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## Skilled Hands

### In Hand Manipulation

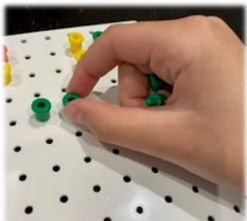
In-hand manipulation refers to the fine adjustments made within the hand after grasping an object. The child needs to develop these skills to have effective and efficient fine motor skills.

#### Fingers to palm and palm to fingers

- Collecting pieces of a toy, e.g. counters in one hand before placing them back into the box.
- Games of pretend play which involve taking money from a purse.
- Small peg games, e.g. ask the child to make a pattern using different coloured pegs.
- Collage work, tearing small pieces of paper from a large piece.
- Taking the lid off a small pot and holding it in the hand while retrieving the contents.
- Placing items inside the cups of egg boxes.
- Moving penny / counter from the palm to fingers.
- Moving object from palm to fingers to put into small container e.g. putting coins into a piggy bank.
- Moving rubber to finger tips to rub out pencil marks.



#### Fingers to palm and palm to fingers with stabilisation



All the above activities can be continued but encourage the child to hold one or two pieces in the palm while collecting others, gradually increasing the number to be held.

The number will depend on the size of the object, but do not expect more than four or five.

- Picking up two or three small crayons at a time will increase the need for stabilization.
- Picking up small items like paper clips, coloured paper clips can be used as counters for games, etc.
- Holding several pieces of a game in the hand until needed

## Finger Dexterity

- Turning pages of a book.
- Picking up sheets of paper, e.g. tissue paper, paper money during games.
- Flattening small balls of Play-Doh between the tips of two fingers.
- Changing the position of the pencil or crayon when writing.
- Moving paper in the assistive hand when cutting.
- Buttoning clothes
- Rubbing paint, glue, etc. off hands.



## Finger Dexterity with stabilisation

- Holding pen and pushing the top off with the same hand.
- Holding keys in hand while shifting one to place in the lock.
- Pushing a toy through small tube of material using only one hand.



## Rotation

- Removing and putting back jar lids
- Games with nut and bolt type mechanism two-ended crayons, child has to rotate the crayon when they want to use the colour on the other end.
- Positioning a pen to put the top back on after use.
- Playing with small toys orientation of puzzle pieces to fit the board.
- Pipe cleaner play / paper straw modelling.

## Rotation with stabilisation

- The above activities whilst retaining something in the hand, e.g. positioning one Lego brick whilst holding another in the hand.

## Additional activities

- Playdough - roll dough in to tiny balls using the tips of the fingers.
  - Roll dough into larger balls using cupped hands together
  - Flatten playdoh on to table or hold vertically on easel and with small dowel make designs in it.
- Lacing activities - lacing cards with small holes, cut up straws to string into necklace, cheerio's, hula hoops etc... Large beads often present more of a challenge even to older children as the thread has to be manipulated more to get it through.
- Eye droppers - can be used to fill with coloured water and make dribble pictures.
- Tear thin strips of tissue paper holding with finger tips, and then roll into small balls (again using finger tips) and stick onto card to produce a picture.
- Plant sprayers can be filled with different coloured water and used to create non-permanent designs on playground, sheets or large sheets of paper.
- Oversized and normal sized tweezers can be used to pick up small objects to glue on to designs or pictures.
- Dice games- cupping hands to shake dice encourages development of the palmar arches
- Coins and buttons can be used for a variety of games including posting, turning over without bringing them to the edge of the table
- Finger puppet games -especially those that use index finger for the head and thumb and middle finger for the arms. Individual finger puppets also have uses for finger isolation skills.

## Isolating Index Finger

The ability to move the first finger on its own is needed to develop a mature pinch grasp and greater fine motor control e.g. when using cutlery and pencils.

