

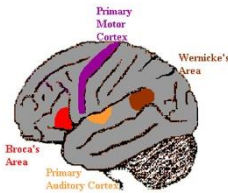
How to improve learning

This information booklet aims to provide you with some insights into:

- the cause(s) of neuro-developmental childhood conditions such as neuro-developmental-, speech & language delay, learning difficulties (Dyslexia, Dyspraxia, Dyscalculia, Dysgraphia), behaviour difficulties (AD(H)D), Autism & Autism Spectrum Disorders (ASD) and how to identify and address them
- how learning can be improved by making new connections to areas of the brain that (for whatever reason) were previously inaccessible
- how any missing prerequisite skills can be taught to those areas
- the results, i.e. the improvements in learning that can be achieved over a very short period of time at home and in the classroom when all of these steps are performed in the right order

What causes learning problems?

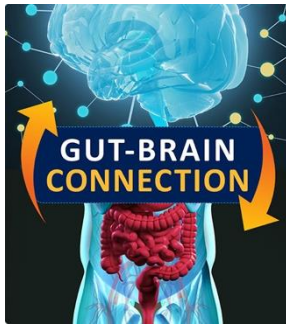
Learning is a complex activity, yet every living creature has the innate ability to learn to a greater or lesser extent. Humans are one of the few species that have the ability to speak and speech is an especially complex action, requiring many areas of the brain to work together. Speech and language were added last in our evolutionary development. Most of the speech areas are located in the neo-cortex, which means that they are on the outside of the brain, since cortex means bark. This makes them extremely vulnerable to external influences (see picture). If someone suffers a brain injury or stroke in the left hemisphere of the brain, there is often a noticeable effect on their speech or language, whereas their breathing and organ functions are usually not affected, as these areas are in the more central areas of the brain.



Speech and language are also very vulnerable to toxic insults. Most of us have heard the effect of too much alcohol on someone's speech, as alcohol is a neuro-toxin. Over the last 50 years the amount of toxins and toxicants (man-made toxins) in our environment and food have increased dramatically. The health of our gut flora has suffered with the increased use of antibiotics, herbicides and pesticides, as well as diets that contain more processed foods, sugar, salt and food additives, but less fermented foods, fibre and plant derived vitamins and other nutrients. When the gut is not functioning well, toxins from bacteria, heavy metals, round-up (glyphosate) and food additives, can leak out of the gut into the blood stream, otherwise referred to as "Leaky Gut Syndrome". Researchers have found that there is a connection between a leaky gut and a leaky Brain Blood Barrier (BBB). It allows gut derived toxins to cross the BBB and enter the brain, where they can interfere with brain



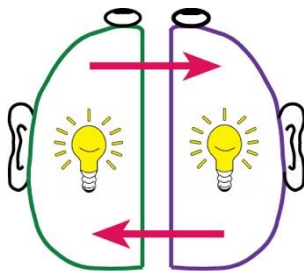
"Leaky Gut Syndrome". Researchers have found that there is a connection between a leaky gut and a leaky Brain Blood Barrier (BBB). It allows gut derived toxins to cross the BBB and enter the brain, where they can interfere with brain



function and can cause brain inflammation. You can read more about the gut in my chapter: “Gut Revelations” that was published in the book: “Elevate your Health”, which is an International best seller. It is available as an e-chapter, e-book and hard copy from the “Products” section on the www.optimumlearningandhealth.com and the www.autismrecovery.com.au website.

As the number of toxins in our environment have increased, the number of children with speech and language delay or learning problems have increased as well. Children with dyslexia find it hard to read the written language and often also have spelling problems. Many children with Attention Deficit (Hyperactivity) Disorder (AD(H)D) have a learning problem that is related to language as well. In Autism & ASD speech and language are almost always affected to a greater or lesser degree. There is a correlation between the severity of the speech problem and the severity of the Autism. On the severely affected end of the autism spectrum, 25% is minimal verbal, i.e. they speak less than 30 words and some have no speech at all.

What is the cause of neuro-developmental delay, learning problems, AD(H)D, ASD and Autism?



Integrated & switched-on brain
Whole-brain communication

The brain can only learn something if the areas of the brain that are involved with the learning process are accessible. However, until all of these areas are switched-on and accessible simultaneously (integrated brain) learning will not be *optimal*.

