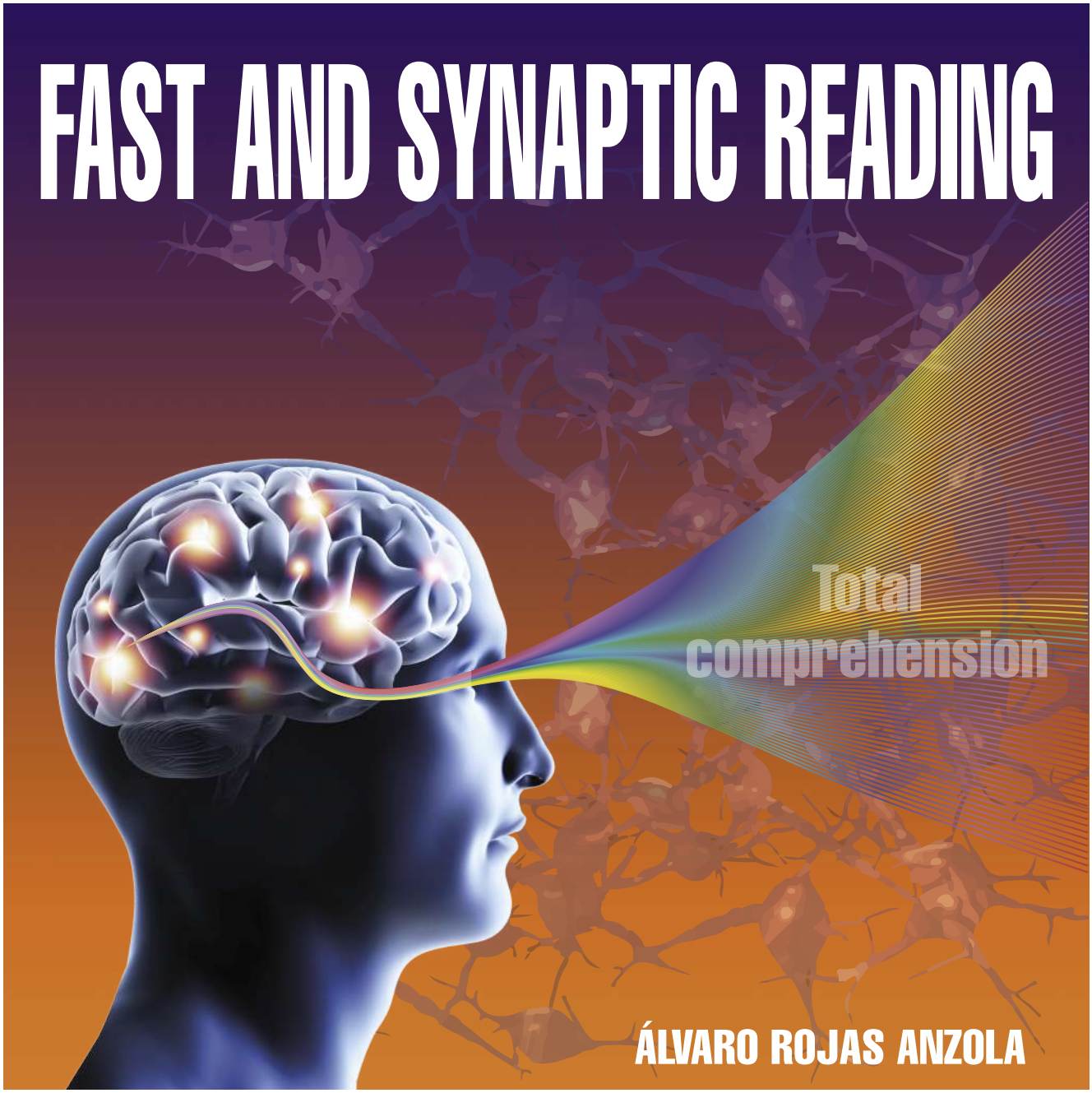
FAST AND SYNAPTIC READING



ÁLVARO ROJAS ANZOLA

INSTRUCTIVE

*Practice and methodology of the fast and synaptic reading

113 street No7 - 45 °B tower °120 Office
Teleport Business Park
PBX (571) 7053172
Bogotá - Colombia

Creación Galeras – 1995
Primera Edición – Enero de 2003
Segunda Edición – Diciembre 2019

Author
Álvaro Rojas Anzola

Graphic Design.
Creation of editing and Galeras
Álvaro Rojas Anzola

First Edition
ae Diseños

Second Edition
Eliana Rodríguez - Gustavo Ospina
TECHNOMODA

EDITORIAL CO-ORDINATION AND PRINT
Álvaro Rojas Anzola

ISBN 958 - 8209 - 25- 0 Instructive
ISBN 958 - 8209 - 00 - 5 Full work

INSTRUCTIVO GENERAL

ÍNDICE

PÁGINA

THE READING…

That magic process

The historical and didactic reasons, expose in this work, show that educational systems used today, although the have been good, aren't fulfilling the informative circuit and take advantage of only a small part of the physiological and mental capacities of the human being.

In his article *THE READING* Dr. Jean Marie Javron. Says that magic process: *"The retina, the sensitive membrane of the human eye, is made up of 500 million receptor cells that transmit images via electrical impulses to the brain, which in turn consists of more than 14 billion nerve cells called neurons".*

Carla J. Shatz, professor of neurology at the University of California, who began her training at Radcliffe and finished it with a doctorate at Harvard, says in the journal Research and Science of November 1992 (Page 17), that the human brain has more than 100,000 million neurons. Today many scientists confirm this theory.

Rodolfo Llinas, colombian scientist and head of physiology and neuroscience at New York University School of Medicine. has invested more than fifty years in the study of brain cells and his contributions to modern neuroscience have placed him in a position of global leadership on the subject, he says: *"The great development of the brain occurs in the last two months of intrauterine life and then, in the two to three years of life, after birth.The type of event that occurs in this phase is the generation of the connections between the neurons.Imagine that there are as many as there are suns in our galaxy or as many as there are drops falling into the Lagoon of Tota. These neurons, during the first years, connect at a speed of many millions per second. Moreover, they keep splitting in two until a certain age and multiplying greatly"*

We see and understand the objective world at the speed that light (300,000 km/s) enters its image to our sensitive retina. The electrochemical changes produced there transport that image through the optic nerve, until it reaches the posterior cortex of the brain where it decodes, interprets and stores the sensorial information.

This magic and fast process dear reader, you can verify it by open and closing your eyes, the faster way possible, in front of a forest and you will instantly see it and your brain will understand it, more easily than if your eyes send you the separate image of each of the trees.

In the reading happens the same… between more perceptive units (signes, words, phrases, pieces) enter our eyes together, the more easily they will be understood by our brain.

AUTHOR'S PAGE

Acknowledgements

The therapeutic and synaptic development for the eyes to capture more quickly the greatest amount of perceptive units and the brain to decode them converting them into images, is the work that I have proposed, thinking about you dear reader of today and of the times to come, of Colombia and of all the countries of the world.

This virtually could be accomplished thank to the doctors Álvaro Rojas Gaitán, Katherine Vargas de Rojas, Gustavo Ospia and Eliana Rodriguez de Ospina, wonderful Great interpreters of my neuro-visual and academic-scientific research, who developed the online platform faithful to my dreams of delivering to humanity the creation of this novel virtual system of reading comprehension and synaptic learning.

Essential recognition of the great patron of education, Doctor **Luis Jorge Santos** who allowed me: print in his editorial the basic course (8 Modules) under the name of **"Synaptic Bits of the fast reading** - *Developed your capacity of comprehension and speed in the reading"* from 1995 dictated in his school Winston-Salem, to students from second to eleventh grade, achieving results in speed over 5,000 words per minute with 100% comprehension.

Thanks to **Alirio Sanchez Ortiz** who designed the work and had the patience to assemble and disassemble each page, understanding that the fundamental thing was not what was written on each page, but the therapy that the student would exercise on them to fulfill the objective of developing the capacity of some part of his eye or his brain. Likewise, thanks to **Francisco Pinzón Avendaño** for the contribution of his chemical knowledge and to **Carlos Barragán** for his mathematical contributions.

special thanks to all the **authors, scientists, writers and therapists** described in the biography, to whose knowledge I support in and in whose written lines, the students of this curse will make their reading therapies and synaptically.

Dedication

I want to make explicit the honor to dedicate this work to my wife **Luz Myriam Gaitán de Rojas**, to my children **Sandra Liliana, Andre del Pilar, María Angélica and Álvaro Rojas Gaitán**, whom for less 20 years, patiently trusted and waited my research and my work to become the reality I offer you today.

