# 5 Reasons Why A Child Might Be Struggling With Writing

Expert advice designed to help you identify a child's areas of strength and weakness and practical ideas to help children succeed!

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### 6 Reasons Why Your Child May Be Struggling With Writing

Issues with writing can be hard to figure out. Some of the reasons are purely physical, some are cognitive, and others involve the way a child processes sensory information coming in from the body, the tools they are using, and the environment all at the same time.

Research suggests that in children who are poor writers, there is more activation in the visual areas of the brain and cerebellum for trunk control versus the primary motor-sensory areas. These areas of the brain are responsible for voluntary motor movements such as coordinating finger movements. Poor writers tend to rely on visual information when executing writing tasks versus easily being able to coordinate the movements of their hand to write quickly and efficiently. But that is only one piece of the puzzle!

In cases where functional visual skills are limited, legibility is compromised due to over-reliance on somatosensory (muscle and joint) information versus using vision to monitor boundaries for sizing, spacing, and formation of letters.

If the ability to recall orthographic representations of letters from memory (think of this like pictures in your head of how to make a letter) is compromised, decreased legibility and mixed casing/inconsistent use of capitalization can occur.

A deficit in any one or combination of areas can affect automaticity of letter formation and ability to sustain participation in writing demands over time. It also makes it difficult for students to focus on the content of what they are writing and easily integrate information from multiple areas of the brain (auditory, language, vision, motor, frontal cortex, etc.) to produce written communication.

This guide will give you tangible ways to figure out why a child is having difficulty writing and strategies you can use right away to help them feel less frustrated.

#### 1. Strength / Coordination

Issues with strength and coordination of the hands often has a physical root. These days children are playing more with video games and phones than they are with old school manipulative toys and playing outside, so their hands have fewer regular opportunities to get strong and coordinated. With strengthening and coordination exercises, your child will generally improve.

#### This may look like:

- Poor grip of pencil
- Needing rest breaks, says "my hands hurt", shakes hands
- Poor endurance
- Shaky or jagged lines and curves
- Too little or too much pressure
- Poor sizing of letters from difficulty controlling the pencil

#### Try Resistive Fine Motor Activities:

- Play dough (make snakes, pinch snake "spikes", make pancakes, pinch and roll balls, create sculptures)
- Coloring books (for endurance) practice coloring left/right, up/down and "round and round" to learn how to move the pencil in different directions
- Push Pin Tic Tac Toe: Using a cork board to rest the paper on and oversized pushpins until small ones are easier to hold. Practice resting your hand on the paper and rocking your hand while quickly poking holes in the shape of an X or O in each box
- Squeeze things: Use a Spray bottle for watering plants or washing windows. Make a mountain of bubbles by squeezing a sponge in soapy water. Shoot water out of squeeze bath toys.
- Cook with you to mix, scoop, roll, whisk, peel, chop, zest, mash, grate. Use as many different tools as you can to encourage changes in hands and finger positions for building coordination and strength.

#### 2. Posture

Issues with posture often, but don't always, co-exist with strength and coordination difficulties and can be caused by core instability, poor postural activation due to vestibular (inner ear/balance) deficits, or be affected by neurologically-based issues such as <u>primitive reflex patterning</u> or inability to <u>cross</u> <u>midline</u>.

#### This may look like:

- Leaning on an arm, hand, or resting one's head on table with writing
- Frequent rest breaks
- Frequent fidgeting/ shifting / getting out of seat
- Inability to stay sitting up for long periods
- Sliding out of a chair or standing while writing
- Turning one's body, head, or the page at midline

#### Try PosturalActivities Like This:

- Over/Under ball passes (two hands) with feet planted in standing back to back to increase vestibular activation and actively engage postural muscles
- Left/Right Ball Passes (two hands) with feet planted in standing back to back to facilitate left right movement, rotation, and midline integration
- In high kneel, lean with the child's hands pressing on the wall and alternately reaching up to retrieve objects from overhead and setting them on the floor with right and left arms (focusing on reflexes)
- In high kneel, lean again into the wall but this time reaching right to left with the left hand and left to right with the right hand to grab and transfer objects. (focusing on reflexes)
- Playing "Kneeling Soccer" with a 55cm yoga ball you must stay on your knees and move around in high kneel, trying not to fall when hitting the ball with your hands back to the other person/trying to score a "goal" (focusing on stability)

#### 3. Vision

Development of binocular vision is needed to support shifting visual attention near and far to copy from the board. Saccades is the ability to shift your visual attention between stable objects to help with activities like making choices between two objects, copying from a board, note-taking, and to monitor boundaries when coloring or writing on a line, reading, and scanning your environment.

#### This may look like:

- Poor anchoring of letters on the line (not starting on the left or not starting at the top of a line)
- Poor spacing: too close, too far apart, not grouping letters for words
- Poor boundary awareness/not monitoring lines when writing
- Skipping letters or words when reading
- Decreased legibility of handwriting when copying from board
- Trouble keeping up when taking notes from the board
- Eye rubbing / squinting

#### Try These Vision Activities:

- Play balloon volleyball or keep it up
- Turn and Touch with Sticky Notes: Facing away from the wall with feet shoulder width apart, alternately turn and touch different colored sticky notes on the right and left side to practice attention shifts in larger space first. Progress to connecting matching letters/numbers/words/pictures positioned on the left and right of a large white board while facing the board with feet shoulder width apart
- Build visual monitoring of boundaries by practicing making "Mountains" with pencil strokes that reach the middle and top lines in an unpredictable pattern from a copied sequence first on a larger white board, then progressing to paper.

