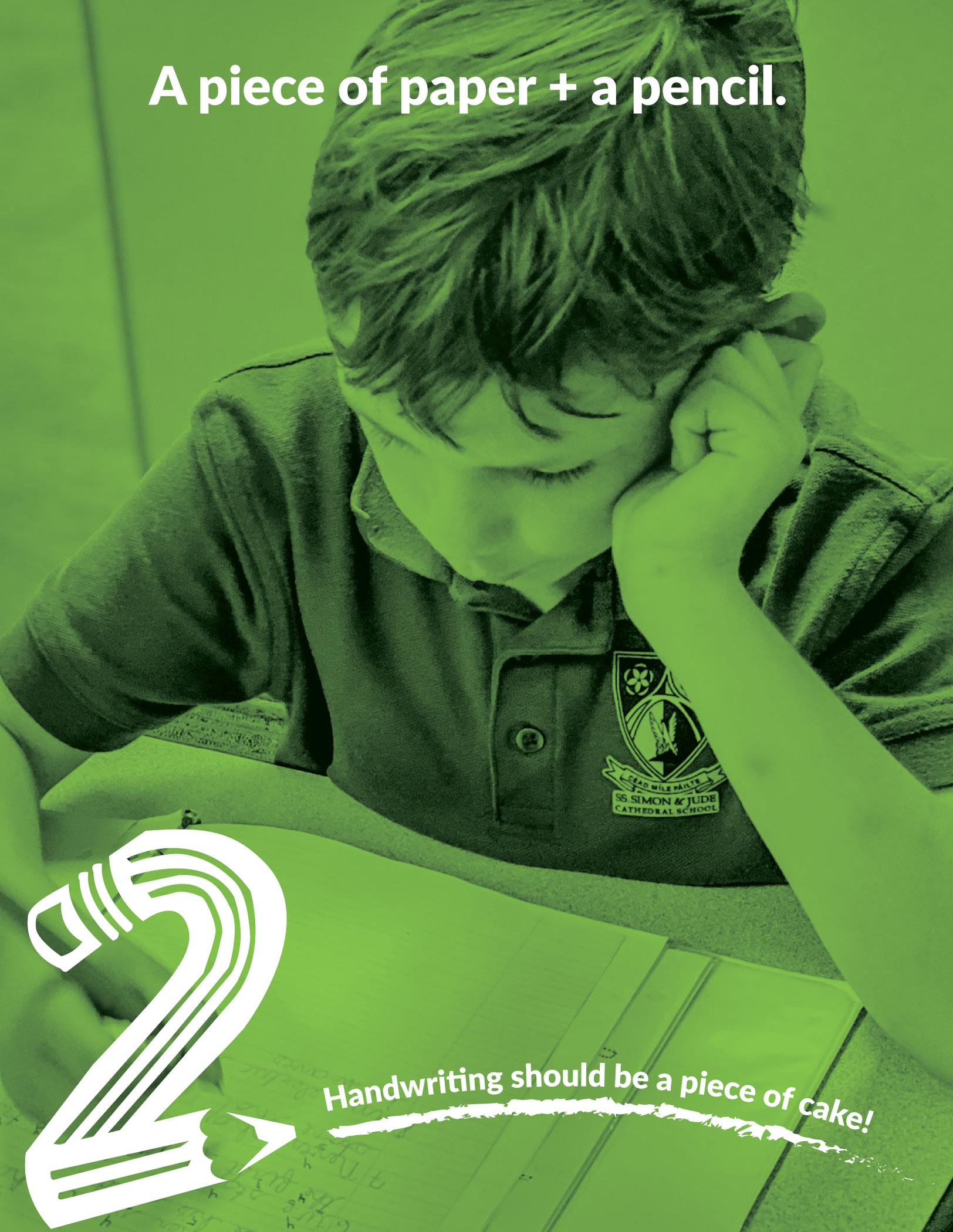


# Poor Handwriting is the Tip of the (Child Development) Iceberg



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A piece of paper + a pencil.



Handwriting should be a piece of cake!

In reality, handwriting is a complex process that requires a specific set of developmental skills to be fully intact for the hand to write with a pen or pencil effortlessly.

Messy handwriting and incorrect pencil grip are signs that other developmental skills may not be fully developed.

Your child could be lacking skills like fine motor control, postural stability, eye-hand coordination, visual perception, and eye movements.