To my parents **Luis Alberto Rojas Ordoñez** and **Carlina Anzola de Rojas**, who from heaven, will proudly share the transcendency of this work in the educational history of humanity.

And my brothers **Marina, Nury, Amparo, Alberto, Enrique** and **Eduardo Rojas Anzola**, thank you for your support and your faith in me.

My grandchildren: Isabelita, Marianita, Manuelita, Sofi, Santiago, Felipe and Martín, (today December 15th, 2019), after almost half a century of neuro-academic-scientific research; I dedicate this formula BIT = nfc to them so that they and all the children of human posterity can read synaptically.

Fórmula de Lectura Sináptica

$$BIT = nfc$$

Finally, I ask you all to join with me in dedicating and thanking with this prayer the one who truly allowed this work to take place

Remember Oh My God,
that was never heard of that somebody
has ever implored you without your help
receiving. So with faith and trust,
humble and repentant ful of love
and hope this favor I ask of you:

May this work
be for the benefit
of humanity.

Álvaro Rojas Anzola.

"Los libros son los transmisores de la civilización. Sin ellos la historia está callada, la literatura muda; la ciencia, incapacitada; el pensamiento y la especulación, paralizados. Son los motores del cambio, las ventanas del mundo, los faros enhiestos en el mar del tiempo."
Bárbara Tuchman

Prologue

According to studies conducted so far, man appeared on earth about 2.5 million years ago, at which time he developed the incredible civilization and amenities we now enjoy. These achievements were possible thanks to the evolution of the human brain, to the emergence of needs to which human beings responded by developing methods, technologies and ideas; the accumulation of the achievements of each generation laid the foundation for the following generation to go even further. However, the great evolutionary leap of civilization occurred when man developed the way to record his discoveries, the historical facts, the evolution of civilization; when he invented writing.

From this moment everything changed. The knowledge and facts began to be transmitted in an unalterable way, the distortion that information suffers when it is transmitted orally no longer exists,and thanks to the written of the greeks, they redacted the ideas that would be the basis of the current policy , the romans elaborated the codes in which will developed, the Romans elaborated the codes on which the law of our days would be developed, the Arabs shaped the knowledge on which mathematical theory was built… and since then, until this historical moment in which research and technological and scientific development are growing without limits

For all these reasons, reading is the main ability that the human has to develop . All the current governments concentrate on ensuring that there are no illiterates among their citizens, schools focus on developing this ability at the earliest age possible, and parents take pride when their children can read a word, two, three, a sentence.

It is irrefutable that in today's society there is a real awareness of the importance of reading; but, if we stop to think, the development of that ability has not undergone as important an evolution as that which has occurred in other fields.The knowledge and science have exceeded limits imagined by our grandparents

These facts make us question our reading capacity: Do we read more and better than our ancestors?, Is the development that we have acquired in this ability enough? Do we read as much as we can?, Do we read as fast as we can? , Do we understand everything that we read? This course focus on not just answering this questions, but also to provide them an effective solution creating the necessary knowledge so the man can take advantage of and develop his reading ability at the fullest. This course puts in your hands the necessary tools for both adults and children to LEARN TO LEARN through reading.

FAST AND SYNAPTIC READING

General presentation of the work
Pedagogic progression
Objectives

OBJECTIVE	Receptive eye cells development	Horizontal reading field development	Vertical reading field development	Development of the peripheral, centrifugal and global reading field and eye muscles	Pedagogic progression	LEVEL
Modules	1	2	3	4	1 word per fixation	BASIC
Modules	5	6	7	8	2 words per fixation	
Modules	9	10	11	12	3 words per fixation	INTERME-DIATE
Modules	13	14	15	16	4 words per fixation	
Modules	17	18	19	20	Increasing fixations	ADVANCED
Modules	**Development of all the learnt skills**					
Modules	21	22	23	24	Fijaciones por ideas	
Modules	**General instruction**					GENERAL

All of the modules have an additional exercise to develop

1. Sense independence.
2. Memory and understanding.
3. Conceptual development.

The learning process begins at the very moment we are born, and even before that according to some scientists, since we already receive sensations and information in our mother's womb, and probably ends when we die, since we never stop learning. This process basically goes through two fundamental stages: the historical process and the didactic process, speech, and later writing and reading, are a fundamental part of this process.

Historical process

The historical process covers the type of learning that goes through the man in his early age, thanks to evolution of species, the intuition and the genetic information. At the beginning of this text we were talking of the millions of years were the man is been on earth; during all this years, the man has acquired grater brain capacity and has developed the way to receive and interpret information. Additionally the man, as any other species has engraved in its genes reactions, movements and attitudes. So it went through a process of millions of years to become what it is today. Thanks to this historical process the human being learns to walk at a certain age, if he is taught and directed, this learning will be faster, but even if he doesn't have all these aids, he will learn how to walk any way.

Just as man has taken millions of years to reach the physical and genetic development he enjoys today, so too has writing, and therefore reading, gone through a long historical process to acquire the form we now know. But to whom do we owe this revolutionary invention? Who opened the doors of history to us?

Should we say Whom? Obviously the writing was an invention that has been perfected until developing the shape we know nowadays. The first historical record of writing dates from the fourth millennium BC, that is, some 5500 years ago. In ancient Sumer, located in lower Mesopotamia, what we know today as Iraq, the high priests, who were also the absolute rulers, invented a pictographic system, to record their belongings. In that civilization , almost all land, livestock and seeds, belonged to the temple, noticeably, were too many goods to be consumed exclusively by the priests, therefore the priests presented these goods to the citizens for the purpose of exploiting them, increasing them, and returning these riches to the temple. In order to register the amount of goods that the temples had borrowed each citizen and the amount that was returned , the priests developed a pictographic system. Such system was based on draws that represented The following table represents some of the most elementary symbols used by the Sumerians and their subsequent evolution (1).

Figure 1 - The evolution of the Sumerian pictograms.

In this way, the signs, which had an ideographic value, represented an idea known to all: it was a form of universal communication within that civilization. (Figure 1).

Same happens with the language of a babr.The capacity of speaking and learning the language of his surroundings is innate to human beings, even at a very early age the child, before being able to express himself in readable words, creates his own language, he names a dog “woof”. How does the kid elaborate these words that are not part of his modern language? the kid is going to picture an animal that is going to be on the visual part of his brain, at the same time he listens the sound the animal is making, and the morphology of his brain, that we will explain later, allows the kid to relate image with the sound, and finally , repeating that sound the kid now identifies and express this concept already formed in his brain. In this case, the child develops an ideographic sound; just as the Sumerians identified a known image with a drawing, the child identifies this image with a sound, thus getting others to understand him and therefore communicating in a universal way.

At this precise moment of the historical process, both the children and the Sumerians still have much to learn; and based on what they already know, what they have already developed, the didactic process begins.

The didactic process

The historical process gives the human being his current capabilities, however, and also from a very early age, man starts a didactic process. From an infant, the child is taught what is good, what is bad, what is done and what is not done, and above all, he is taught to develop his capacities as a human being. A key part of this didactic process that the human being goes through is reading. This ability becomes the master key for the acquisition of all the subsequent knowledge that the man will come to embrace throughout his life; it is precisely for this reason that the ability to read is, or should be, considered the most important, and whose development should know no limits.

One the baby is at the age to talk, with help of his surroundings and himself, he learns the words that will identify the concepts that he already knows, and will acquire the capacity to communicate.Then the process of learning to read and write begins. And it is precisely in the nature of this learning process that the key is found for the human being to develop to the maximum his or her reading ability.

The Sumerians had already developed their writing skills to the maximum, since they did not limit themselves to giving their drawings the ideographic value we mentioned earlier, but they went beyond that. How? Until now, they had successfully invented a communication system that made it possible to record the material belongings of their civilization, but they quickly felt the need to represent something else, to be able to give expression to abstract concepts such as "the vision".

Then they noticed the sounds of their own language: “vision” in sumerian was “shehu”, and if we look the evolution drawing of sumerians pictograms, we will see that they already had two symbols that represented the sound, “she” was a spike, and “hu” was a bird, therefore matching the drawing of the spike with that of the bird, manage to represent the idea of the “vision”. This way, the pictograms varied in meaning depending on their context , a spike or a bird alone, representing a vegetable and a bird respectively, but when you put them together, they represent an abstract idea of the vision.

This invention was a revolution in the history of writing, for the first time they gave signs a phonetic value, a value that was not limited to the image they represented, but also to the sound, as the current writing is conceived.