Accessibility is the most important prerequisite for learning. When the accessibility is impaired, brain function is impaired, so we need to identify what is causing this.

Lack of access is usually caused by one of the following 4 reasons.

The connections between the areas:

1. have not developed yet (as is the case in young children)
2. are blocked
3. are damaged or destroyed
4. as well as the areas they connect with are damaged or destroyed

Re 1: The connections between the areas haven't developed yet

In Australia, children go to school and start formal learning at the age of five, but for many children both sides of the brain are not fully integrated until the age of seven (especially in boys). Hence, skills that require both sides of the brain to be accessed at the same time (like reading and writing) often cause a problem for five- or six-year-olds, so learning problems are introduced right from the start.

Most learning problems are because the left and right hemispheres of the brain do not work together efficiently.

Symptoms of a left/right brain integration problem are:

- poor coordination
- poor reading skills: comprehension, accuracy, fluency and speed may all be affected
- reversals of “b” and “d”, numbers, “was” for ”saw” or “on” for “no”
- visual problems, as the left and right eye do not communicate efficiently
- poor eye hand coordination
- poor handwriting skills: i.e. capitals where they do not belong, letter size and spacing is irregular and often lines are ignored, even though this may have been pointed out to the child many times
- poor story writing skills, as creative ideas are processed in the right brain and grammar and punctuation in the left brain
- poor spelling:
 - there may be reversals of letters within a word
 - the word may look all right, but there may be an extra letter which the child does not notice
 - one letter is missing, often a “n”, “r”, or “l”, which shows the child does not say the word as s/he looks at a picture of the word. This is an example of a survival strategy used by children who can only use one side of the brain at the time.
- exam blanks

The nature of a learning- or behaviour problem is dependent on what area of the brain cannot be accessed. Research has shown that Dyslexia is often a later symptom of a speech problem. The motor part of their speech areas is usually age-appropriate by the time the child is four years old. However, a dyslexic child’s speech development was often slow and the “babbling” stage was often skipped or very quick and then one day, the child started speaking in whole sentences. The “babbling” stage is a very important requirement for Auditory Discrimination, i.e. the ability to hear the difference between “sting” and “string”, or “then “and “than”, which in turn frequently leads to problems with spelling later on.

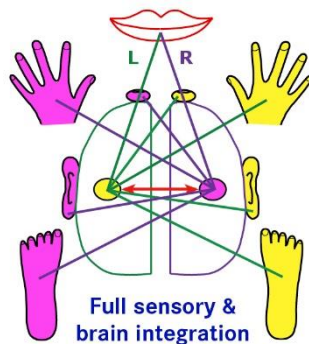
Sensory Integration

Sensory integration is also a very important prerequisite for whole brain learning, because the information that is received, often needs to be translated from one sensory channel into another. The learning process can be divided into 4 stages:

- Receiving
- Processing
- Storing
- Retrieving

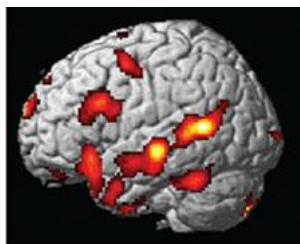
Any of these stages can be a problem for the person with learning difficulties and often there are problems in the transition from one stage to the next.

There are 3 main sensory channels that are involved in the learning process: Visual (V), Auditory (A) and Kinesthetic (K). The Kinesthetic channel deals with learning through doing, touching or feeling, so for optimum learning to occur it is essential that these sensory channels are integrated with each other.



For children who have not yet reached a high enough level of sensory integration, this translation process cannot take place easily. Often, it will be hard for them to learn, as they will only be able to process information in one or two sensory channels. This will result in a very limited learning style. Lack of sensory integration, is one of the main causes of learning problems.

For example, if someone is telling a story about their cat (A), then this information will be sent to the sensory integration centre of the listener on the left side of the brain, which will then connect to the information that is stored about a “cat” in all of the sensory channels (I have left the nose (smell) out of the picture, as it is not often involved in the learning process). We can then imagine: a picture of a cat (V), hear the cat purr (A), imagine what it would feel like to stroke a cat (K), see how the word “cat” is spelled (V), repeat the word “cat” (K) and if all is working well, we are able to summarise the story



about the cat in our own words (V, A, K). Listening to a story and making sense of it, involves many areas of the brain and all of these areas need to be accessible simultaneously (see picture). Otherwise, not all of the sensory information that is linked to the story will be retrievable or the story may not be completely understood by the listener, or they may not be able to summarise it in their own words.