The skills listed above are examples of the skills needed for success with handwriting regarding speed, fluency, and legibility.

## The top 7 reasons that children struggle with handwriting are deficiencies with:



1. Fine motor control
2. Eye tracking/teaming skills
3. Visual-motor integration
4. Visual perceptual skills
5. Spatial skills
6. Bilateral coordination
7. Retained primitive reflex-

Children who struggle with handwriting may experience difficulties with some or all of these developmental skills.

# The most common reason for handwriting struggles is fine motor control deficiency.

Fifteen specific fine motor skills lay the foundation for a child's hand to write with a pencil. If these skills are not developed by the time your child is 5 1/2 years old, it affects their handwriting legibility as well as their ability to become independent with daily living skills such as tying their shoes.

## If your child struggles with fine motor skill deficiency, they may show signs and symptoms such as:

- Holding a pencil incorrectly
- Writing with heavy or light pencil pressure
- Having hand fatigue or cramping when writing
- Struggling with tying their shoes
- Difficulty holding utensils appropriately

If your child is already past the age of 5 1/2 and is struggling with some of the areas listed above, there is good news and bad news. Many parents fall into the trap of believing that their child will improve over time. Unfortunately, if a child's skills do not advance, but the curriculum does the gap between skill ability and achievement widens.

**The bad news is that these skills  
won't develop on their own.**



**The good news is that, once the fine  
motor skills are identified, targeted  
intervention can develop these skills  
with specific exercises for the hand.**

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# The second reason for handwriting challenges can be poor visual tracking and eye teaming skills.



## Did you know?

**1 out of 4 children has a vision challenge significant enough to affect their performance in school despite having 20/20 vision?**

Visual tracking skills are critical for your child's writing and reading development. For handwriting specifically, these skills allow your child to use their eyes to guide their hand across the page when they write.

**Their eyes need to lead their hands to have the ability to accurately:**

- Balance their central and peripheral vision (to look at what they are writing but see what's coming up next)
- Track their pencil
- Sustain visual attention and visual concentration





Without visual tracking skills, your child may:

- Show a decreased attention span
- Skip words when copying or reading
- Have difficulty writing within a given boundary (for example, being able to write between lines or sit on the line)
- Reverse letters or numbers

Some children experience even more difficulty beyond challenges with visual tracking. Some children may also struggle with their eyes working together as a team and adjusting focus to keep things clear. This is despite having 20/20 vision.

Eye teaming and focusing challenges can cause them to experience the following signs and symptoms when writing or reading:

- Rub their eyes or blink excessively
- Close or cover an eye
- Tilt their head to one side or the other
- See double
- Have headaches
- Complain of blurred vision
- Says their eyes are tired
- Places their head close to the desk or book



**Frequently, these developmental skill deficits go undetected even if a child has had a vision exam. It's important to rule in and rule out all skill abilities when putting together a plan of action to remediate your child's struggles.**

# The third reason for handwriting issues can be weak visual-motor integration.

The term visual-motor integration refers to the coordination of visual perceptual abilities and fine motor control. Visual-motor integration is a skill that allows us to use our eyes and our hands in a coordinated and efficient way, specifically for shape reproduction (as in forming letters and geometric shapes).

Children that have challenges with visual motor integration typically start with poor handwriting, and it only gets worse from there. If they don't have solid visual motor integration skills when entering kindergarten, they will not have the ability to watch the teacher show them how to write each letter (or follow the arrows on a letter to trace) and then copy that letter with correct formation on their paper.

What they do instead is write the letter in their own made-up way, and then that becomes their habit. This might look okay if the demand for writing is low because you see the finished product and not how they arrived there.

However, as soon as they need to speed up and get their thoughts down on the paper, the quality of their legibility decreased significantly. There is a reason for forming letters correctly-so you can write quickly with speed and efficiency.



Visual-motor integration (VMI) is the function that ensures our eyes and the movement of our hands work together efficiently and smoothly.



**With over 18 years of data collection at Scribble 2 Script, we have discovered that at least 65% of children who struggle with handwriting also struggle with visual-motor integration.**

# The fourth reason for handwriting challenges can be poor visual perceptual skills.

Visual perception happens in the brain. It is our ability to interpret, analyze, and give meaning to what we see. Good visual perceptual skills make it easier to understand, remember, and learn at school.