From this phonetic system emerged the cuneiform writing, so called because it was developed through some drawings in the form of a wedge made with a cane stiletto on a clay tablet. This precarious invention constituted the first printing press.

This first writing system, although extremely intelligent, was also very complicated, as a good scribe had to learn up to 1000 different signs in order to express the necessary ideas properly. 3.000 years after the Sumerians, the Egyptians also represented sounds with drawings, but it was some Semitic workers who worked for the Egyptians in the Sinai Peninsula, who simplified this system by bringing it closer to today's writing. Through a process of acrophony, i.e. similar sounds, these workers began to use the symbols to represent the first letter of the word to which the pictogram referred. For example, if house in the Egyptian hieroglyphic writing was represented with  and in Semitic was said "beth", that symbol came to represent the letter "B". Thus, for the first time, a symbol was given the value of a sound rather than an image. However, this Semitic tribe had not yet developed an alphabet.

This writing system was too complicated and had too many symbols; was then when the Phoenicians, a village of merchants located on the shores of the Mediterranean, and who obviously had contact with the Egyptians and the Semites, invented the current writing.

The Phoenicians realised that almost all words were emitted with the same sound, this way they simplified the symbols as much as possible that were meant to be use in the writing to 22 consonants. By combining these consonants, all the sounds that were being made at that time in the language could be represented. These letters, invented by the Phoenicians, have evolved to the form in which we know them today, yet there is an evident parallelism between those early Phoenician letters and the current ones, as can be seen in the following table. (Figure 2)

The Phoenicians bequeathed to us the most important invention in the history of humanity, thanks to writing and consequently to reading, today we can LEARN.

Its writing was adopted by the Greeks and the Romans, the fathers of present-day Western culture, and thanks to all these peoples we enter history. Historians divide the history of humanity into two parts, separated precisely by the invention of writing, thanks to which man has been able to constantly develop civilization. Since the invention of writing, scientific and technological discoveries have not ceased.

Figure 2 - Phoenician alphabet tablet

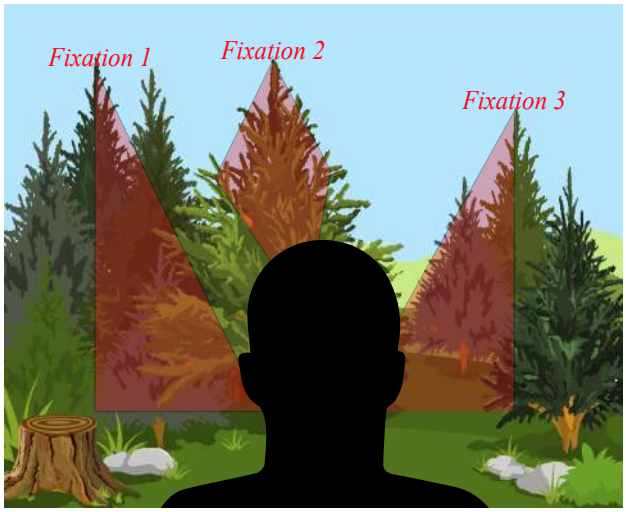
Nowadays, and since an early age, the man starts the didactic process of learning reading and writing. The traditional learning process of reading is based on the principle of repetition , and it develops according to the following: when we are taught the letters , actually these still don't mean anything, are simply a symbol that we can't even relate to any known concept.

Only when we learn the sound that these symbols represent they start to gain a meaning; therefore the system in a phonetic repetition. We see the symbol, we are taught the sound and we repeat it until we learn it. Like the Sumerians, the Semites and the Phoenicians, we learn to give phonetic value to these symbols, that is, we give a sound to the letters. And the process continues in the gradual scale, first we learn the letters, then the syllables and finally the words. This learning is always based in the phonetic repetition, as we previously mentioned a letter means nothing to us, either a syllable , that only represents a sound , and at first not even the words mean much, for we must go through a slow process that forces us to put all the syllables together to utter the whole word and then understand it. Therefore, at this moment there is no relationship between the image, the concept expressed in words and reality. (Figure 3).

This way, the eye fixes the sight by parts, when we learn to read first we see the letters, then the syllables and later we put together the whole word, for this reason when the kids read out loud they do it per syllables; as adults, we set our sights on the full word, and when we have deciphered every single word that make up a sentence , we understand the meaning of it.

This is the so-called "traditional method of learning". All of us today have learned to read through this process. (Figure 4)

But is this process absolutely necessary? Must we always look at each word step by step to understand a sentence? This course will show you that it is not.



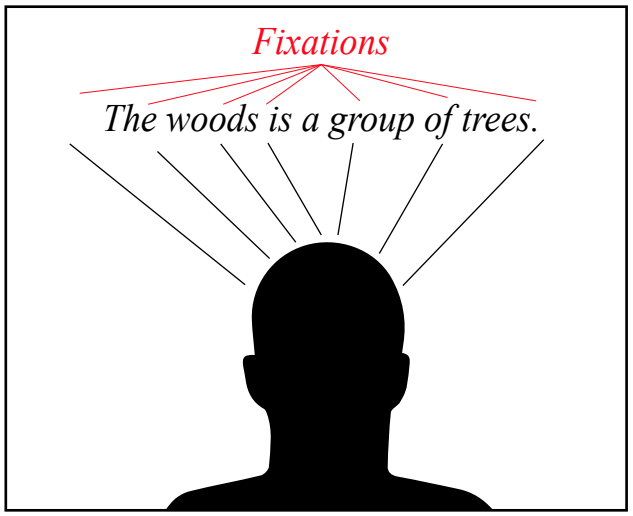


Figure 4

SUPERLEARNING

Just as writing underwent a remarkable evolution from the first Sumerian representations, so civilization and science have evolved considerably to reach their peak during the past 20th century. Since World War II, scientific achievements, especially computers, have enabled the globalization of communication and made information available to all. But what are computers more than machines based on the scientific study of the human mind? In many ways, however, the machine has surpassed its creator.

It is true that machines technically surpass man in certain abilities, but the latest scientific studies of the brain have shown that it is overused.

Knowing the history, not only of the writing, but all of humanity's discoveries, knowing also the learning process of the human being, and understanding the real capacity that we have, not only as a species but as individuals, we came to a logical conclusion: our brain is working below its possibilities.

The traditional method has limited the reading process to the ability to read words separately and then put them together. This system has produced a significant setback in the natural and logical development of the human brain.

We should ask ourselves why we have evolved so much en all this fields and yet we read the same as the phoenicians.And the answer lies precisely in the traditional method of teaching. This method puts an end to the brain process exactly at the moment when we can take the big leap and achieve a much higher development in our reading ability that will open the doors of learning in a way we never dreamed of.

Man can learn more concepts in less time than is spent nowadays, but first, in order to achieve such objective, the man has to LEARN TO LEARN.

How to learn how to learn? Through the SUPER-LEARNING.

The above-mentioned studies reiterate that the capacity of the human brain is not limited to research and discovery, but also to the acquisition and understanding of information and, above all, to the speed of this process. These theories are closely linked to the concept of "photographic memory".

All of us have heard this expression once, simply, the capacity that any brain has, thanks to its morphology, of making some sort of photograph of everything it sees, and hold it as information in the brain; thus enhancing the speed of reading, comprehension and memory.

There are people who, in our opinion, read very fast and apparently have a higher retentive capacity than the average. To this people we consider them geniuses, but in reality is not like that, in this context, we all could be geniuses by using the adequate techniques that simply maximize and harness in real terms our brain capacity. This is achieved through SUPER-LEARNING.

THE SUPER LEARNING It should replace the traditional method of teaching in order to develop the natural capacity of the human brain, its speed and understanding.

SUPER LEARNING modifies the patterns and vices acquired from childhood that limited our ability to learn. Through simple therapies and exercises, SUPER-LEARNING restores to our brain the ability to process and store information at the right speed, which is obviously much greater than we have today.

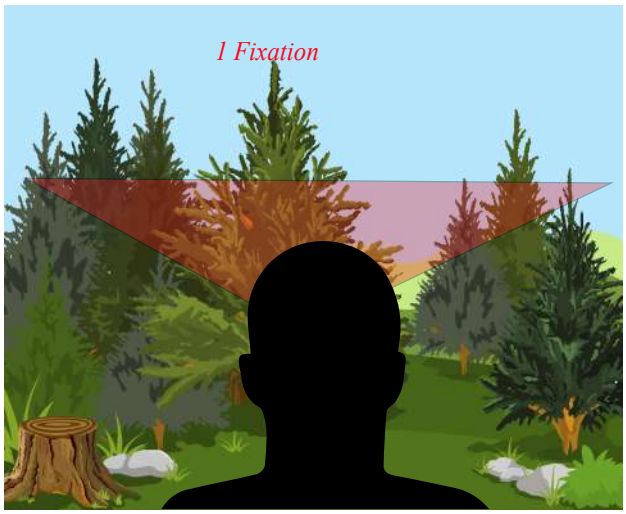
The method is based on continuing to develop our brain capacity exactly where traditional teaching stopped it, but with techniques that renew and modify those obsolete habits that once prevented this natural development.

