How To Improve Learning

Information Booklet

The Optimum Learning & Health Centre
12 Bayview Crescent
Beaumont, South Australia 5066.
Tel. 61- 8 - 8379 4755, Fax. 61- 8 - 8379 0824
Email. akoelman@ozemail.com.au
Web: www.kinesiology.nu/ankekoelman

How does the OPTIMUM LEARNING® Centre work?

***Objective**: The OPTIMUM **LEARNING®** Centre aims to assist children, teenagers and adults in achieving their optimum potential by identifying and dealing with the cause of any problem, learning block or developmental delay that may interfere with their progress.*

What causes learning problems?

The learning process can be divided into 4 major stages:

* Receiving
* Processing
* Storing
* Retrieving

Any of these stages can be a problem for a person with learning difficulties. Often there are problems in the transition from one stage to the next, because the information needs to be translated from one sensory channel into another. For example if the information has been received through listening (Auditory channel), then in order to process that information, one needs to make a picture of what is being said (Visual channel). Most memories are also stored as a picture, so that when one retrieves a memory, it needs to be translated back into words, before one can think or talk about it.

Therefore for optimum learning to occur it is essential that all sensory channels are integrated. If an individual has not reached a high enough level of sensory integration, this translation process cannot take place easily and it will be hard for him/her to learn, as he/she will be stuck in one or two sensory channels. This will lead to a very limited learning style. Lack of sensory integration is one of the main causes of learning problems.

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 writing: 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 it sounds like and not on what it looks like
* a student may learn easier with one teacher than with another, depending on which teacher matches the sensory channel that the child can best learn in (learning style), so that the child does not have to spend the whole day translating from one sensory channel to another.

In hospitals babies, toddlers and young children with poor sensory integration are often given occupational therapy and physiotherapy to improve sensory integration through their early intervention programmes.

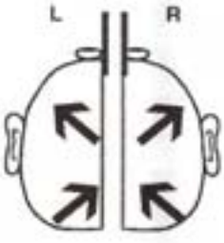
In order for any learning to occur, one has to be able to **access** the areas of the brain that are involved with receiving, processing, storing and retrieving of information and it is necessary that all areas of the brain are accessible simultaneously. Accessing is the most important prerequisite for learning. A major cause of learning problems is the fact that one or more areas of the brain are not accessible. 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 accessible at the same time (like reading and writing) often cause a problem for five or six year olds,

resulting in learning problems right from the start.

Most learning problems, are due to the fact that the left and right hemisphere do not work together efficiently. One could say that the communication channels between the two sides have not yet been formed (in case of a young children), or are temporarily blocked (in case of older children and adults), mostly as a result of stress.

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, or "was" for "saw"
* visual problems, as the left and right eye do not communicate efficiently
* poor eye hand coordination
* poor hand writing 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, or the word may look all right, but there may be an extra letter, or 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



Stress affects brain integration in a negative way. 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. For example someone who fears public speaking may forget what they were talking about during public speaking, as he/she is then not able to access both sides of the brain anymore.

The nature and extent of a learning or behaviour problem is dependent on the area of the brain that cannot be accessed. Research has shown that dyslexia is often a later symptom of a speech problem. The motor part of the speech is usually normal by the time the child is four years old, but often the child's speech development was slow and the "babbling" stage was skipped or very quick and 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 spelling problems later on.

Where do we start?

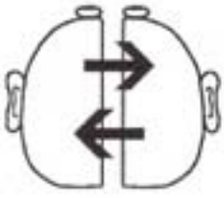
Every first visit is always an **assessment**. Depending on the nature of the problem a series of tests will be chosen to assess the student's ability in that area. For **reading** the Neale Analysis test (revised edition) and/or the Woodcock Reading Mastery test will be used, depending on the level and nature of the reading problem. For **spelling** the Westwood Spelling test and L.A.C. (Lindamood Auditory Conceptualisation) test (to assess the Auditory discrimination skills) will be administered and for **mathematics**: KeyMath.

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 problem(s) than just a test score. On the basis of this assessment the best possible programme for the child will be discussed with the parents and the child, so that the child can overcome these problems and become a successful independent learner.

What programmes does the OPTIMUM LEARNING® Centre offer?