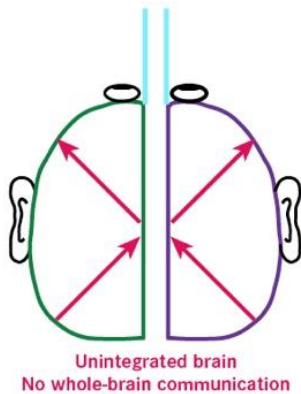
Most long-term memories are stored as a picture. This means when we retrieve a memory, it needs to be translated back into words before we can think or talk about it.

Symptoms of sensory integration problems are:

- short term memory problems
- information goes in one ear and out the other
- the person may not be able to remember more than one or two items from a list of four verbal instructions
- tables may be learned and understood one day and totally forgotten the next day
- poor reading comprehension
- messy handwriting: while the attention is on *what* to write (Auditory channel), there is no attention on *how* it looks (Visual channel)

- phonetic spelling: the attention is only on what the letters sound like, but not on what the word looks like
- a student may learn easier with one teacher than with another. The teacher the student prefers may teach mostly in the sensory channel that the child can best learn in (learning style), so that the child does not have to translate from one sensory channel to another.

Re 2: Connections between the areas are blocked



Stress interferes with left/right brain communication. Under the influence of stress, the “Fight or Flight” reflex is triggered off in the brain and this causes the connections between the left and right hemisphere to become barriers or blockages. For example, someone who fears public speaking may forget what s/he was talking about during public speaking, as s/he is then not able to access both sides of the brain anymore. When a child is bullied or feels stressed about learning, whole brain learning becomes near impossible. This stress can then create a learning or behaviour problem, or it can exacerbate an already existing one.

Blockages can also be caused by the presence of toxins and toxicants in the brain. Heavy metals such as lead, aluminium, cadmium and mercury from pipes, old paint, car tires, fish, vaccinations, amalgam fillings, soft drink cans, cookware, aluminium foil etc. have all shown to be able to interfere with brain function.



Many children with ADHD react to food additives, especially artificial colouring and flavouring. Within minutes these substances can cross the BBB, which causes the children to become hyperactive, because they lose access to their frontal lobes that help with focus and concentration.

Re 3: The connections between the areas are damaged or destroyed



Unfortunately, gut derived toxins and artificial food additives are not the only toxins that can cross the BBB. The brain contains a high amount of fatty tissue. Glyphosate, other herbicides and most pesticides are fat soluble and are therefore often stored in the brain, where they cause inflammation.

This inflammation causes damage to the brain cells and the connections between the cells. This makes it difficult, if not impossible to access these areas, which can lead to developmental delay, learning difficulties, behaviour difficulties, AD(H)D, Autism & Autism Spectrum Disorders (ASD). These childhood conditions have risen dramatically over the last 50 years. Over the same period, chronic childhood conditions such as Asthma, Allergies and food

sensitivities have also risen dramatically, which shows that the brain is not the only organ that suffers from these changes in the environment and diet.

Re 4: The connections between the areas as well as the areas they connect with, are damaged or destroyed



The extent of the damage is usually related to the amount of neuro-inflammation that is caused by these toxins and toxicants. In the worst scenario, an overload of toxins in the brain can cause such severe neuro-inflammation, that it can destroy the communication channels as well as the brain cells (neurons) themselves. This can result in the regression into autism.

Regression is usually the result of several factors and these need to be identified if we want to recover from regressive autism, i.e. the total toxic load, any nutritional deficiencies and intolerances, genetic influences and the state of the gut health. All of these factors need to be addressed first, so that the cells can heal and function can be restored. Autism Recovery Therapy (ART) was designed to do all of the above in a 6-step process. You can read more about ART on the www.autismrecovery.com.au website.

What do we do after we have dealt with the cause(s) for the accessing problem(s)?

Once the toxins have been identified and removed, the brain cells healed, gut health restored and the diet optimised, we are ready to make new connections and optimise brain function.

We now need to find the answer to the following 2 questions:

- which areas of the brain do we need to make new connections to?
- what skills need to be taught to those areas?