**There are several visual perceptual skills required for legibility and ease of handwriting. They are:**



- Visual discrimination**
- Visual spatial relations**
- Visual figure ground**
- Visual form constancy**
- Visual memory**
- Visual sequential memory.**

## Key Terms

**Visual Discrimination** is the ability to quickly identify similarities and slight differences of objects, words, and forms, including size, shape, pattern, form, and position.

*Challenges with visual discrimination become apparent when a child reverses letters, or there is a lack of attention to detail. For example, if a child writes the letter "n," but the first stroke is too long, it may look like an "h" instead.*

**Visual Spatial Relations** refer to the ability to process information about space, orientation, and position in relation to oneself and others, between oneself and objects and objects in relation to other objects.

*Difficulties with visual spatial skills result in challenges with the sizing of letters, spacing within and between words as well as sitting on the line, and using margins properly.*

**Visual Figure Ground** allows us to isolate or find an object when presented in a complex background.

*Challenges with visual figure ground are most apparent when copying information from the board or book while attempting to keep track of where they are supposed to be writing on the page. Information is not translated correctly, causing children to lose their place when writing when having to look up at the board or book and then back down at their page.*

## Key Terms (Continued)

**Visual Form Constancy** is the ability to recognize that a shape, letter, number, or symbol remains the same despite changes in size, shape, or orientation (i.e., larger, smaller, rotated, italics, bold, different font or color or in a different context).

*A child may have trouble recognizing a number, letter, or word when presented differently or in an unfamiliar context. For example, in an unfamiliar font, capitals vs. lowercase or print vs. cursive. They may also be seen reorienting their body to look at*

**Visual Memory** refer to the ability to process information about space, orientation, and position in relation to oneself and others, between oneself and objects and objects in relation to other objects.

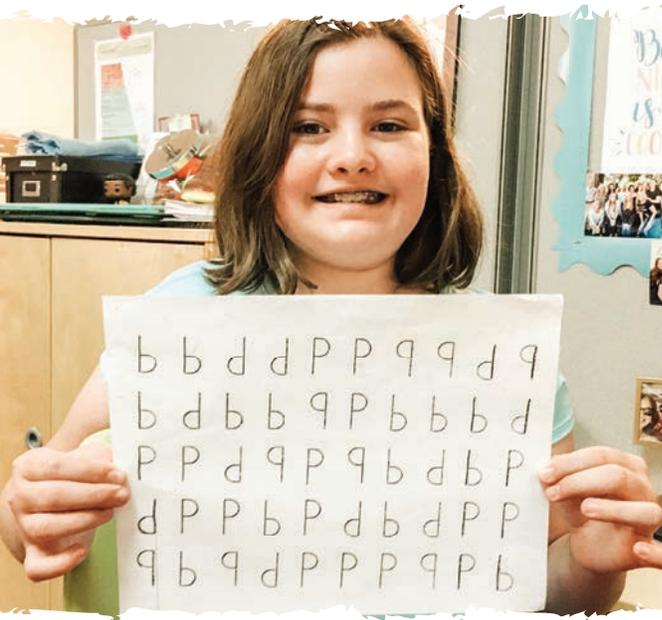
*Challenges with visual memory may result in a child's inability to recognize and name shapes, letters, numbers, and words. They may also have difficulty remembering what things "look like" without a visual prompt. For example, they may be able to copy the letters of an alphabet when given an example, but if you ask them to write letters or numbers without an example, they may not recall what they look like.*

**Visual Figure Ground** allows us to isolate or find an object when presented in a complex background. F  
*Challenges with visual figure ground are most apparent when copying information from the board or book while attempting to keep track of where they are supposed to be writing on the page. Information is not translated correctly, causing children to lose their place when writing when having to look up at the board or book and then back down at their page.*

**Visual Sequential Memory** is the ability to remember a sequence of objects, letters, words, or movements in a specific order.  
*This may affect their ability to form letters correctly because they may not remember the correct sequence of strokes to form each letter correctly.*



# The fifth reason for handwriting challenges can be poor spatial skills.



Good spatial skills first include the awareness of the two sides of the body and their differences and similarities. Then a child begins to recognize that one hand or one foot is better at certain skills than the other.

Next comes the ability to process information about oneself in relation to their environment for space, orientation, and position. If a child doesn't understand where their own body is in space, it is challenging to project those spatial concepts on paper.