We explained before how to learn to read, and where we stop this process: In reading by words. However the same by putting letters and then syllables, we reached the word, we don't have to stop our brain process there, we should be able to look at the whole sentence at once, and therefore understand the general concept of what we are reading with one just fixation; this must be the logic evolution of the reading process. (Figure 5)

The right way to read is to fix our eyes on the complete sentence, to be able to understand the totality of the concept that is being transmitted to us with greater speed, that is to say, just as, as adults, we no longer need to read by syllables, nor do we need to read by words, but applying those of SUPER LEARNING, we could read by concepts.

What do we need in order to learn by concepts? Simply to develop certain natural abilities of the two organs involved in the reading process: the eye and the brain, since, as far as reading ability is concerned, both organs are underused and could perform their function much more quickly and effectively. In the process of reading, both organs are connected, they do not exercise their function independently, but we can speak of only one organ: the visual organ; therefore, a more efficient and rapid reading process cannot be developed without first developing the faculties of this whole process.

This development of the visor system is precisely the main tool we use to start the SUPER LEARNING process. By transforming the way this device operates through the therapies contained in this course, we establish the great difference between the traditional way of learning and SUPER-LEARNING and we are aware of how to LEARN TO LEARN.



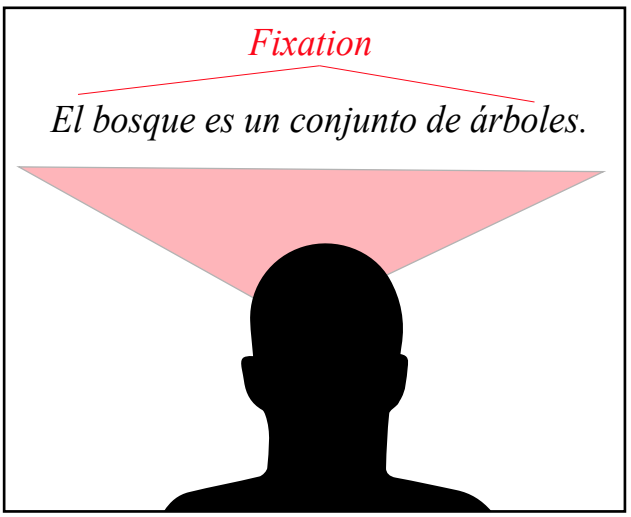


Figure 5

In order to explain how to develop our reading skills to the fullest, and therefore, to accomplish the above objectives, first we must understand how the organs in our body work that allows us to perform this activity. We must understand the scientific facts that have led to the above-mentioned conclusions, as well as the academic basis of the exercises proposed in this course.

As we all know, we use two organs to read: the eye and the brain. The study of the functioning of these organs and of the phenomena that occur in them when we read constitutes the scientific basis of the exercises contained in this course, precisely because we know how these organs function, we can achieve optimum functioning.

The eye

EThe eye is simply a camera, in fact, this invention was based on the functioning of that organ.

Just like a camera, the eye is a dark box, with a small opening, the pupil, where the light enters when we open our eyelids, just the same when we press the camera device and open the aperture. By the same system, the light bounces off the objects around us and enters our pupils, printing on the retina the inverted image of these objects, just as they are printed on a negative. (Figure 6)

Inside the eyeball exists 500 millions of cells that are in charge to correctly receive the images and print the retina with all its settings. These are of various types depending on the function they perform, so there are cells that are responsible for: colors, shapes, sizes and distances. (2).

All the cells allow that, when we open the eyelid, we can receive the exact image of everything around us. As we have already explained, this phenomenon takes place thanks to light, because, basically, what enters the eyeball is light. Therefore the images enter our eye at the same speed of light, that is to say at 300,000 km per second. In that infinitely short period of time that is almost unimaginable, any image is printed on our retina, if we see a tree, and we know what it is.

Some authors claim that the eye is an extension of the brain. Certain researchers show that some optic nerve cells are actually anatomic neurons and physically equal to the ones found in the occipital cortex and that make up the visual reception centre. (3)

At the same speed that images enter our eyeball, written words enter, however the time we need to understand and interpret them is much more. Why does this phenomenon occur?

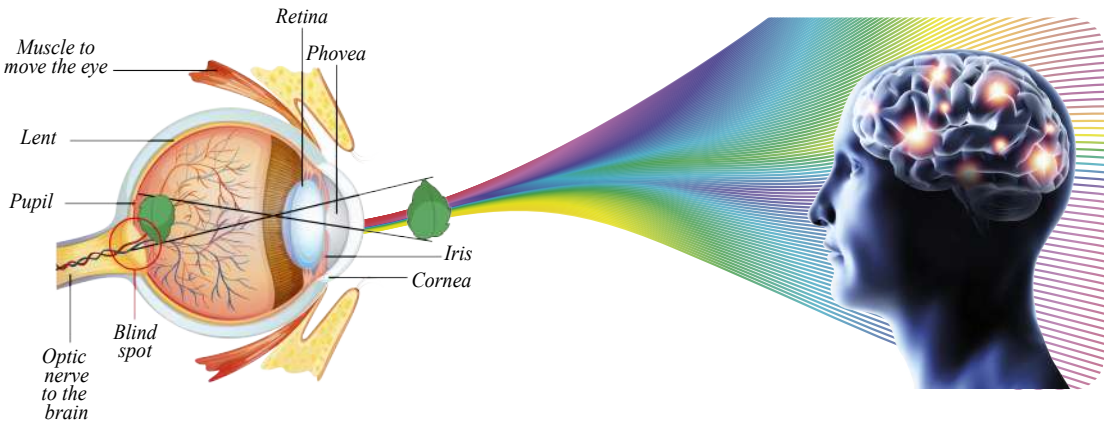


Figure 6
The eye parts

The brain

We know the inner working of the eyeball, the function of it is limited to the process explained above, the eye captures the image with the precision that the different cells confer, and the speed of light; and there, exactly there, its function ends, the eye does not know what it is seeing, and to explain it, the brain comes into action.

What does the brain do in order to identify an image, to relate it to a concept, to interpret this concept, to name it and to understand it?

Similar to the eye, the brain is made up of cells. These are called neurons, and like those in the eye, they perform different functions. There are 14 billion (4) neurons in the brain, which communicate and transfer information to each other. This incredible and complex process is possible thanks to some filaments that are in the ends of each neuron, hundreds of filaments called dendrites that end in a tiny head called axonic button.

When the axon button of one neuron touches another, the phenomenon in which the information is transmitted happens, that is, the SINAPSIS. Thanks to this process the brain is capable of interpreting images, retaining concepts, sensations, weighing and giving orders to the rest of the body. (5) (Figure 7)

And it is precisely this phenomenon is responsible for interpreting the images that have been printed on the retina. As we mentioned before, the eye only gathers the image, but it does not know how to interpret, however, the brain, through its neurons and the SYNAPSIS gives a meaning to the image by relating it to a concept.

The SINAPSIS, strengthened through the exercises and appropriate therapies open the doors of TOTAL understanding and knowledge.

The brain is divided into several parts that fulfill different functions; in order to explain this, let's take a newborn baby as an example. This brain has not yet received images, nor has it formed concepts, much less words. Now then. This baby opens its eyes for the first time and all the visual process that we have explained in the previous point is triggered, and there is already an image recorded in its brain, its mother's; this image goes to the occipital lobe of the brain, where the "visual recognition center" is, but obviously it doesn't mean anything yet. When the mother talks to the baby, the sounds enter his brain through the auditory organ, the ear, and are recorded, just like the images, in a different lobe, the temporal lobe, where the "hearing center" is.