To answer these questions, I always do a Neuro-developmental and Educational assessment. Depending on the age and the nature of the problem, a series of tests will be chosen to assess the student's ability in that area. You can find out more about which tests I use on the Neuro-developmental and Educational assessment page of both the www.optimumlearningandhealth.com and

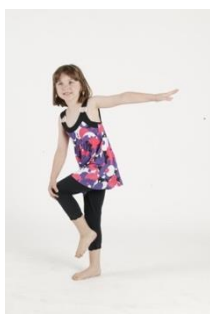
www.autismrecovery.com.au websites.

Parents are welcome to be present during the assessment, as this will give them a much deeper understanding about the nature of their child's learning problem(s) or neuro-developmental delay, than just seeing a test score in a report.

Based on the results of the assessment, I will determine the most suitable programme for the child, so that the child can overcome these problems and become a successful independent learner.

How can we make new connections?

If the child cannot access the area(s) of the brain that need(s) to learn a skill, then the first step is to make that area accessible.



Educational Kinesiology offers a set of Brain Gym® activities that have helped to switch on and access all areas of the brain. There are different activities for the different subject areas. The Brain Gym® activities are easy to do at home and in the classroom, so that every child can help themselves learn easier and more successfully.

The Brain Gym® Demo CD contains all of the Brain Gym® activities as well as explanations of when and how to do them.

The CD is available for purchase from the Products section of both websites.

In 1991 the Educational Kinesiology foundation in the USA was awarded the prize of the Learning Foundation for the best innovative contribution to learning.

Dr. Paul Dennison, founder of Educational Kinesiology (Edu-K), made a significant breakthrough. He developed an Integration Process that allows the



left and right side of the brain to work together more efficiently. Since then, thousands of children from all over the world have benefited and are now able to enjoy whole brain learning (see writing examples below). When a child can access the whole brain for learning, new strategies can be learned to replace the old survival strategies, which often involved using only a small part of the brain.

Reading: If a child has learned to read by the Sight-Reading approach, he/she will usually be able to manage reasonably well up to grade 3. Then as the size

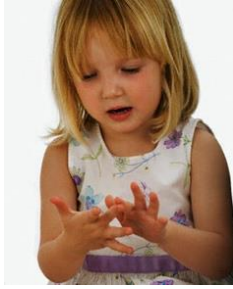


of the letters decreases and the length of the words increases, it becomes harder to read simply by recognising the words. At this stage the child needs word attack skills to advance. Research has shown, that without intervention, poor readers usually remain poor readers all through their adult life! Based on the skills most children with reading difficulties were lacking, I have developed the

SureReading method, so that everyone can learn how to

read with ease. You can read more about the **SureReading** method on the **SureReading** page of the www.autismrecovery.com.au website.

Mathematics: Counting on fingers is an example of a survival strategy for mental maths. In many schools, mental maths is not taught, only tested. If the child is unable to access the sensory integration centres of the brain that can



make pictures of the numbers, i.e. 3 ice-creams, then adding and subtracting 2 numbers, i.e. $3 + 4$, or $5 - 2$, will be difficult for the child. Unless something changes, the child will always have problems with mental maths, as counting on fingers will be too slow for more advanced mental maths.

Therefore, I have developed the **LiveMaths** method, a multi-sensory, whole brain approach to mathematics. In this method children first develop connections to both hemispheres and both sensory integration areas, so that they can learn maths skills using their whole brain, followed by multi-sensory strategies that are fun to do and easy to understand. You can learn more on the **LiveMaths** page on both of my websites.

For the last 37 years, I have done research, both in South Australian Schools as well as in private practice whilst working with children who have reading problems. The research focused on identifying those reading skills that had not been acquired by the students who struggled with reading. This study resulted in the **SureReading** method, which is a whole brain and multi-sensory approach to reading. The method focuses firstly on accessing all areas of the brain that need to be involved in reading, followed by developing all prerequisite skills for reading and lastly teaching efficient decoding, syllabification, phonological discrimination, encoding and comprehension skills. This method is suitable for all years of primary and secondary schools, either as a classroom method, or as a remedial method and is available to schools and individuals from the Optimum Learning & Health Centre (OLHC).

