

Handwriting Issues/Strategies for the Student with Down Syndrome

Posture & Low Muscle Tone

- Ensure good posture: Feet supported, back straight, head up, pelvis at correct angle, good shoulder/arm/wrist/finger strength & position.
- Adjust size of table and/or chairs
- Use box, thick books, stool, bench to ensure foot support
- Use wedge to sit upon
- Use slanted writing board

Shoulder Strength

- Wheelbarrow walk, crawl, modified push-ups, pushing a swing, sweeping, vacuuming, raking, climbing, hanging from a bar
- Retrieve objects and perform activities at and above shoulder level
- Perform large circular motions with shoulders (e.g. jump rope or write upon a large vertical surface)
- Pull elastic bands or tug-of-war, shoveling, hammering, pouring
- Pull self forward while on stomach on roller board

Wrist and Hand Strength

- Scribble/paint/roll-on vertical surface
- Opening jars & lids, turning knobs, use a rolling pin, use a hand-held pencil sharpener, turning keys in locks, moving a computer mouse
- Squeeze sponges, washrags, playdough, squeeze balls, spray bottles, squirt guns
- Snap foam pieces (1 ½ inch pool tube floats) between thumb & middle finger
- Point, poke & push with isolated index finger with fingers wrapped under the palm
- Snip paper, especially with spring-loaded scissors

Finger Strength

- Open zippered Ziploc bags and tabbed plasticware with thumb & index finger
- Remove peg-handled puzzle pieces or other small objects
- Push toothpicks into a potato, pull blocks apart, use stamps
- Use resistive activities with fingertips (e.g. pulling off pieces from playdough, grapes from vine, pulling velcro apart)
- Squeeze tongs, tweezers, clothespins, play bedbugs
- Pull objects (golf tee, piece of straw, cookie cutters) out of putty or dough
- Play Trouble, Ants in the Pants

In-hand Manipulation

- Encourage grasping second object with pincer grasp
- Move object from outer part of hand to pincer grasp

Finger position

- Light Bright, coins in a piggy bank, stickers, Connect Four
- Vertical writing surface
- Pencil grips

Bilateral Coordination

- Encourage holding small bowls or cups with one hand & spoon in the other
- String beads or Fruit Loop necklace, lacing cards, snip paper, tear paper
- Use physical assist to stabilize paper or pegboard (for example) with one hand while manipulating object (e.g. marker, pegs) with the other hand
- Spread butter, jelly, peanut butter on bread or toast
- Cut pieces off bread, cookie dough, or playdough roll using both hands
- Remove and replace caps from markers, fold towels, play with puppets/mittens/gloves

Motor planning

- Complete obstacle courses & 3-4 multiple step directions
- Emphasize sequential play & provide a verbal label (First, next, last)
- Use songs and stories (e.g. Mat man) to form strokes and letters



- Starting & stopping activities & practicing directional terms (top, middle, bottom, right, left)

Sensory Issues

- Arm & hand massage prior to handwriting activities
- Practice activities that require graded movement
- Use chalk as it has more drag
- Use weighted writing implement, pencil grips, Wikki Stik or sticker on pencil

Misc

- Use markers over crayons as they require less strength
- Use small pencils (e.g. golf pencil) versus thick pencil
- Use pencil weights to increase awareness of pencil in hand and add to thickness of line quality
- Use yellow highlighter versus dots to trace
- Use raised-line paper to increase sensory feedback of where to stop line strokes
- Fingerplays

Children with Down syndrome usually learn to print using the following sequence: 1) Imitating; 2) Tracing and copying; 3) printing independently; 4) printing on lines.