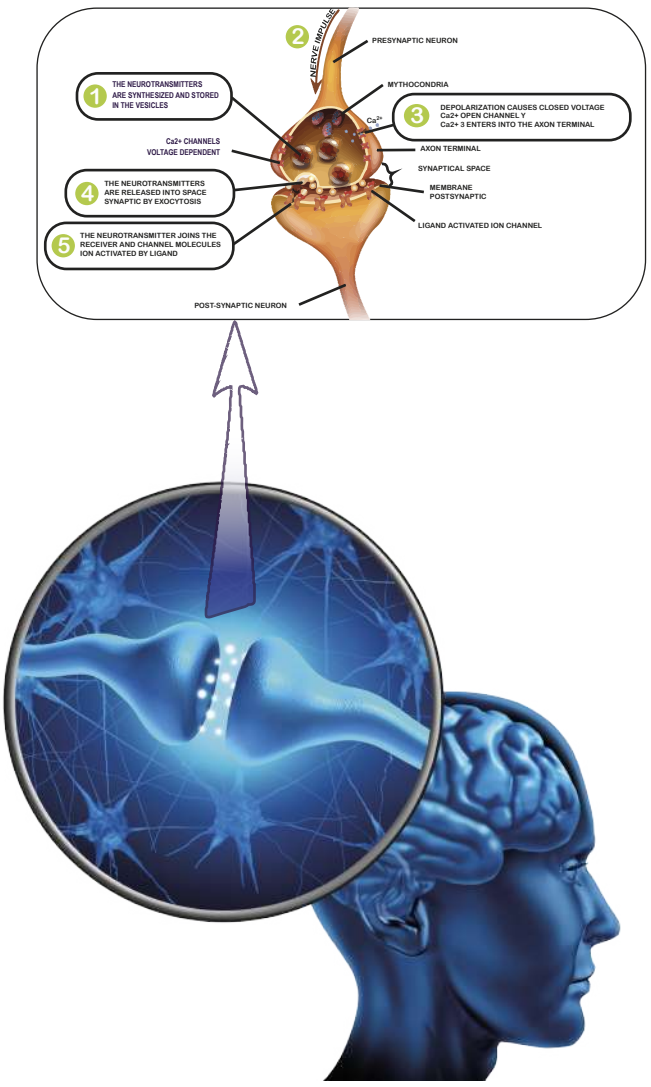


Figure 7

The first information, the visual, enters the eye at the speed of light, 300,000 km/s, while the second information, the auditory, enters at the speed of sound, that is, 340 meters/second, that is, a much lower speed.

At the very moment when the baby has this two information in the brain, the **SYNAPSIS** is produced, its billions of neurons transmit information at unimaginable speeds, and the baby already has a concept, it already relates the image of its mother with a pleasant, protective sound, which are the tender words that the mother says, and, although the meaning of these words is not yet known, the feeling that it generates in its brain is pleasant.

A few moments later, the brain of this baby receives another image, the doctor's, which grabs him by the feet, and gives him a slap, this feeling travels to the area of perception, and again there is a SYNAPSIS in which the baby relates an image with a feeling, this time unpleasant, the baby already has several concepts in his brain, and can differentiate, and is able to correctly interpret the images of both mom and his doctor. **And like that, all the images that are seen will turn into concepts inside his brain through the SYNAPSIS.** (Figure 8)

The brain also collects the olfactory and gustatory functions, so that the five senses are received and interpreted in the brain, and all this diverse information that penetrates its different areas converges thanks to the synapse, forming the concepts that will govern our perception of the world and subsequently our attitude towards life.

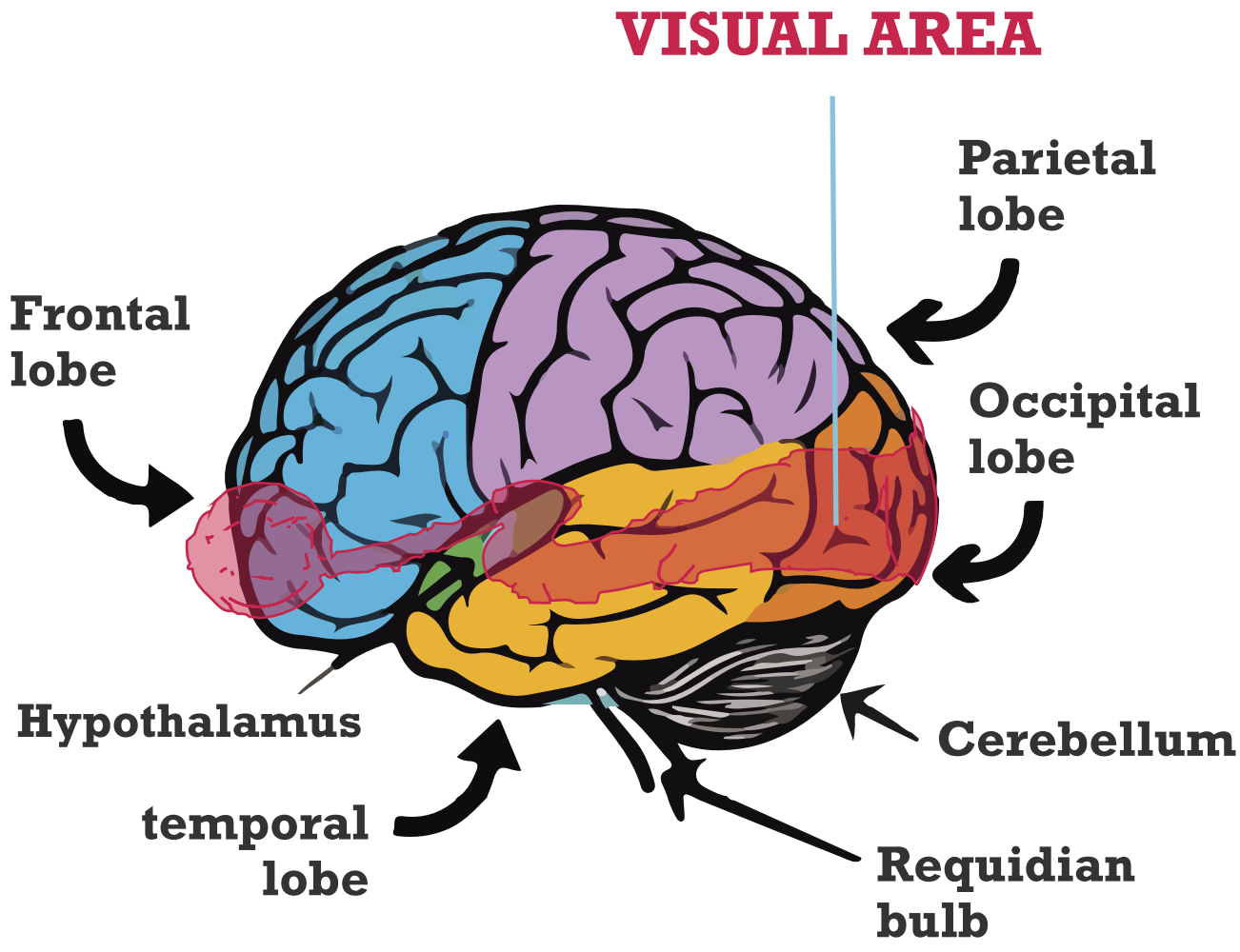


Figure 8

GENERAL OBJECTIVES OF THE COURSE

Neurologists and pedagogues have carried out different studies based on the functioning of both the brain and the learning process, and their conclusions have been forceful: we do not read at the speed we could. In the same way, different exercises and courses have been elaborated with the purpose of solving this problem, but some of them proved to be ineffective since, despite increasing the reading speed, the same thing did not happen with comprehension.

20 years of experiences and study have conclude in this course we enter two fundamentals objectives:

- Increase reading speed
- Develop the comprehension

Additionally, these exercises develop the retention quality, it means, they strengthen the memory giving as result a better functioning of it.

Increase the reading speed

Currently, the tests carried out on adults with normal reading ability, show that the average speed achieved is 200 words per minute. Studies have shown that this is due to the teaching traditional system, meaning, the way we learn to read. Since we were children we receive a teaching system based on audio-visual relation, or, similar to, they teach us to relate sounds to symbols.

We have already explained how a child learns to read with the traditional system, which is essentially based on the repetition of words, as if the brain cannot understand or reads if it does not listen to it.
This process derives from the fact that when we read, we repeat what we are reading, many people murmur it aloud, and some, do it mentally, but we all repeat what we read for two fundamental reasons: the learning process to which we have been submitted and the misconception, that we understand better. This assertion is wrong, because we do not need to repeat the words to understand them.

The effect of these acquired habits from the start of the learning process gives as result that our reading speed is directly proportional to our speed of speech, for we assume that we have to repeat in order to understand, yet thought is much faster than word, as we all know.

When we think , we don’t do it outloud, nor do we even mentally repeat each and every word that makes up our thoughts, however that doesn’t stop us from understanding, reasoning and reaching logical conclusions.

The same way, we can equate our reading speed with that of thought, and not the word. Such a development will result in one of the main objectives of this course: to multiply the number of words you read and assimilate per minute.