On the basis of the assessment, it can be determined whether the problem is an accessing problem or a strategy (processing) problem or both. Content is rarely significant, because if the teacher, the parents and others have tried to explain something and the child has not been able to learn the skill, then something must be preventing the child from being able to learn. If the child cannot access the area of the brain that needs to learn the skill, then the first step is to make the area accessible.

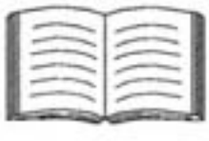
Educational Kinesiology offers a number of **Brain Gym®** activities that have helped to switch on, i.e. access all areas of the brain. Brain Gym® activities are easy to do so that every child can help themselves to learn easier and better. In 1991 the Educational Kinesiology foundation in the USA was 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 benefitted and are now able to enjoy whole brain learning (see writing examples). When a child can access the whole brain for learning, new strategies can be learned to replace the old survival strategies, which often involved only a small part of the brain.

3 X 4=?

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 a child is not able to access, or utilise the centres of the brain that can make pictures of the sums, then the child will have to manage mental maths in another way. Counting on fingers is already known to the child, so that then becomes a survival strategy for mental maths. Usually these strategies do not change by themselves. Consequently I have developed the "**Live Maths**" method, a multi-sensory, whole brain approach to mathematics. In this method children learn to access their whole brain first, followed by multi-sensory strategies, that are fun to do, easy to understand and involve the child fully.



Reading: If a child has learned to read by the Sight Reading approach, he/she will be usually be able to manage up to grade 3. Then as the size of the letters decreases and the length of the words increases, it becomes harder to manage by simply recognising the words. At this stage the child needs word attack skills to advance. Research has shown that generally poor readers remain poor readers all through adult life!

For the last eight years the OPTIMUM **LEARNING®** Centre has done research in South Australian schools, as well as in private practice working with children who have reading problems. The research focused on identifying those reading skills that had not been acquired by the students as a result of the Sight reading approach and other factors. This study resulted in the "**Reading for Sure**" 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, 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®** Centre.

w..a..s..p **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.

Being able to spell requires these skills. If children do not have these skills, they will often try to remember the word as a picture, but if they miss a letter here or there, they will not be able to self-correct, as they do not say the words 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 can be accessed (using Kinesiology and Brain Gym®) and consequently develop these skills through the **"Reading for Sure"** method.

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 just to name a few. Different areas of the brain need to be accessed to perform such a variety of skills.

If children write reversals, most teachers tell them that for a "b", the bat comes before the ball, however often without success. The most common reason for reversals is the fact that the child mainly uses the left eye, which processes information from right to left. For example Elke is left eye dominant. Her writing example (see attached writing examples) shows that the Lazy 8 (a Brain Gym activty) and the Integration Process (IP) can help with letter formation and reversals. As a result of the IP, the right and left eye are now coordinating the writing together and as the right eye processes information from left to right, reversals disappear. Christopher's writing example also illustrates that simple Brain Gym® exercises can switch on areas of the brain that were previously inaccessible. Brain Gym® can therefore save teachers a lot of time and effort and is well worth doing before any instructions are given.

What about behaviour problems?

