# HOMESCHOOLING PARENT MAGAZINE

Homeschooling empowers the future.

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# EARTH DAY '24 APRIL S AUTISM AWARE NESS MONTH



Your Guide To Homescool-Friendly Colleges & Universities

### Neuroplasticity

**Neuroplasticity**, also known as neural plasticity or brain plasticity, is the ability of neural networks in the brain to change through growth and reorganization. It is when the brain is rewired to function in some way that differs from how it previously functioned. These changes range from individual neuron pathways making new connections, to systematic adjustments like cortical remapping or neural oscillation. Other forms of neuroplasticity include homologous area adaptation, cross modal reassignment, map expansion, and compensatory masquerade. Examples of neuroplasticity include circuit and network changes that result from learning a new ability, information acquisition, environmental influences, practice, and psychological stress.

-- Wikipedia (Links and citations appear at the end of this article.)

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# Using Neuroplasticity to Address Learning Difficulties in Your Homeschool Day

**By Shelley Woon** 

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#### ACADEMIC SOLUTIONS

# When Your Child Struggles

- Is your child struggling to learn within your homeschooling program?
- Is their ability to read, calculate, think critically, or focus getting in the way of their success?

Whether making the decision to homeschool at the onset of a child's educational career or mid-stream, we know homeschooling families are doing so to provide an educational experience designed to best meet their child's needs.

If your child is struggling to learn, there are resources available to assist you in helping your child overcome learning difficulties while maintaining your priority of homeschooling.

You might have been aware of your child's learning difficulties before homeschooling, or you've become aware of it while teaching them. Either way, you may have discovered that addressing learning difficulties can be challenging, particularly when your goals include increased independence and academic success. Reading, writing, mathematics, and learning in general is complex and does not come easily or naturally to everyone. Many people, children and adults alike, struggle to read, calculate, focus, and self-regulate. Some individuals who are can decode text may struggle to understand what they are reading. Productivity slows and pleasure diminishes when you must reread something multiple times to understand it or apply it to real life.



Learning challenges present in numerous ways, including:

- Inconsistent academic performance
- Inability to effectively organize thoughts on paper
- Trouble comprehending what is read or heard
- Difficulty following instructions
- Inability to comprehend problems in math or do mental calculations
- Poor attention to detail
- Being described as inattentive, hyperactive, or easily distracted

Do any of these learning difficulties resonate with you? Are they similar to your child's learning experience?

What will happen if you don't address these challenges? Will it negatively impact your child's future?

We know that addressing learning challenges is critical for a child's overall well-being and success in life.

## **How to Respond**

There are many <u>approaches to responding to</u> <u>learning difficulties</u>. Some have a bigger impact than others.

- Make accommodations
- Lower expectations
- Neuroplastic change
- Intervene is specific subjects
- Enroll in tutoring programs

When the solution to the challenge is accommodating and lowering expectations,



learning gaps widen, and difficulties persist. Interventions and tutoring programs typically require ongoing support as each new concept is introduced within each subject area. These solutions do not address the origin of the learning challenge nor provide insights into it.

On the surface, you know your child is struggling to learn. However, knowing this does not provide information about what is making learning difficult. Identifying the <u>origin of the difficulty</u> is key to the solution.

Responding to your child's learning difficulties with a <u>neuroplastic approach</u> will provide you with a deep understanding of your child's learning challenges and how they can be addressed. By identifying and targeting your child's weak cognitive functions and capitalizing on the neuroplasticity of their brain, these functions can be strengthened, improving their overall learning capacity and positioning them for positive educational and life achievements.

A neuroplastic approach to responding to learning challenges gets to the root of the problem—the brain's cognitive functions and addresses them (literally) head-on.

To begin to make connections between your child's learning challenges and the cognitive functions that may be underperforming and contributing to their difficulties, complete the <u>Arrowsmith</u> <u>Cognitive Questionnaire.</u>

## Did you know?

Our brains have the incredible ability to change and improve throughout our lives?

It's called neuroplasticity, and it means that with intentional effort, we can strengthen our brains to overcome learning challenges and enhance performance. Just like our bodies benefit from exercise, our brains can also undergo positive transformations through neuroplasticity.

 $\frac{\sqrt{2}}{1}$  Hear from Olivia and Mitch on their journey in homeschooling with support from Arrowsmith.





#### NEEDING SUPPORT TO MOVE BEYOND LEARNING CHALLENGES?

Think critically, comprehend and focus purposefully with Arrowsmith.

LEARN HOW