

NEURALIGN Cognitive Training

for LEARNING and LIVING



incorporates everything we
know about learning and reading
and deals with what can go wrong

Thanks to advancements in research, we now know more than ever what our brain needs to master the skills of learning, reading and being in the world.

Neuralign targets the following...

Auditory Processing: the way the brain recognizes and interprets sounds/speech. Needed for recognizing slight differences between sounds in words, even when they are loud and clear isolating sounds in words, matching sounds to letters and blending sounds into words, improving attention, listening, conversation, reading and spelling.

Visual Closure: the ability to use visual cues to identify a whole form, object, or person, when only part of it is seen. Our visual processing system does not need to analyse every single detail to recognise what we see.

Good visual closure helps us to quickly process the information we receive from our surroundings, leading to safety, good communication and fast reading.

Decoding and Encoding
Efficient decoding of phonemes (smallest unit of sound) is the root of reading, and encoding of phonemes is the root of writing. While the brain is naturally wired for sound to develop speech, the wiring for writing must develop from parts of the brain used for viewing the natural environment.

Timing: is needed to coordinate and integrate the information from what we look at (20-40 msec) and what we listen to (8-10 msec) so we can pay attention, make sense of our surroundings, and interact with people. Good timing is necessary to develop working memory span for reading comprehension and to truly read with fluidity, rhythm, and automaticity.

Phonological Awareness
.Good phonological (print-to-sound relationships) awareness allows us to attend to, discriminate, remember, and manipulate sounds at the sentence, word, syllable, and phoneme (sound) level. This results in clear speech and communication and accurate reading and spelling.

Executive Function: higher-order processes (eg controlling impulses, working memory, and ability to shift the focus of attention) leading to action to achieve goals and adapt to new or ambiguous situations. Executive function is responsible for paying attention, organizing, planning and prioritizing, starting and completing tasks, understanding different points of view, regulating emotions and self-monitoring.

Visual Processing and attention: the number of distinct visual elements in a series (such as letters along a line) that can be paid attention to and processed at the same time. Span of visual attention, eye movement differences affect our ability to pay attention to the places and people around us, as well as reading.

Visual Sequential Memory: accurately recalling and reproducing a series /sequence of visual stimuli – objects, symbols, numbers, letters. Apart from managing in life, this is necessary for the decoding process in reading and the encoding process in spelling. "The eyes look and the brain sees."

Ocular Motor Control: motor neurons controlling eye muscles coordinating both eyes smoothly and efficiently tracking a moving object or looking from place to place. Necessary for safety in the environment, playing sports, physical balance, social communication, and following a line of text when reading resulting in smooth, fast reading.

Working (short-term) Memory
temporarily stores and manages information needed to carry out complex cognitive tasks such as comprehension, learning, and reasoning through a) the Central Executive which sends data to the subsystems), b) the Visuospatial Sketchpad or inner eye which stores and processes information in a visual or spatial form, and 3) Phonological Loop which deals with spoken and written material.

Morphology | Word construction: the smallest units of meaning in language, are called morphemes. These units include root words that can stand alone as words, prefixes, suffixes, and bound roots, which are roots that must have a prefix or suffix added to become a word.

Multi-Sensory
Multi-sensory activities provide needed scaffolding for beginning and struggling readers and include visual, auditory, kinesthetic, and tactile activities to enhance learning and memory.



08 71274938
maria@dyslexiaclinic.com.au