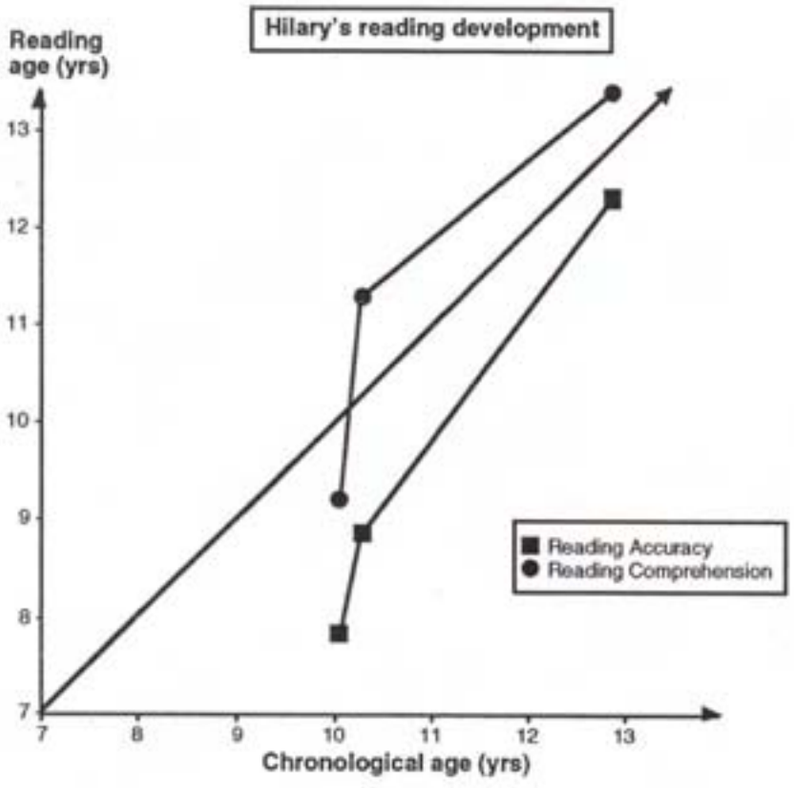
AD(H)D Many children in the last 5 years have been diagnosed with Attention Deficit (Hyperactivity) Disorder (AD(H)D) and put onto drugs to calm them down. In our experience the majority of the children with concentration problems have learning problems as well. By addressing the learning problems first, most of the concentration problems disappeared, they became a non issue. Causes for true AD(H)D can also be dealt with by looking for the best diet. Kinesiology can help to determine which foods have a negative effect on the child and what foods or supplements can help to improve overall health and thus learning ability.

What are the results?

Success stories:

1. Hilary was a ten year old boy who came to see the OPTIMUM **LEARNING®** Centre 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. On the LAC test (Lindamood Auditory Conceptualisation Test) he scored in the beginning of year 3, while 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 that his eyes hurt if they moved from left to right (a possible sign that both eyes and both sides of the brain are 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. On retesting he scored in the beginning of year 6 on the LAC test, a 3 year improvement in only 2 weeks (2 sessions)! The third session was 2 weeks later and we focused on Brain Gym® to improve writing, spelling and decoding. We also used the "**Reading for Sure**" method. ***Afterwards he said that he had enjoyed reading a book from cover to cover for the first time in his life!***



Hilary only came once more 3 month 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 improve- ment in 3 months time!). He had become an avid reader. He could now enjoy the stories, because he could understand them, as the score for Reading Comprehension shows.
Without any further sessions I retested him almost 3 years after the first session. He was 12 years and 11 months. The 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.

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

2. Simon had problems with writing (see attached writing example). 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 pleasant boy who wanted to succeed, but somehow did not manage very well. Kinesiology checks revealed that both eyes and both sides of the brain were not working together. After the Integration Process both his eyes and his whole brain were now looking at the page, which meant that he could think about the spelling, the grammar and the punctuation (left brain), while the spacing and size of the letters were looked after by the other eye (right brain). Everything teachers and parents had told him over the years now became accessible to him and his brain coordinated this automatically for him. When his mother looked through his school work she noticed the difference between these two consecutive pages. Then she looked at the dates. The only thing that happened between the two dates was the fact that we did the Integration Process to improve communication between the two sides of the brain. The results show that accessing is a prerequisite for processing as the content was already there for years, but it could not be processed, because the area of the brain that needed to process this content could not be accessed at the time of writing.

3. Kate was 10 years old and came to see me, because she lacked confidence at school. She had problems with decoding in reading and consequently with spelling. As too much energy went into the decoding process, she also had trouble understanding what she had read. The LAC test showed a problem with processing the sounds within the words. Through Kinesiology checks it was established that the Causal age for this problem was 2 years of age. We then firstly accessed the area of the brain that is responsible for processing the sounds, followed by mastering those skills that Kate's brain was not able to learn while she was a toddler and young

child. Her mother commented: "Anke worked on sounds and other areas. Her spelling and her comprehension improved. Her confidence has risen and she has moved from the lower section of the class to the middle. Kate is now in high school and has settled in very easily. However the transition for some other friends was not so easy."

4. Peter was a year 10 student and a boarder at Rostrevor College. He had scored only 1 out of 50 on the final maths test in year 9 and consequently was not allowed to choose main stream maths in year 10. He therefore had to do business maths, but then realised he wanted to be a pilot, for which he needed main stream maths. His councillor recommended to see me in the end of second term in year 10. Peter was a left hander and his learning style was limited to a right brain approach to maths, which means that the total picture had to be there, before details can be learned. 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.