- Pointing:
  - Songs with actions, for example “Wind the bobbin up” or “Incy Wincy Spider”.
  - Games, such as “I Spy” encourage the child to point with index finger extended.
  - Matching games, point to pairs of the same shape, colour, number, picture. Odd one out games, point to the odd one out.
- Turning Pages.
- Finger painting.
- Draw in sand / steamed up mirror / whipped cream with the index finger
- Pressing:
  - Use toys with push buttons or springs, e.g. toy cash register, Jack in the box, pop-up farm, telephone, typewriter, piano, calculator and tablet devices.
- Finger puppets or draw faces on the index finger.
- Counting on fingers one at a time.
- Pick up small, light items on dampened fingertips of each finger (e.g., hole puncher cut outs, sequins, glitter, beans, small beads.)



## Pincer Grasp

This grasp involves accurately bringing together the tips of the thumb and index finger

The following are useful activities to encourage and strengthen this grip:

- Board games using small figures or small button size objects
- Peg boards with different size holes and pegs
- Threading activities starting from large string and large holes to smaller ones
- Construction nuts and bolts activities like Meccano.
- Card games that involve picking up cards and turning them over, holding them in the hands or putting them onto the table
- Sorting objects from large to small like pieces of Lego
- Pegs can be used for variety of activities:
  - help to hang the washing out
  - see how many things you can pick up before you drop one, take turns
  - place pegs along a paper plate to make a sun or dinosaur creation
  - Wet the pad of your index finger then dab it into rice/lentils etc. Flick them off with your other index finger.
  - Playdough or Plasticine, pinch out ridges, roll into little balls like peas.
- Puzzles - use smaller jigsaw pieces as fingertip grip improves.
- Paper tug—of—war for 2 people. Use strips of paper/card.
- Making a paper chain – Cutting out strips of paper and using a stapler to fix them together.
- Fastening buttons.
- Games – Connect 4, Pick up sticks, posting coins.
- Cutting out with scissors – try cutting different types of materials such as straws, sausages of play dough, and strips of card. Make a straw necklace – cut the straws to short lengths and thread on to a lace.



- Tear coloured paper into small pieces to glue on to a picture.
- Making and using potato prints.
- Popping bubble wrap.
- Using small decorative hole-punches for craft activities.
- Squirting water bottles or other squirting toys.
- Pencil activities such as colouring, mazes & dot to dot.
- Craft activities involving cutting and pasting.

## **Grip Strength**

- Weak hands and fingers are quite common in children who have difficulty with fine motor skills. Hand and finger weakness makes activities that require pinch and grip against resistance such as zips, poppers, opening jars, and holding pencils, difficult.
- Clay, dough and putty – pinch, squeeze, roll or cut with scissors. Make eggs in a nest, pinch pots, squeeze material until fingers touch, poke index finger and thumb into a small hole and stretch the hole.
- Hide objects in dough, use knife and fork to cut dough and find objects or pull dough apart with fingers.
- Squeeze or wind-up toys.
- Tiddlywinks.
- Water relay – transfer water from one bucket to another using a sponge.
- Squirting gun activities.
- Finger pull - make a finger circle with thumb and index finger, interlock fingers with another person's finger circle. Pull hands away from each other while attempting to maintain a closed circle.
- Table tennis ball race – use a turkey baster to blow ball across a finish line.
- Art projects – use stapler and hole punch, tear paper for Paper Mache, crumple paper using one hand and screw up into tight balls, use tubes of paint with brushes on the end or large squeeze bottles, use non-loop
- Target practice – tear up large sheets of newspaper then use one hand to crumple the paper and throw it into the rubbish bin.
- Print pictures – colour over cardboard templates or textured surfaces such as tree bark, old book covers, leaves, coins etc. using fat crayons or pencils.
- Cleaning up and helping out – encourage child to wipe whiteboard, desktop or dining table, squeeze out cloth or sponge, squeeze dishwashing liquid into sink, hang clothes using clothes pegs.
- Drawing – draw or write on whiteboard or large pieces of paper attached to wall.
- Construction toys – Duplo, Lego, nuts and bolts.
- Stamps – stamps should have a variety of small handles.
- Hammering sets and carpentry tools.
- Climbing equipment.
- Sand play – Making sand castles. Slightly wet sand will be heavier and make it more of a challenge.
- Bubble wrap – pop bubbles between thumb and index finger.
- Hiding games – hide food or toys or stickers in containers with flip top or screw lids. Have one child try and screw the lid on so tight that the other cannot open it.