IMPORTANT: Before beginning any visual activities make sure to plan time to take eye breaks in between and at the end of exercises. Eye breaks can be as simple as covering the eyes with cupped hands, putting your head down on a table, or going into a dark space such as under the covers. If you notice the child rubbing their eyes at any time, stop and take a vision break immediately.

#### 4. Motor Planning

Writing should become automatic for many kids. However, children with motor planning challenges consistently have to cognitively think about and/or overly rely on visuals in the environment to try to figure out how to draw each letter as they write.

#### This may look like:

- Slow writing/copying and require more effort than peers Trouble remembering how to form the letters/"bad handwriting" when there is not a visual model present or if the steps are not demonstrated
- Kinesthetic letter reversals caused by starting in the wrong place when forming a letter
- Difficulty shifting between formation of a variety of letters when progressing to writing words

#### **Try These Activities:**

- Use as many senses as possible to explore and "build" letters
- (use different mediums: write letters in sand or shaving cream, form letters with clay/play dough/ beads/pasta, paint letters on easel, draw letters with their finger on parent's back).
- Try using the App "Writing Wizard" alternating with forming the letter on paper or by tracing a stencil to build interest in working on formation while fading tracing activities
- Gradually progress from tracing to starting/stopping dots to starting dots only
- Practice tracing tactile/textured letters with your eyes closed and try to guess the letter, reinforcing the steps of the motor plan while fading visual support
- Build up to writing 2 letter, 3 letter, and 4 letter words when combining motor plans. Practice words that group similar shapes (dad, cat, goat, coat, got, dog, dot) before shifting to dissimilar combinations (today, and, mat, train)

#### 5. Orthographic Memory Deficits

Children who have difficulty with orthographic memory can't remember patterns of letters or words, have difficulty reading, have trouble with spelling, recalling upper and lower case letters, and punctuation.

#### This may look like:

- Difficulty writing letters/words from memory
- Mixing upper and lower case letters after they have been learned
- Writing the same letter in different ways across writing demands (inconsistent formation)
- Poor sight word/high frequency word recognition even after they have been learned (still has to sound out these words)
- Spelling errors despite knowledge of spelling rules and decoding ability (Ex: Can't remember "silent e" or "igh" words

#### Try These Activities:

- Using a blind fold, feel a plastic/wooden letter and try to identify it. If you can't, have someone use your finger to trace the formation pattern on the letter
- Blindfold writing: Write a letter/word 2 times with eyes open and then a third time with eyes closed/blindfolded. Progress to fading the eyes open part to write sight words and high frequency words without a model.
- Time Gap: Using a scooter board or hopping dots, look at a letter/word on a card, trace the formation with your finger as needed. Close your eyes and see it in your head. Then ride the scooter or hop on dots to a black/white board on the opposite side of the room and write the letter/word without looking at the flash card.
- Vary these activities by increasing the number of letters a child must visualize and write from memory to decrease reliance on the visual system and increase kinesthetic awareness of letter formation.

\*Keep in mind that children may have issues in more than one area. Use the chart below to identify co-occuring categories.

	Strength/ Coord.	Posture	Vision	Motor Planning	Orthographic Memory Deficit	Competing Demands
Poor grip	x	x		Х		
heavy/light pressure	X	x		X		
Shaky, jagged lines	x	x				x
Leaning on table	x	x	x			x
Fidgeting / getting out of seat	x	x	x	x	X	x
Frequent rest breaks	X	x	x	x	x	x
Squinting / rubbing eyes		x	x			x
Poor alignment	X	x	x			x
Poor sizing, spacing	x	x	x			x
Slow writing	x	x		x	x	x
Difficulty visualizing letters				x	x	Х
Reversals				x	x	
Mixing cases				x	x	X
Poor spelling / punctuation				x	x	x

\*Note: The information contained in this guide is not a substitute for a through occupational therapy evaluation to assess handwriting. Information should be used only to inform and optimize intervention strategies related to underlying areas of demonstrated need.

## Some writing difficulties reach the level of Dysgraphia if writing difficulties persist after foundations should bee established

\* Dysgraphia (LD 3.00) is defined as "a neurological disorder a writing disability where a person's writing is illegible, with non-uniform letters and words that are unevenly spaced along with words being misspelled, despite adequate instruction." The primary problem is that students with dysgraphia focus much of their energy on writing and as a consequence learn less than their peers. (http://specificlearningdisabilitiesspring2015.weebly.com/dysgraphia.html)

There are four recognized subcategories of dysgraphia:

- \* Dyslexic Dysgraphia (LD 3.01): This is a student's difficulty in writing or spelling words that is not associated with a lack of fine motor coordination, or a physical medical condition. Their writing is illegible and more pronounced when the writing context is complex, such as a long essay. The problem is the student's internal processing and output of the information. The student may also experience problems with spelling.
- \* Motor Dysgraphia (LD 3.02): A student with motor dysgraphia has difficulty in writing and copying words along with problems in drawing and finger-tapping speed. Like dyslexic dysgraphia, the student's written text is illegible. It is that motor function of finger-tapping speed problem that defines this SLD.
- \* Spatial Dysgraphia (LD 3.03): Here oral spelling and finger-tapping are normal, yet students with spatial dysgraphia have a problem with illegible writing or drawing because of a lack of understanding of space, due to their internal processing of the information not related to a physical medical condition.
- \* Mixed Dysgraphia: Combination of symptoms fall into multiple categories

#### Next Steps:

Learn more about dysgraphia and writing interventions by checking out the Dysgraphia Playlist on the Sensational Achievements Youtube Channel

If a child is not progressing as you think he/she should or you are concerned about red flags related to dysgraphia, please consult an Occupational Therapist.

Visit our website to book a virtual consultation or contact the Sensational Achievements office via email at <u>admin@sensational-achievements.com</u>