First of all he learned how to switch himself on for maths, because even the thought of maths switched him off to the point that he did not want to do his homework or concentrate in class. Once he was switched on for maths, we worked through all the primary and secondary school maths, in a right brain way at first and later on he learned to use his whole brain and to be flexible in his learning style. He was now enjoying maths and happy to study an hour each night after his other homework was finished. As he was a boarder, 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, we were already doing year 10 main stream maths, so we discussed whether he could be allowed into the year 10 main stream maths class in the fourth term. This had never happened before in the history of the school, so it was agreed upon 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. However he did 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 and at the end of the first term of year 11, he had a "B" for maths. Having had no further sessions in year 11, his teacher told me that he had an "A" for the final term of year 11!

5. Alicia: Alicia's writing showed many reversals and she also had trouble writing on the lines. Her pen grip was immature. After the Integration Process I asked her to write the same things as she wrote before and I also changed her pengrip to the mature Tripod grip. As I was curious to see what the effect of the pengrip was, I stopped correcting her pengrip after "jet". She then immediately stopped writing on and between the lines (see attached writing example).

6. Justine: Her mother wrote: "My daughter Justine wasn't saying any words at the age of 3 1/2 and was sent to a speech therapist. She made some progress and when she started Reception she was speaking in short phrases. Learning problems in all areas were recognised and a special school programme was devised. At this stage she began to display an aggressive and withdrawn behaviour. As a mother it is very upsetting to witness your sweet natured child (although always strong willed) change into an aggressive child with very few friends. Around this time I took her to Anke, as very little progress had been made at school in regards to her learning abilities and her behaviour."

"The change in her behaviour and in particular her learning ability was dramatic. After just one session she was able to learn to read and her writing improved. I can't stress enough the success Justine's sessions were at the OPTIMUM LEARNING Centre."

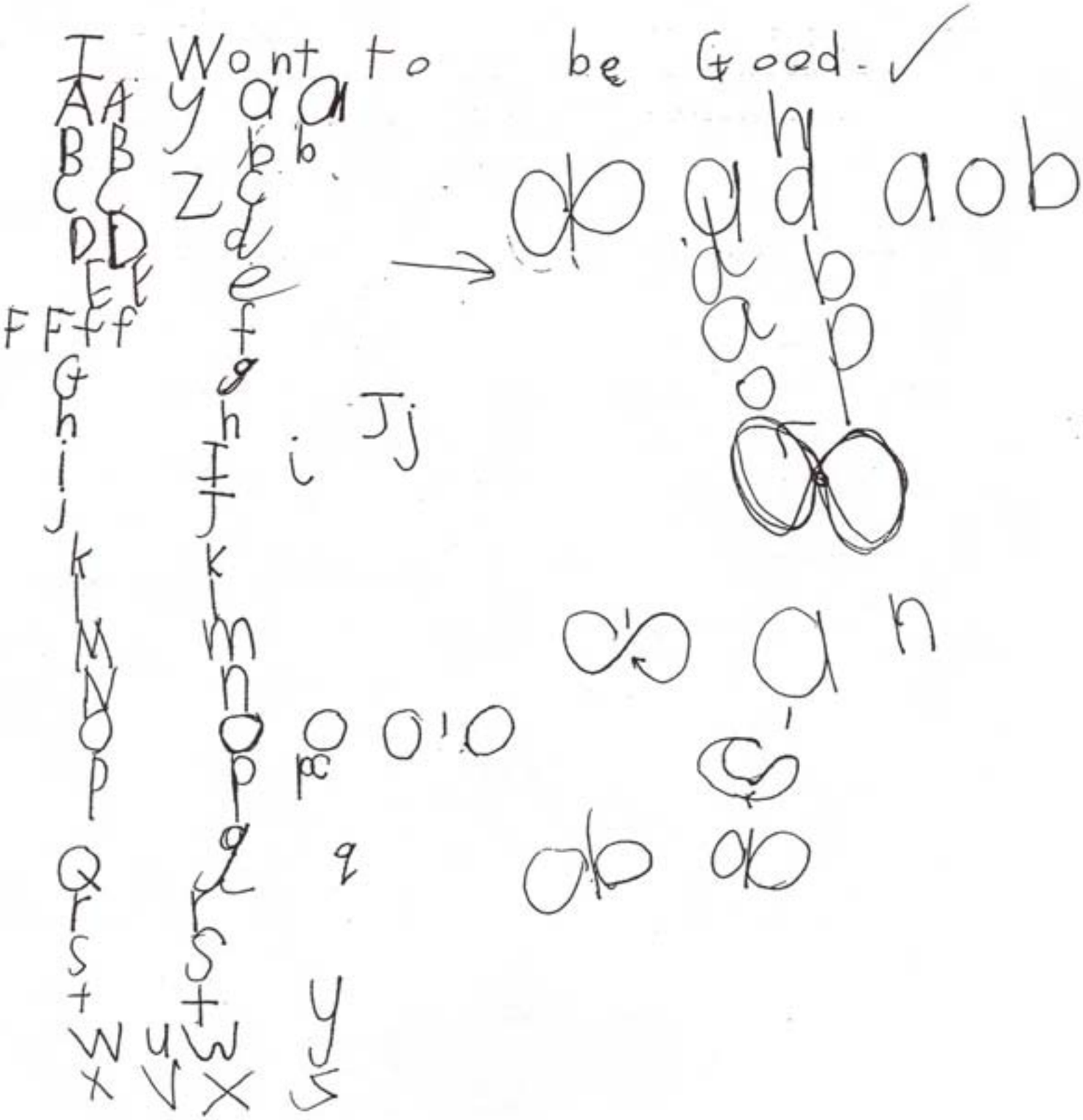
Conclusion: Once the brain is switched on and all the prerequisite skills and strategies are there you can learn anything (see attached Ryan's story)!

