

How to Make a Texture Board to Scratch, Grab, Hold & Release



Very young babies and some older children who have difficulty using their hands, benefit from interacting with a device developed by Dr. Lilli Nielsen, author of *Are You Blind?* and creator of Active Learning Theory, called an SPG (Scratch, Position and Grab) Board™. These boards may be ordered in the USA from Lilliworks at www.lilliworks.org for about \$400. These boards are very sturdy and have a variety of changeable texture squares or shapes to engage the child's interest in using his/her hands.

If you do not have the money to purchase one of these boards, you can make a home-made version with some simple, inexpensive materials. Here's what you will need:

1. Lightweight Masonite, Styrofoam board, or lightweight plywood
2. Glue gun and glue and/or elastic
3. Objects to glue on the board based on your child's current hand skills such as:
 - Variety of fabrics (corduroy, felt, fleece, satin, etc.), ribbons, braid, and/or ric-rack
 - Variety of empty individual plastic jelly containers, cardboard or other packing materials, empty boxed-candy holder
 - Variety of carpeting or Astroturf
 - Variety of metal or plastic pot scrubbers
 - Variety of flat shapes made of interesting materials like wood, bone, shell, etc.

Directions:

Cut the board into a rectangle that is about 18" x 14". Make sure the edges have no splinters or sharp edges (sand or cover in duct tape). Using a hot glue gun and glue, attach the materials to the board making sure to include some familiar and favorite textures. You may need to re-glue items frequently as your child develops better use of his/her hands. If a child can grab and hold, you need to be careful about the safety of the objects you include. Do not include objects that could be put in the mouth and swallowed. Also, be sure to supervise the use of these boards by checking the board before each use to make sure there are no broken or loose parts.



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