Spelling: Children who have had a speech problem or have suffered from ear infections when they were young, often have a problem with Auditory Discrimination and processing skills later on. These skills are required for spelling, but if children do not have these skills, they will often try to remember the word as a picture. However, if they miss a letter here or there, they will not be able to self-correct, as they do not say the word in their head whilst they are writing. Research has shown that if Auditory Discrimination skills are not developed by the time a child is 6 years old, these skills will not develop automatically later on in life.

Therefore, the best approach is to first ensure that the areas of the brain that are involved in Auditory Discrimination and Processing skills are accessible and consequently develop these skills through the **SureReading** method (the **SureReading** information booklet is available from the Free Publications & Products section).

Writing: Writing can be a problem in many ways: letter formation, spelling, reversals, story writing, grammar, punctuation, use of capitals and lower-case letters, spacing of the letters, pengrip, writing between the lines etc. Different areas of the brain need to be accessed to perform these skills. Fortunately, there are a variety of Brain Gym® exercises for the different writing activities.



Why does a child write reversals?

If children write reversals, i.e. “b” for a “d” and vice versa, many teachers will tell them to remember a “b”, as “the bat comes before the ball”, however often without much success. The reason for this is usually that the left eye is looking at it with the exclusion of the right eye.

The left eye processes information from right to left like books written in Arabic and Hebrew, which makes a “b” look like a “d” to them. The right eye processes information from left to right like books written in English.

There are 2 main reasons for processing information with the left eye only.

1. The child has not yet reached the level of developmental maturity to be able to process information with both eyes working together as a team and with an integrated brain. In this case, if they look at the left side of the page, they are more likely to reverse a letter, number or word than on the right side of the page. This is illustrated by Alicia’s writing examples below.
2. The child is left eye dominant, which means their left eye is their dominant and preferred eye. This is illustrated by Elke’s writing examples below.

What are the results?

The success stories I have listed below are mostly from the time when I first learned about Brain Gym® and the brain integration process. At that time, the lack of accessibility was usually caused by a lack of developmental maturity and readiness, rather than by chemical interference with neuro-development such is often the case in AD(H)D and ASD.

These results show that:

- Brain Gym® exercises can help to increase the accessibility for each subject very quickly and effectively
- The brain integration process increases the ability for the 2 hemispheres to work together
- The Brain Gym® exercises and the brain integration process have a long-lasting effect upon which further development can be built

When AD(H)D and later, Autism Spectrum Disorders (ASD) became more prevalent and toxins and neuro-inflammation were playing a role, it became necessary to deal with this first on a biochemical level (working from the **inside-out**), before other techniques that work from the **outside-in** such as Brain Gym® and the brain and sensory integration processes can be successful. For this purpose I developed Autism Recovery Therapy (ART), so that the brain can be cleared from toxins and inflammation before new connections can be made.

Success stories:

1. Alicia: Alicia was in year 1. Her writing showed many reversals and she had trouble writing between the lines. Her pen grip was immature as well, which meant she was pressing too hard into the paper.



Alicia was right-eye dominant, which means that her right eye was her dominant eye. If a right-eye dominant child writes reversals, then this is most likely because the connections between her 2 eyes and 2 hemispheres have not been formed yet. When Alicia was looking at the left side of the page, only her left eye was processing the information, which led to reversals.

Therefore we needed to increase brain integration, so we did the brain (or Edu-K) Integration Process and afterwards I asked her to write the same things as she wrote before. I also changed her pen grip to the mature Tripod grip every time before she wrote a word.

Alicia: 5 3/4 Years old, Prim. 1, 17 - 5 - '88.

Before:	After Edu-K Integration Process (15 min. later) and change of pengrip (till "jet"):
Alicia	Alicia
ball bal	ball
dog dog	dog dog
put put	put put
you you	you
jet	jet
hest	hest
2	2
3 5	3 5
4	4
6	6
7	7
9	9
10	10

Results:

Without any prompting, she immediately started writing between the lines and her spelling of the word "ball" was correct as well, meaning that she could now access the areas of the brain where a picture of the word is stored.

When she had to write the number 5 again, she hesitated, then wrote it as a reversal, but said: "I know it is not right, but I don't know how to do it". Before we did the Integration Process, she had no idea

which letters and numbers she wrote back to front. Now that both her eyes were looking at it and both sides of the brain were working together, she could learn how to write the letters, numbers and words in the correct way. Up to this point, more writing would not have made a lot of difference, because the way a letter or number was perceived, was dependent on which eye was looking at it.