## If your child struggles with fine motor skill deficiency, they may show signs and symptoms such as:

- sizing letters correctly
- spacing within a word
- spacing between words
- proper use of margins
- letter reversals



# The sixth reason for handwriting challenges can be poor bilateral integration

Bilateral integration refers to the ability to use both sides of your body together in a coordinated manner ( i.e., hands, eyes, arms, legs, feet, and brain)

The development of bilateral integration helps to establish same-side dominance that will store and receive information more efficiently.

It prepares the body for the development of fine and gross motor skills along with higher-level learning for writing, reading, problem-solving, creativity, critical thinking, and reasoning.

As a child develops their bilateral integration, each side of the body learns to perform different and separate tasks but cooperate on the same activity requiring the brain to coordinate between two streams of skilled thinking.

For example, your dominant hand does the main task while non-dominant hand stabilizes. Writing and holding the paper, using scissors to cut, stir food in a bowl, tracing stencils, stringing beads all use bilateral integration.

Academic skills rely on good bilateral integration and solid midline crossing for reading and writing.

Crossing your midline is the most efficient way to move through space and refine skills. Without the ability to cross the midline smoothly, a student will struggle with reading and writing.

For example, when a child is reading, their eyes must follow the entire line before moving to the next line of text. Without well-developed bilateral integration skills, your child's eyes will follow the first few words and then pause and continue to finish the rest of the words on that line.

## Signs and symptoms of poor bilateral integration include difficulty with:

- delays in sitting, crawling and walking
- difficulty using utensils
- poor ball skills: kicking, catching, throwing
- difficulty riding a bike, galloping, hopping, skipping
- shoe tying
- clumsy
- poor eye-hand coordination
- Reading
- Writing
- Coloring
- Cutting



# The seventh reason for poor handwriting can be active primitive reflexes



*Infant Moro Reflex*



*Reflex Therapy at Scribble 2 Script*

Primitive reflexes build the foundation of the central nervous system needed for the development of balance, mobility, vision, hearing, speaking, learning, and communicating. The sequence and development of primitive reflexes play a vital role in optimal learning and behavior later. Primitive reflexes are the building blocks of our nervous system, and, much like building a house, a strong foundation prepares young bodies for all further development.

Primitive reflexes develop in a sequence, and each one has a specific job to do within a relatively short time frame. For example, newborns do not have control of their head or neck. However, if you lightly touch either cheek, they will turn their head in search of a food source. This movement is not voluntary; it is reflexive. The purpose is for survival (search for food) and is also the first step in developing independent head and neck control.

Having the control to turn your head leads to developing eye-hand coordination, which leads to grasping and exploring objects and eventually developing the fine motor skills needed for zipping, buttoning, coloring, proper pencil grip, shoe tying and handwriting! This is just one of many examples of how vital primitive reflexes are for the successful, long-term development of higher centers of the brain.

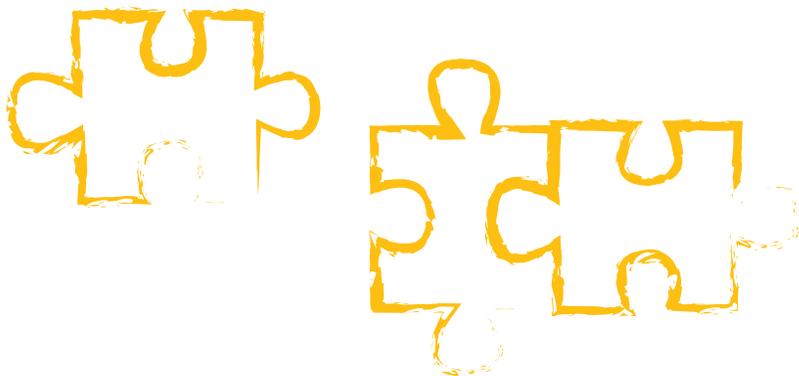
# Taking the "wait and see" approach could be a costly mistake that can create additional problems for your child, even creating life-long struggles. **Here's Why:**



All of these skills will mature throughout the ordinary course of development. As humans, we develop in a specific sequence and timing. If the sequence or timing of acquiring these developmental skills got off track at some point, your child is likely demonstrating one or more of the signs and symptoms listed above.

If your child did not develop these skills or is not on track to mastering many of these skills by the time they enter kindergarten, it would be best if you got targeted intervention for your child as soon as possible.

**These skills will not develop on their own if they haven't developed already, and your child will continue to struggle.**



# Won't deficiencies in these seven areas cure itself over time?

Deficiencies in these critical areas of child development are **not** something that your child will outgrow .