Desarrollar la capacidad de comprensión y retención:

¿Qué retenemos?

Si leemos un texto una vez, a la velocidad que hemos adquirido con el sistema de enseñanza tradicional, y luego respondemos preguntas sobre el mismo, los estudios han demostrado que tenemos una capacidad de comprensión aproximadamente entre el 60 y el 80%. Siempre existen algunos conceptos, y algunos datos que no hemos retenido correctamente. Incluso el sistema evaluativo en colegios y universidades sigue este patrón, se puede aprobar un examen contestando al 60% de las preguntas de forma relativamente adecuada. ¿Dónde está el 40% restante? ¿Es que no podemos entenderlo o retenerlo? Por su puesto que podemos, la realidad es que no estamos acostumbrados a hacerlo; no hemos ejercitado nuestro cerebro, que al fin y al cabo es un órgano y necesita trabajar con el fin de mantenerse al máximo de sus posibilidades. Sin embargo no tenemos la culpa, nos hemos acostumbrado a entender y retener tan sólo una parte de lo que leemos, y con eso nos ha parecido suficiente, o lo que es más grave, nos parece lo normal.

¿Qué comprendemos?

Adicionalmente existe otro problema común respecto al concepto de comprensión, y es el hecho de que en muchos casos éste se confunde con la capacidad de retención. Hay personas que tienen una memoria prodigiosa, y son capaces de aprenderse hasta un directorio telefónico, y pueden recitarlo de arriba abajo, pero ¿qué están diciendo? Nada, una serie de datos inconexos que no transmiten idea alguna. De la misma manera, un niño puede recitar sin equivocarse una poesía que le enseñaron en el colegio, sin embargo, no la entiende, desconoce el significado de lo que está diciendo, simplemente ha efectuado un proceso de repetición textual, o lo que es lo mismo, memorización sin comprensión.

Por este motivo es fundamental precisar el concepto de comprensión: se trata de algo tan sencillo como ser capaz de realizar un análisis intelectual de la información que hemos recibido, es decir, lograr no sólo ponerla en nuestras propias palabras, sino explicarla y hasta cuestionarla.

Por lo tanto, el segundo objetivo d este curso, que realizará de forma simultánea al primero, es desarrollar nuestra capacidad de comprensión real, es decir, comprender el 100% de lo que leemos, tal como comprendemos el mundo objetivo que nos brinda su información y aún el subjetivo propio de nuestros conceptos abstractos.

Además de estos dos objetivos principales, el curso también centra en la memoria y la capacidad de retención. Diversos estudios han comprobado que de 20 palabras que leemos, retenemos una media de 10. Podemos hacer la prueba nosotros mismos, si leemos un periódico, ¿cuántas noticias recordamos?, probablemente menos de la mitad. Sin embargo, con los ejercicios y concentración adecuados, lograremos fácilmente retener todos los conceptos contenidos en un texto. Para alcanzar dichos objetivos, este curso incluye ejercicios de memoria que desarrollan las técnicas adecuadas facilitando una mayor retención de la información.

Notas:

(1) según el autor Virgilio Ortega en su texto "Quién nos enseñó a escribir?"

(2) Según el autor Jean Marie Javron en su artículo "La lectura, ese proceso mágico".

(3) Según los autores Diego Andrés Rosselli en su libro "Neuro" y Semir Zeki en su artículo "La imagen visual en la mente y el cerebro".

(4) Según el autor Jean Marie Javron en su artículo "La lectura, ese proceso mágico".

(5) Según los autores Carla J. Shats en su artículo "Desarrollo Cerebral", y Gerald D. Fischbach en sus artículos "Mente y Cerebro", "El Cerebro Órgano de la Mente" y "La Comunicación entre las Neuronas".

OBJETIVOS ESPECÍFICOS DEL CURSO

Los objetivos de este curso son tres:

- El desarrollo de las células receptoras del ojo.
- El desarrollo del campo de lectura.
- El desarrollo de la capacidad cerebral, con la ampliación de memoria que esto conlleva.

Dichos objetivos se lograrán a través de las terapias contenidas en este curso que se han desarrollado con base en los estudios científicos ya mencionados.

Desarrollo de las células receptoras del ojo.

Como ya sabemos, el ojo ve a la velocidad de la luz, sin embargo la percepción de las palabras en un texto no alcanza ni p r asomo esta velocidad de visualización y la velocidad de comprensión, sin embargo, con los ejercicios adecuados podemos acelerar ambas velocidades y reducir la diferencia existente entre ellas.

Al igual que, como ya hemos explicado, gracias al proceso cerebral de la SINAPSIS cuando vemos una imagen inmediatamente la relacionamos con un concepto, podemos aplicar el mismo proceso a la lectura, hasta conseguir leer y comprender a la misma velocidad que formamos un concepto.

Estas velocidades se logran a través de los BITS SINAPTICOS, que nos ayudan a fijar la vista de manera adecuada y a una velocidad mayor a la que estamos habituados. Ejercitando nuestra capacidad de comprensión casi sin darnos cuenta.

Ampliación del Campo de Lectura.

Se define el Campo Visual como todo el espacio que alcanzamos a ver. Dicho campo, en el ser humano está tremendamente desarrollado (Figura 9); gracias a la forma esférica del globo ocular y la posición de estos órganos en la cara, somos capaces de abarcar con la vista hasta un ángulo de 180 grados tanto horizontal como vertical.

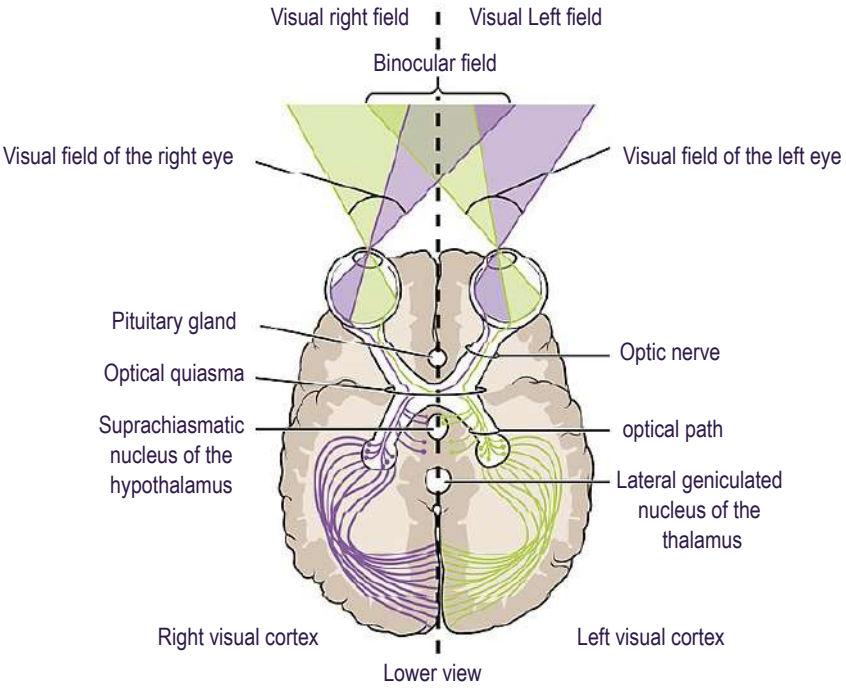


Figure 9

We ourselves can do the test; even if we fix our eyes on a point completely in front of us, we still perceive what is happening to our right or left. However, there is a big difference between the visual field and the reading field.

It is understood that Reading field is the space in which we fix our gaze when we read, is extremely reduced, especially compared to the visual field. And it is still reduced compared to the Text Field, this concept defines the space occupied by the text we are reading. Thus, if the Visual Field always reaches 180 degrees, the Text Field is usually about 20 degrees while the Reading Field barely reaches 2 degrees, that is, what a word occupies. Since the Visual Field covers 180 degrees both horizontally and vertically, the Reading Field should be equated to that space, why limit it to a tiny percentage? To develop the Reading Field in its entirety, we must bear in mind that it will not be limited to the word, not even to the line, but will extend to the entire text, that is, to the four Fields that make up the text: horizontal, vertical, peripheral and centrifugal

Horizontal reading field

The Horizontal reading field changes from childhood to adult stage directly proportional to the reading capacity, meaning, when we start the traditional process of learning. we read by word, that is our reading field during this stage, to finish with a word .

But, from that increasing progression to finish where? , Is it necessary that our reading field finishes in one word? Of course not and even more if we take into account the incredible gradual capacity of our Visual Field.If, as we explained before, we manage to read a sentence at a glance, in the same way, our Reading Field will expand until it is equal to the Text Field.