As I was curious to see what the effect of the changed pen grip was, I stopped correcting her pen grip after “jet”. She immediately started writing outside of the lines again. Apparently, the stress involved with holding the pen in an immature grip and pressing too hard into the paper, meant that she could no longer pay attention to whether she was writing between the lines or not.

Therefore, to avoid reversals and habits such as poor pen grips or poor letter writing that are hard to change later on in life, it is better to first ensure that both eyes and both hemispheres of the brain are working together as a team, before introducing the letters and numbers. If brain integration is achieved first, it does not matter anymore on which side of the page the child is looking or whether they are left or right eye dominant. When the letters and numbers are introduced at this stage, they can be practised until the child can remember them confidently, i.e. *only perfect practise makes perfect*.

2. Elke. Elke is left-eye dominant. Her writing example of “Before” shows that she only wrote on the left side of the page and that she wrote a “b” for a “d”.

Elke: 5 3/4 Years old, Prim. 1, 28 - 3 - '88.

Before:

I W o n t + to
be g a b



She also struggled to make a “d” or “o” or any other letter with an anti-clockwise movement (see arrow), so we practised the Lazy 8 (one of the Brain Gym® activities for writing).

After E.K. Integration Process (30 min. later):

After the Integration Process and the Lazy 8, i.e. 30 minutes later, you can see that the reversal had disappeared. The reason being that the left and right eye were now coordinating the writing together and as the right eye processes information from left to right, she could now see the letter “d” correctly. No repetition or teaching required. Note also that she crossed the midline on the page spontaneously afterwards and wrote the whole sentence on one line.

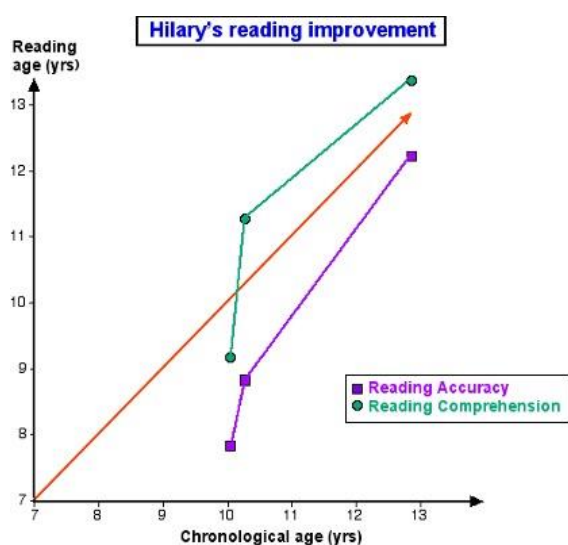
Brain Gym® can therefore save teachers and learners a lot of time and effort and is well worth doing before any instruction or homework session.

3. Hilary. Hilary was a ten-year-old boy who came to me to see me because he had reading difficulties and he lacked confidence in reading, writing and spelling. The Neale Analysis test (revised edition) showed a Reading Accuracy age of 7 years and 11 months and a Reading Comprehension age of 9 years and 3 months (Chronological age: 10 years and 1 month). The main problem was decoding (Reading Accuracy), but the Reading Comprehension was below his age level as well (see graph below). On the LAC test (Lindamood Auditory Conceptualisation Test), a test for Auditory Discrimination and processing skills, he scored as if he was at the beginning of year 3, while at school he was in year 5.

His letter formation was very inconsistent, with many letters and numbers being formed from the bottom to the top (9, b, e, s). He said his eyes hurt if they moved from left to right (a possible sign that both eyes and both sides of the brain were not working well together). He did not like reading and writing and never read on his own accord. He had a poor sense of left and right.

In the first 2 sessions we concentrated on improving Brain and Sensory Integration. Some emotional learning blocks were cleared as well. When I retested him on the LAC test 2 weeks later, he scored as if he was in the beginning of year 6, a 3-year improvement in only 2 weeks and 2 sessions! The third session was 2 weeks later. We focused on selecting special Brain Gym® exercises to improve writing, spelling and decoding. We also used the **SureReading** method. He said that he had enjoyed reading a book from cover to cover for the first time in his life!

