their hearing (e.g. position away from open window / door / other children, consider headphones or earplugs)
- Keep the activity fun by incorporating things that the child/young person is interested in
- Give plenty of praise, and reward with stickers / charts / preferred activity next.