The enlargement of the horizontal Reading Field not only helps to increase the speed of the reading, but also speeds up comprehension.

Taking account the previous explanation, when we are children and read letter by letter we take time to emit the syllable represented, and later, when we read from syllables we take time to understand the words, therefore, as adults, it will take us longer to understand the text read by words than if we read it by lines.

Consequently, the exercises in this course, especially those with a pyramidal shape, will help us to develop the horizontal reading field, enlarging it to adapt it to the complete line contained in the text we are reading . (Figure 10)

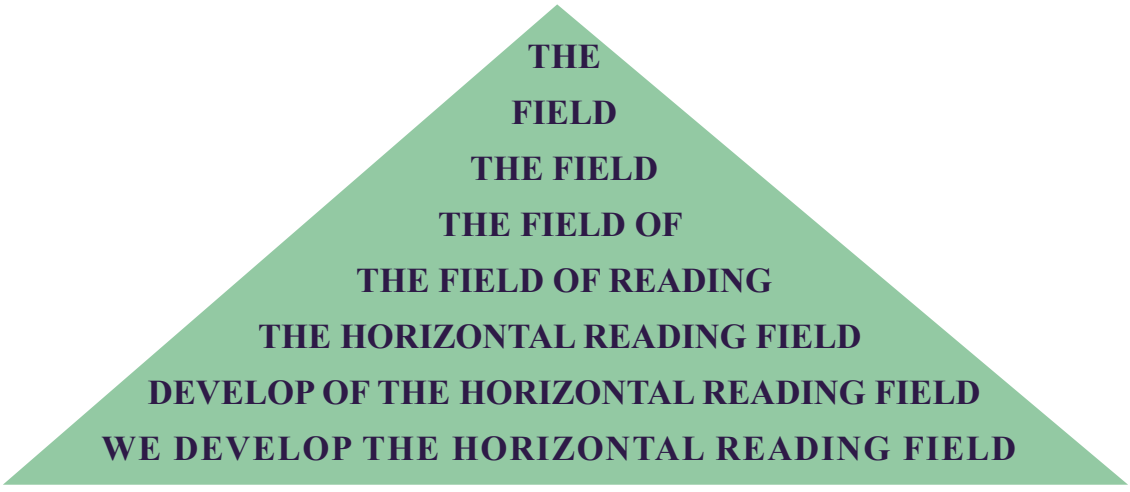


Figure 10 - Example of the pyramidal exercise

Vertical reading field

When we explained that the visual field of the eye is of 180 degrees,we must be aware that this fact applies both horizontally and vertically, given the round shape of the eye. Henceforth, once we have expanded our Horizontal reading field, we must develop the same way and by the same principle of the Vertical reading field. (Figure 11)

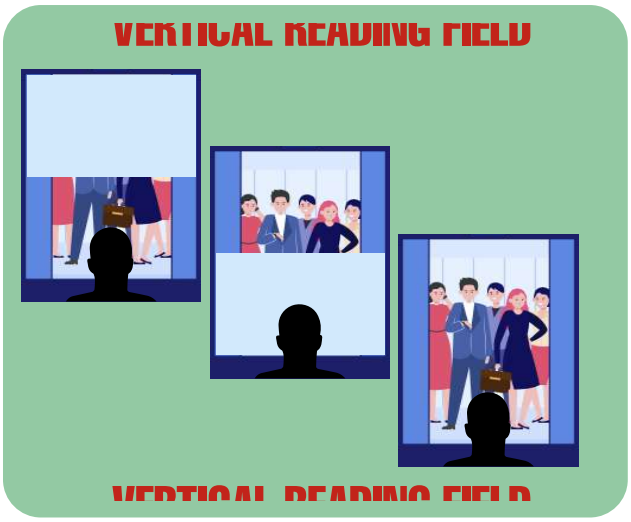


Figure 11 -Vertical reading field

In the traditional reading system, we read word by word until we finish a line , then we must make a diagonal and downward eye movement until we reach the beginning of the next line, However, there are two facts that can prevent us from this movement in which time and concentration are lost: The morphology of the eyeball itself allows us to cover this space in a single glance, additionally, if we have already expanded the horizontal field, we are already reading by lines instead of words, therefore the movement to find the next line does not have to be diagonal, but vertical (Figure 12)

When reach this stage of the Fast reading process, we have already expanded the Horizontal reading field to a complete line, therefore we can begin the following step that which consists of enlarging the vertical reading field, first

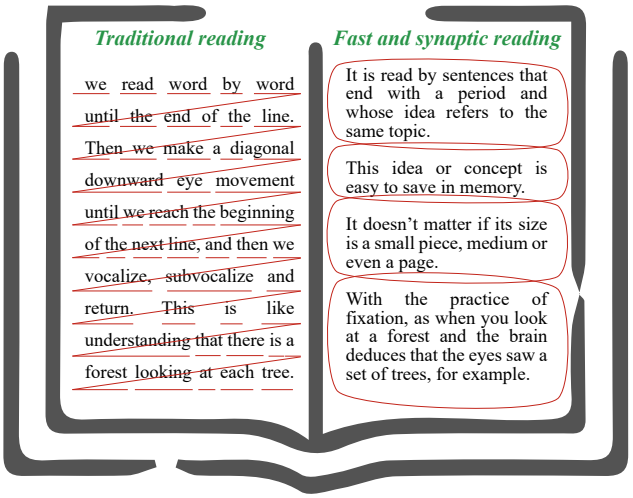


Figure 12 - Difference between the traditional reading eye movement and the fast reading.

several lines at a time, then lines, whole paragraphs, and finally a whole page. (Figure 13). At the beginning, we will need as many strokes as paragraphs exist in a page, just as when we learned to read we needed as many strokes as syllables, and nowadays as

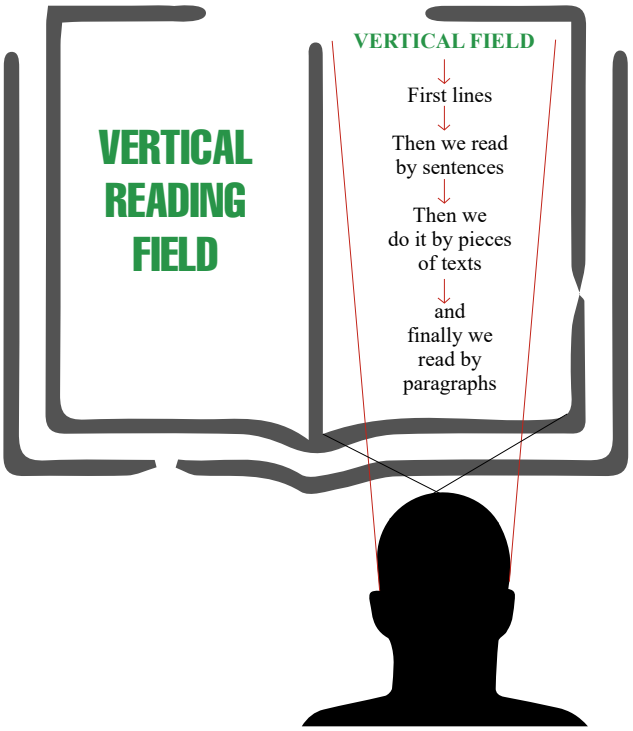


Figure 13 - Vertical reading field representation

as words, but by expanding the Vertical Reading Field we can reduce the number of hits to one, the one that covers the whole page.

Peripheral, centrifugal and global field

To explain these fields we must take into account the natural morphology of the eye; the eyeball, besides being round, is suitable for movements in accordance with its shape thanks to the muscles that support it internally. (Figure 14).

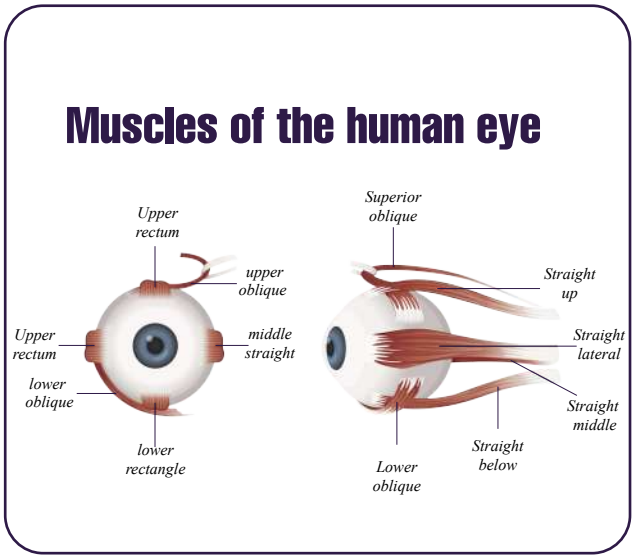


Figure 14

As we can appreciate in the illustration, the eye is enabled to move thanks to four straight muscles: superior, inferior, interior and exterior, and other four obliques. These muscles allow that the eye not only horizontal and vertical movements, but also obliques. These muscles help the receptor cells of the eye since they are in charge of covering the whole of our Visual Field. And it is precisely the oblique and straight muscles that provide the receptor cells with the ability to operate in the Peripheral and Centrifugal Reading Field.