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

Before:

I Wont to be good

After Edu-K Integration Process and Lazy 8's (30 min. later):



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 SCOOle

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

FUNa 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 bass 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.

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 W my poket
and IT bite me.
and. I SQUILD.
AND I (it) was DEAD A SOW WAS
IT. Ha. Ha. 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 pout 100 ml of 100
and 900 ml of water.

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

Before:

Alicia

ball bol

dog doe

put

you Eeou

jet

nest

2 tc

3 5 5 7

4

6

7

9

10

After Edu-K Integration Process (15 min. later) and change of pengrip (till "jet"):

Alicia

ball

dog dog

put put

toy

jet

nest

2

1

5 7

6

7

8

9

10

OBSERVATIONS OF RYAN

Ryan is repeating grade 2 in 1997. His mid year results were showing no progress. Ryan's class behaviour was constantly being reported as disruptive. He was getting multiple time out slips for inappropriate class and yard behaviour. Ryan was often sad because he could not cope with being teased or that he had no friends.

As a concerned and frustrated mother, who was getting regular assessments and out of class special tutoring from the Education Department, I knew there had to be more to switch Ryan's mind on to receive, understand and store information.

After his 1st assessment on the 18th June 1997, he has had 3 subsequent sessions with Edu-K.

From that first visit I knew Edu-K was going to provide the triggers to turn on his brain.

Ryan's difficulty with identifying and repeating sequences in sounding words was the first areas to have success. Using the Brain Gym exercises morning and night seemed to be working.

I watched Ryan happily progress from Grades in Spelling:

Date	*Grade*	to:	*Date*	*Grade*
2/6	1/20		1/9	7/10
10/6	0/20		8/9	7/10
12/6	1/20		15/9	14/20
			22/9	11/20

Ryan now mentions that Maths is his favourite subject. He revels in long additions: His grades have improved from:

Date	*Grade*	to:	*Date*	*Grade*
2/6	2/10		1/9	8/10
10/6	4/10		8/9	6/10
12/6	1/10		15/9	9/10
			22/9	9/10
			21/10	10/10

When I asked Ryan to tell me how he feels now, the following was his reply:
"I feel different, a bit nicer, look forward to doing work, I'm concentrating more, thinking better, have more friends now, better behaved, no time out this term, braver when people tease me, can read the time now and do money maths, read books on my own, I feel older."

I have noticed Ryan is speaking with more confidence, and therefore able to tell me what he wants more easily, without stopping and starting all the time.

I can now see and hear Ryan growing up without silly baby like behaviour.

The Brain Gym exercises are simple to follow, painless and cost a little bit of time. I have found it to be a wonderful investment, especially as I am no longer as anxious about Ryan's bleak educational future. I would recommend the process to all students, in all grades as a regular daily programme.