Hilary came to see me again 3 months later and I retested his reading. The Neale Analysis test showed a Reading Accuracy age of 8 years and 10 months (a 1-year improvement) and a Reading Comprehension age of 11 years and 4 months (a 2-year improvement in 3 months' time!), which meant his reading age for Comprehension was now above his chronological age!



Without any further sessions, I retested him almost 3 years after the first session at 12 years and 11 months old. His Reading Accuracy age was now 12 years and 3 months and his Reading Comprehension age was 13 years and 4 months, so his reading had continued to improve naturally according to his chronological age.

In that time, he had become an avid reader. He really enjoyed the stories he read, because he could now understand them, as the score for his Reading Comprehension shows.

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His parents said that his confidence in reading, writing and spelling had improved out of sight (without me having to address the issue of confidence at all).

4. Simon: Simon was a 9 ½ year old boy who had problems with writing. His teachers had told him for over 4 years to write between the lines, to use capitals only at the beginning of a name or sentence and yet he was not doing it. He was a very nice boy who wanted to succeed at school but somehow did not

manage to do this very well. Kinesiology checks revealed that both eyes and both sides of the brain were not working together well either.

Simon: 9 1/2 Years old, Primary 4.

Before:

6-12-91

one day I got
 a crocodile a week
 after IT was alive
 but IT WAS STILL
 small I put
 IT in my pocket
 and IT bit me
 and I SQUILLED
 AND I WAS DEAD A SOW WAS
 IT- Ha.Hg.Ha.

After one Consultation on 9 - 12 - '91 (Edu-K Integration Process):

X 11-12-91

yesterday I killed ants
 and I killed 100.
 I pour 100 ml of loc
 and 900 ml of water.

We did the Integration Process to ensure that both eyes and his whole brain were now looking at the page.

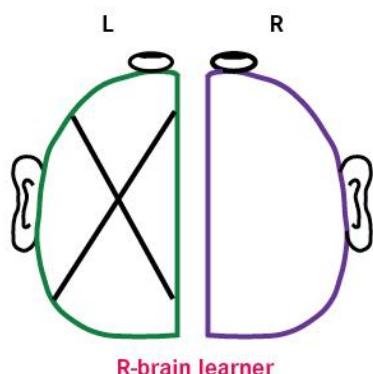
This meant that he could now move both eyes from left to right like windshield wipers in a car. The right eye was connecting with the parts of the left brain that processed spelling, grammar and punctuation, whilst the left eye connected with the parts of the right brain that were

responsible for looking after the spacing, spelling and size of the letters.

Everything his teachers and parents had told him about writing over the last 4 years became accessible to him now and his brain was capable of coordinating all of this automatically for him. When his mother was looking through his schoolwork, she noticed the difference between these two consecutive pages. Then she looked at the dates. The only thing that was different, was the fact that we had done the Integration Process between those two dates. The results show that accessing is a prerequisite for processing, as the information was already there for years. However, during these years this information could not

be processed, because the areas in the brain where that information was stored were not accessible to him whilst he was writing.

5. Peter: Peter was a year 10 student and a boarder at a private college. He



had scored only 1 out of 50 on the final maths test in year 9 and consequently was not allowed to choose mainstream maths in year 10. He therefore had no other option than to do business maths, but then he realised he wanted to be a pilot, for which he needed mainstream maths. His councillor recommended that he came to see me at the end of second term in year 10. Peter was a left hander and a Right brain learner. His learning style was limited to a right brain approach to maths, which means he needed to have the total picture before he could

learn the details. As he had travelled a lot during his primary school years, he had never understood the total picture of the early maths concepts and consequently had not learned the details either. I saw him once a fortnight for the next two terms.

At first, even the thought of doing maths switched him off to the point that he did not want to do his homework or concentrate in class. The boarding house master said he was always the first to switch off his light and go to sleep. The emotional reaction to mathematics was the result of years of having poor grades for mathematics and a sense that he could not do it. This had to be addressed first to enable him to switch his brain on for mathematics. Once he could switch his brain on for mathematics, we first worked through all the primary and secondary school mathematics in a right brain way, to suit his preferred learning style. To help him access his left brain, I did some Integrative therapy sessions with him (if you are interested to read more about Integrative therapy see www.optimumlearningandhealth.com and/or the www.autismrecovery.com.au). After these sessions he could access and learn to use his whole brain and this allowed him to be more flexible in his learning style. After 2 sessions, he was starting to enjoy mathematics and was happy to study an extra hour each night after his other homework was finished. The boarding house master commented that it was an enormous surprise to everyone that he went from being the first to switch off the lights at night to being the last...

