

# LET'S GET LEGIBLE

*If your child struggles with horrible handwriting, use these strategies to boost skills...*

BY LINDSEY BIEL, OTR

**M**any children, teens, and even adults struggle with illegible handwriting, getting their thoughts written down, and with taking notes. When you analyze the components of handwriting you'll see why it can be so challenging. A continuous interaction between motor, perceptual, language, and sensory components makes this a complex task that some individuals struggle to master despite their best efforts.

In order to write by hand optimally, writers require:

- ▶ Trunk, shoulder and upper arm muscle tone, strength, and stability to keep the body secure while the brain and hands are busy writing.
- ▶ Visual acuity and ocular-motor skills to see clearly, use eyes to read across lines of print, and refocus from near to far and back when taking notes.
- ▶ Visual perception and visual memory to perceive and reproduce horizontal, vertical, diagonal and circular forms in accurate relationship to each other.
- ▶ Fine motor dexterity and ability to use proprioceptive feedback from finger joints and muscles.
- ▶ Ability to integrate visual skills

with motor skills as the writer uses vision to guide hand movements to form letters precisely and legibly.

- ▶ Cognitive ability such as deciding what to write, organizing thoughts and then sustaining focus and attention until complete.
- ▶ Phonemic awareness, defined as hearing, identifying, and manipulating small, individual sounds called phonemes in spoken words, becomes essential in reproducing words and sentences in written form.

Sensory processing difficulties can make handwriting even more challenging, including issues such as:

- ▶ Visual sensitivity to light, especially downcast lighting, glare, and fluorescents that some people can see and hear
- ▶ Visual overloading when lined paper is confusing or poorly printed; there is too much on a worksheet; or contrast sensitivity makes black letters on white paper appear to jiggle
- ▶ Tactile sensitivity to paper, writing tool, and writing surface
- ▶ Auditory sensitivity to the teacher's voice, sound of other students writing and ambient noise

## GET A BOOST FROM TECHNOLOGY

When kids struggle to form letters and words, they can't focus on developing ideas. As a result, all the great thoughts they have in their heads get boiled down to a few simple written words. Look into assistive technology such as laptop computers, iPads, AlphaSmart, and other alternative writing devices.

Items such as SmartPens make taking and reviewing class notes much easier. Software such as Write: OutLoud and Inspiration can make the writing process so much easier while typing tutorials such as UltraKeys and Mavis Beacon Teaches Typing can improve keyboard skills quickly. You will need to get assistive technology into your child's IEP in order to have your child use it for everyday work at school.

## TOP 10 HANDWRITING HELPERS

- 1 **Make sure bodies and brains are ready to write.** Drinking water, eating something crunchy, or chewing gum plus fun movement activities help wake up kids, doing a bit of attitude adjustment at the same time.
- 2 **Get moving.** Try activities such as "painting circles" on opposing walls (hold pretend paintbrushes in each hand with arms out and move straight arms in circular motions 5-10 times in each direc-

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tion) or “karate fingers” (with arms and fingers straight forward with palms down, alternate making fists and quickly straightening fingers 5-10 times with palms facing down and then again with palms up.) Look into Brain Gym moves, MeMoves, Move Your Body fun deck from Super Duper for more engaging movement activities.

**3 Make sure the desk or table and a chair are well-proportioned.**

Arms should rest comfortably on the tabletop, feet should reach the floor, back should be supported by the back of the chair, and hips, knees and ankles should be at approximately right angles. Consider whether the writer would benefit from an inflatable seat cushion in order to wiggle (e.g., a Disc'O'Sit) or to correct slouching (Movin'Fit wedge shaped cushion). Sometimes a ball chair helps.

**4 Improve lighting.** Turn off overheads and fluorescents. Provide full spectrum light or incandescent light at eye level, preferably from behind the writer to avoid glare.

**5 Consider the surface.** Try a slant-board, easel, or vertical writing surface such as a wall to promote a straight, neutral wrist position (not bending down or up) which helps hand muscles work properly. This also makes it easier to see what is

being written without neck strain. Some slant-boards come with a plastic sheet on top that slows down the pencil or pen, making it easier to write neatly.

**6 Get a vision examination.**

See a qualified vision care provider, especially if the writer complains of headaches, squints, rubs eyes, relies on peripheral vision, closes one eye, says letters are moving, and so on. Find a local developmental/behavioral optometrist who will assess acuity and how your child uses her vision. (See *Find Out More* below, and page 63 of this issue.)

**7 Reconsider writing tools.**

If the child needs help learning where to hold a pencil, use a short pencil and break crayons and chalk into small pieces. Point out the “holding stripes” on most markers and crayons and add a strip of colorful electrical tape approximately one-inch above the tip for pencils. Would the child do better with a triangular or chubby pencil? If his hands tremble, try a weighted pencil or pen. Is your child calmed by vibration? Try a vibrating pen like the Tran-Quil™. Does he press too hard? Try a mechanical pencil.

Does he need a molded pencil grip added to his writing tool? There are a variety of grips available which your occupational therapist can recommend based on the unique grasp challenge. For example, the CrossOver Grip gives kids who wrap their thumb around their pencil a flap under which they can tuck the thumb, index and middle finger.

**8 Use multisensory approaches.**

Consider structured programs such as Handwriting Without Tears which incorporates wooden shapes, chalk, music, and fun

workbooks. Kids can write with a stick in mud, a finger in pudding, shaving cream or tub paint on the wall while in the tub, and so on. Practice letter formations with apps such as LetterSchool and Touch and Write.

**9 Reconsider paper choice.** First writing papers tend to be lightly printed with blue and pink lines on gray newsprint stock. This may be visually confusing for a new writer. Look into higher quality paper with well-printed, clean lines. Also consider raised line paper with bumpy lines that give kids both tactile and visual information about where letters should go on the page.

**10 Play.** Build skills with toys like Lite Brite, Legos, Operation, Play-Doh and Fun Factory, Sculpey, Crazy Aaron's Thinking Putty, drawing and coloring, making Shrinky Dinks, as well as dot-to-dot books, mazes, and writing old fashioned letters to friends and relatives. ◀

**FIND OUT MORE**

- ▶ **Sensory Smarts (Under “Toys and Equipment- Handwriting”)**  
sensorysmarts.com
- ▶ **College of Optometrists in Vision Development** covd.org
- ▶ **Ultra Keys** bytesoflearning.com
- ▶ **Mavis Beacon Typing Software**  
mavisbeacon.com
- ▶ **Brain Gym** braingym.org
- ▶ **Super Duper® Publications**  
superduperinc.com
- ▶ **MeMoves** thinkingmoves.com
- ▶ **Thinking Putty** puttyworld.com
- ▶ **Therapro, Inc.** therapro.com
- ▶ **Handwriting Without Tears** hwtears.com
- ▶ **Therapy Shoppe®**  
therapyshoppe.com
- ▶ **Pocket Full of Therapy** pfoot.com