We will help you identify these challenges with our extensive evaluation process at

SCRIBBLE  SCRIPT™

# What can I do to help my child now?



## Did you know?

**Removing these developmental barriers can have positive effects beyond obtaining legible handwriting:**

**Confidence!**



The first and most important step you can take is to find the "why" behind your child's challenges. We will help you identify challenges your child is facing with our extensive evaluation process at Scribble 2 Script.

Once we have a clear understanding of why your child is struggling, we can develop a specific plan of action to help them achieve legible handwriting, while at the same time, alleviating all of the developmental challenges outlined in this book while increasing your child's skills and boosting their confidence.

**The best part is, we accomplish all of this while having fun doing it!**

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**Sign up for an evaluation today at Scribble 2 Script! We help your child achieve classroom success now and success throughout their lifetime.**



# We help your child achieve classroom success now and success throughout their lifetime.

Other positive outcomes our clients have experienced are:

- ✓ Increased confidence and interest in learning
- ✓ Pride in their work
- ✓ Better focus and attention to detail
- ✓ Increased reading fluency and comprehension
- ✓ Better eye-hand coordination for sports
- ✓ Parents not being called into the classroom for "problem" behaviors or deficiencies in learning
- ✓ Better ability to sit still during class or mealtime
- ✓ And much more!



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# SCRIBBLE 2 SCRIPT

We help your child achieve  
classroom success



Handwriting should be a piece of cake!

# HOW SCRIBBLE 2 SCRIPT PROGRAMS WORK:

By the end of the program, you'll see your child's confidence restored because their developmental barriers have been eliminated.

## STEP 1:



We meet with you and your child to conduct an in-depth 1-to-1 evaluation, with a highly trained Occupational Therapist, to find the reason for your child's specific challenges.

## STEP 2:



Once we know the "why" behind your child's struggles, we will create a customized plan of action to resolve the challenges that are discovered during the evaluation process.

## STEP 3:



Scribble 2 Script Specialists work with your child on a 1-to-1 basis, in a customized, private instruction program created specifically for your child's needs.

A group of six diverse children, three girls and three boys, are smiling and standing in front of a chalkboard. They are wearing backpacks, suggesting they are students. The chalkboard behind them has some math problems like  $4 = 8$  and  $5 = 5$ .

The benefit you'll notice upon graduation from the program is restored confidence leading to greater classroom success now and throughout their academic years.

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# WHAT CAN I EXPECT FROM MY CHILD'S PROGRAM?

## **1-to-1 sessions, customized for your child's specific needs offer:**

- Individual attention from highly trained professionals that address your child's particular needs, which we uncover in their evaluation.
- Increased skill development with engaging "Hand Gym" activities and Smart Moves™ exercises, leading to better handwriting, improved pencil grip, increased attention to detail, and ease of completing schoolwork.
- A fun learning environment with child-friendly teaching methods that motivate your child to improve their handwriting and build their confidence.
- Improved oculomotor and visual tracking skills with targeted eye movement exercises leading to better eye-hand coordination and visual attention to tasks.

## **As a parent who got your child the help they need, you'll experience:**

- Peace of mind knowing that our staff has a genuine interest in the success of your child
- A clear understanding of your child's strengths and needs with a plan of action to resolve the issues your child faces
- Weekly communication with our team empowers you to help your child at home and become an advocate for your child in the classroom



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## My child demonstrates some of these signs and symptoms. What is my next step?



If you've noticed any of the signs and symptoms outlined here, help is close at hand. [See what parents, just like you and their children, have experienced](#) by working with Scribble 2 Script.

Then [complete this convenient form](#) to request assistance. We'll call you no later than the next business day to schedule an extensive, 1-to-1 evaluation for your child.



“ Hi there, I'm Megan, founder and occupational therapist for over 20 years. The Scribble 2 Script Mission is to assist your child in overcoming obstacles that inhibit their academic success today and their potential to live their best life, long-term. I founded Scribble 2 Script in 2003 and everyday I am thrilled to continue to have the opportunity to positively influence a child's trajectory for success both now and throughout their life. My team & I look forward to meeting you and your child and helping them reach their goals. ”

Find out how Scribble 2 Script can help your child.

Call [480-614-1232](tel:480-614-1232) or email [info@scribble2script.com](mailto:info@scribble2script.com)

REQUEST AN EVALUATION