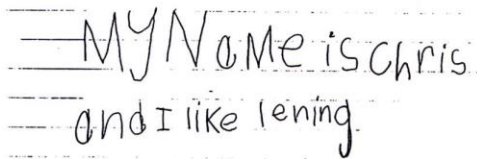
At the end of the third term, he was already capable of doing year 10 mainstream mathematics, so doing another term of business mathematics was of no benefit to him. We therefore discussed whether he could be allowed into the year 10 mainstream mathematics class in the fourth term. This had never happened before in the history of the school, so it was agreed that he could have a trial period. If he failed the final test, he could further catch up during the Christmas holidays and until the end of the first term in year 11. He did however pass the final year 10 test with a "C", even though we had only completed two thirds of the year 10 material. Over the holidays he completed the rest by himself and had no further sessions with me during year 11. At the end of the

first term of year 11 he had a "B" for mainstream mathematics and his teacher told me that on his final report for year 11 he had scored an "A"!

6. Christopher: Christopher was repeating year 2. He had problems with writing. He had never written a story that was longer than one sentence, wrote reversals, had trouble knowing when to use lower case and capitals, did not write between the lines and his spelling was phonetic (as it sounded to him).

Christopher: 7 1/2 Years old, Prim. 2, 17 - 2 - "88.

Before:



MY Name is Chris
and I like lening.

After Brain Gym Exercises (5 weeks later):



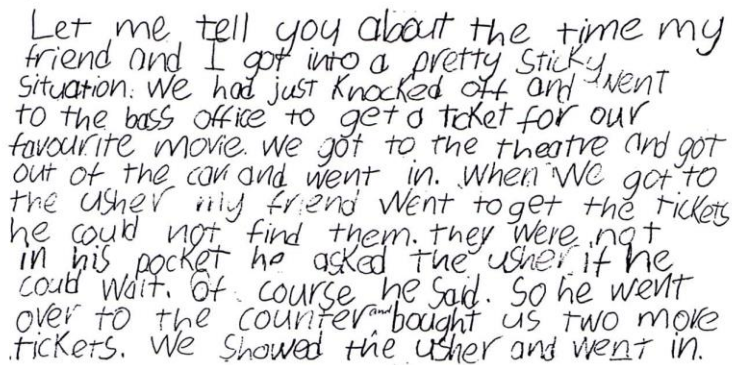
Goal: FUN AT SCHOOLE

After Edu-K Integration Process (20 min. later):



FUN AT SCHOOL

No further sessions (1 Year later)



Let me tell you about the time my friend and I got into a pretty sticky situation. We had just knocked off and went to the boss office to get a ticket for our favourite movie. We got to the theatre and got out of the car and went in. When we got to the usher my friend went to get the tickets he could not find them. they were not in his pocket he asked the usher if he could wait. Of course he said. So he went over to the counter and bought us two more tickets. We showed the usher and went in.

I had no further sessions with him.

A year later, I met his mother in a supermarket. She told me that he had continued to improve in writing even though he had not done any of the Brain Gym® exercises and promised to give me some writing examples. She said he was writing stories instead of sentences now and she showed me proudly that he also liked illustrating his stories which made them look very nice and colourful.

His writing examples show that he was able to build on the foundation that we made a year ago. The Brain Gym® exercises helped him gain access to areas that were previously inaccessible. They also helped to switch on those areas, so that he could learn to use them and connect them with other areas. The

On the first session, I did some Brain Gym® exercises with him and even though he had not done any Brain Gym® at home, his writing had already improved on the next session.

I then did the Edu-K integration process with him and took another writing example 20 minutes later.

You can see that he could write between the lines now, access the correct picture of the word and did not write any reversals, showing that the two eyes were now working together as a team.

integration process improved connectivity between the two eyes as well as the two hemispheres of the brain, so that they could work together more efficiently and make whole brain writing possible.

The success stories above show, that when the brain is switched on, has all the nutrients, prerequisite skills and strategies it needs to function optimally, it can learn anything!

