

Widening the Circle

Celebrating Neurodiversity in Faith Based Schools **Focus Strategy: Fine Motor Development**

Understanding Fine Motor Development in Early Childhood

Young children build fine motor skills through rich, playful experiences that strengthen the small muscles of the hand and support a functional grasp. Fine motor development grows through movement, manipulation, and exploration. Opportunities to pinch, squeeze, pull, push, tear, and press lay the foundation for future handwriting success. Because these early skills are still forming, children under four or five are not yet ready to use pencils the same way older students do—and that's developmentally appropriate.

Fine motor activities that help prepare preschool children for later pencil use:

- Broken crayons
- Sidewalk or egg-shaped chalk
- Vertical surfaces such as easels
- Tongs and tweezers
- Play-Doh or clay
- Sticker activities
- Tools that encourage squeezing, pinching, pushing, and pulling

These experiences build intrinsic hand strength, wrist stability, and dexterity. When these foundational skills are in place, children are better prepared to transition to formal handwriting instruction.

Letter Formation Without Worksheets

When incorporating early writing experiences, proper letter formation matters. Habits developed early—good or bad—tend to persist. Instead of traditional worksheets, which can be developmentally inappropriate for young children, consider multisensory, movement-rich alternatives:

- Sticker letters
- Rainbow writing
- Build-a-letter activities
- “Race car” letter paths
- Air tracing
- Sand trays
- Shaving cream writing

These hands-on experiences support kinesthetic learning and help children internalize letter shapes in a meaningful, memorable way.



Why Handwriting Matters: A Brain-Based Skill

Handwriting is far more than a mechanical task. Neuroscience shows that writing by hand activates more areas of the brain than typing, engaging the visual cortex, motor cortex, Broca's area, the cerebellum, and regions supporting language and memory. Research consistently finds that handwriting strengthens neural encoding, letter recognition, memory, and word recall—core skills needed for fluent reading. Writing by hand is a cognitive workout that builds literacy, executive function, focused attention, perseverance, and fine motor strength. It also encourages children to slow down, process information, and communicate ideas with greater clarity.

The Power of Cursive for Struggling Learners

Cursive handwriting is not an outdated tradition; it is a powerful neurodevelopmental support, especially for students who struggle with print or have dyslexia. Many find cursive easier because the continuous flow of connected letters reduces visual confusion, minimizes reversals such as b/d or p/q, and reinforces spelling patterns through muscle memory. Cursive supports language development, fine motor control, executive function, memory, and left-right brain integration. It helps the brain recognize words as whole units rather than isolated shapes and improves reading fluency by strengthening rhythm, pattern recognition, and visual-motor coordination. For students discouraged by handwriting, cursive can offer a fresh start and a new pathway to confidence and literacy.

Final Thoughts

Handwriting, fine motor development, and literacy are deeply interconnected. When educators provide developmentally appropriate instruction, multisensory practice, and an emotionally supportive environment, students build both competence and confidence. Whether a child is squeezing Play-Doh in preschool or learning cursive in upper grades, each experience strengthens the brain, the hand, and their sense of capability.

Resources:

[Scribble2Script](#) - this information was brought to you through an interview with Megan Eldridge, Pediatric Occupational Therapist, Founder of Scribble2Script

Parent Connection:

Families can support handwriting development at home by encouraging short, playful fine motor activities (such as drawing, clay, or simple crafts), offering calm writing practice without pressure, and celebrating small gains. When school and home work together, children feel supported, confident, and ready to grow.

