

Levels of Hand Use

(Adapted from a handout by Patty Obrzut, Penrickton Center)

Level 1 Scratch: Low textures are attached to encourage the learner to scratch. This is the level of finger activity seen before the thumb is consciously included in grasping behavior. (Usually learners do not like sand paper. They prefer to scratch on surfaces with textures different from familiar ones, such as fabric and hair).

Level 2: Grab & Release: Objects are secured on tight elastic that don't travel far. This is the level of closing the fingers around an item, and increased grabbing activity.

Level 3: Grab & Handle: Objects on loose elastics that can reach 6 to 12 inches. This is the level of grasp and release leading to the ability to grasp and manipulate - as in a Position Board explained and shown in Lilli Nielsen's books "Early Learning" and "Space and Self."

Some Tips for Choosing Materials

Think about what the child is currently able to do with his/her hands when choosing materials.

Scratch: Start with materials that are flat, like fabric or carpet that will be easy for the child to move his/her hands over without becoming tangled. Including items with slender profiles that the child can get fingers tangled into like ribbons along-side these other textures may encourage them to move towards grabbing and holding objects.

Grab and Release: Look for things with slender profiles that easily fit the child's hands such as electric tooth brushes, strings of beads or buttons, chain, rope, etc.

Grab and Handle: Include objects that have interesting properties such as the ability to change shape or bend, turn, twist, make a sound, vibrate, etc. Keep in mind the size of the child's hand. If the object has holes where fingers can poke into to manipulate or grab the object securely, size is not as critical.

Hand Skills (from Functional Schemes, Nielsen, L.)

- Sucks fist
- Performs circular movements with arms
- Reaches for objects without grasping them
- Pushes objects within reach
- Grasps reflexively
- Closes hand around e.g. hair, corner of cloth with passive thumbs
- Releases grip without awareness
- Scratches skin, clothes, sheet
- Shows interest in tactile and auditory feedback when reaching out
- Repeats 1+ movements after a break of 1-2 seconds
- Uses ulnar grip (fingers 3, 4, & 5 strongest) thumb does not participate
- Learns various ways of grasping
- Moves object to his mouth
- Reaches towards dangling objects
- Opens and closes hands
- Puts hands together
- Grasps an object
- Practices stretching/flexing of fingers
- Turns hands at wrists
- Bangs himself, objects, adults with fist
- Graps objects by using all fingers
- Manipulates own fingers
- Repeats novel movements
- Experiments with various ways of grasping
- Grasps and keeps objects
- Grasps objects with both hands
- Releases voluntarily