The Peripheral reading field will allow us to cover not only those words that are in the center of the page, but also the ones located in the periphery, this way, the simultaneous inclusion of the peripheral area of the text in our Reading Field, will allow us to read also what is contained in the center.

The specific exercises to develop this Reading Field are those in which an image surrounded by the text is included. The achievement of this practice accustoms our ocular muscles to move more and at greater speed, on the page and especially to cover more perceptive units. (Figure 15)

Figure 15

Finally, we must develop the Centrifugal reading field, this will allow our eye muscles to exercise at the highest, and therefore perform at their best when reading text.

In order to develop this reading field we must perform ocular gymnastics, exercise the muscle of this organ, Well, like the rest of our muscles, the more they are exercised, the better they work. Exercises destined to such purpose are those whose text is written in the form of a spiral, as much inward as outward. (Figure 16).

Figure 16

Exercising and, therefore, developing the four mentioned Reading Fields, we will acquire a Global Reading Field, it will no longer be words, nor lines, nor paragraphs, but complete pages that we can read at a glance.

Develop of the Brain capacity

Until now we have analyzed the inner structure and functions of the organs that take place in the reading process.

Based on their morphology, the necessary theories and exercises have been developed so that our eyes acquire speed and width of field and thus apply the technique of rapid reading that allows the optimization of the functions of these organs. Nevertheless, and as we were pointed at the beginning, reading fast is not enough; until now several techniques have been performed that speed up the reading, but no the understanding capacity.

In order to take advantage of the brain's capacity to the maximum, this course includes techniques that: optimize the result of the synapse, achieve independence of the senses and develop the ability to understand through the visual image.

The techniques in this course not only increase the reading speed by a factor of "n", but the comprehension capacity increases in a directly proportional scale simultaneously.

Same way for exercising the eyes and acquiring its optimal performance, this course has been based on scientific studies, the same process has been followed to develop the technique whereby understanding is intensified and accelerated.

At the beginning we were explaining the different arts of the brain and the functions of each of one of them, coming to the conclusion that we learn through the five senses that are properly registered in the brain and interrelated by the SYNAPSIS. Now, given that the traditional learning process is fundamentally based on the phonic repetition of words, the habit of using such repetition in the belief that it intensifies our comprehension has, in fact, the opposite effect, decreasing not only the speed of reading but also the capacity to understand.

Let’s analyze the phenomenon that is happening in the brain when we read and count the required steps in the process of the traditional reading until we reach the final objective that is the comprehension.

1. Word is fixated to the retina
2. It is transmitted from the retina to the visual area of the brain where it becomes an image.
3. Through the SINAPSIS the word passes to the sensitive area where the brain assigns it a known sound and meaning.
4. This information is transmitted to the sound system, following the habit of understanding by repetition.
5. The phoner emits the sound.
6. That sound is in turn heard by ourselves, and at last, understood.

As a general rule these are all the steps made by our brain until we understand the information we are reading; there are people who may not allow words to be spoken aloud, but even so they continue to do so mentally, since the learning system we have assimilated taught us that without repetition there is no understanding. (Figure 17)

But the reality is that all these steps are not necessary for a deep understanding of reading. Words can be understood directly as concepts, same as images; when we see an illustration we don't need to repeat either oral or mentally all the concepts reflected, simply our brain is capable of understanding what our eyes are seeing.

Therefore , using the system of fast reading , the phenomenon has a place in our brain that is shorter, and simpler, speeding up and optimizing the capacity of understanding. This way steps are reduced to:

1. The text is fixed on the retina.
2. Is transmitted from the retina to the visual area of the brain where it becomes an image.
3. Through the SINAPSIS the brain relates it to a concept and attributes a meaning to it.

As simple as that, nothing more is needed, we can save all the rest of the process and get both organs, the eye and the brain, working at their maximum capacity, without wasting time and without limiting them in intermediate stages of the learning process.

The techniques contained in this course achieve independence of the senses, and therefore developing a faster and deeper understanding. This way we do not need to repeat what we read to understand it, but the mere image is enough for the brain to understand the meaning of the text. (Figure 18)

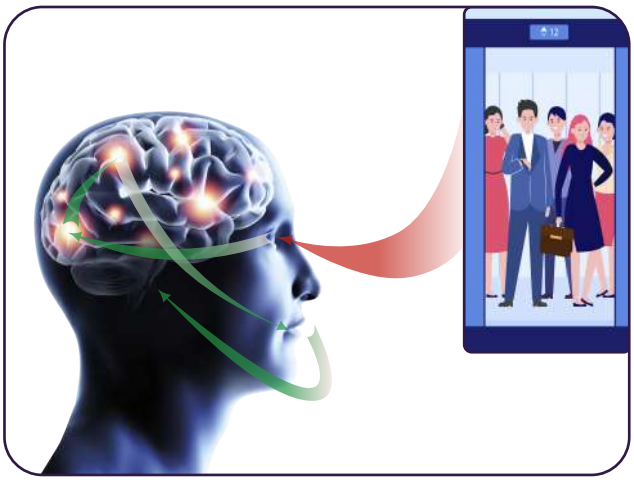


Figure 17

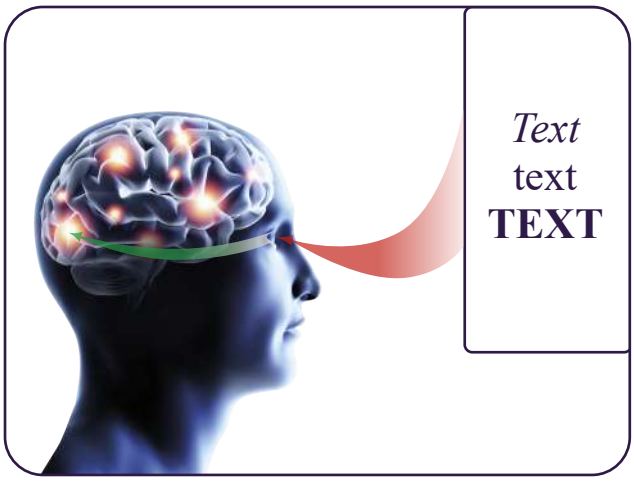


Figure 18

INTELECTUAL METHODOLOGY

As mentioned, this course is based on scientific studies of both the morphology and the brain capacity, however there is another extremely important aspect of this organ that has been taken into account during the conception and development of the techniques that will lead it to maximize its performance: the way the brain operates.

The brain is responsible of this abstract concept that we call intelect, and that hardly can be define or measure There is, however, a "modus operandi" of this intellect that can be identified.

The beginning of this process is marked by necessity, a necessity that fixes our attention on the people and objects that surround us, and also on the concepts that we read. The next step in fixing our attention is concentration: the more we need or are interested in a concept, the more we concentrate on it.

During this process of concentration, the SYNAPSIS work at the highest, giving as result the comprehension of the concept that turns into concept. But the brain doesn't stop in the mere comprehension or acquisition of knowledge; understanding also means hold, and in this retentive ation where the man performs his memory.

The memory has a retention capacity that can be divided into short, medium and long term, the more we need or are interested in a knowledge, the longer the retention time of it. We always remember the most important knowledge of our life in any area, however a phone number that we stop using, we forget.

Once we have acquired a knowledge and recall it, the brain reflects on it, expanding and improving it. And it is precisely the retention and reflection that allow us in the future to transmit our knowledge, and thus contribute to the learning process of humanity, both historically and didactically.

Below you will find the academic methodology and the specific instructions to carry out the course correctly. Carefully following all these instructions you will develop your reading ability to the maximum and optimize the functioning of both your eyes and your brain by getting to use your photographic memory correctly. Within a few weeks of starting the course you will be surprised by your own abilities both in speed and comprehension, so that by the end of the course your organs will be functioning at their maximum capacity. This personal development will open the doors to a new world where you will have access to a greater amount of information in record time, and you will have managed to LEARN TO LEARN. .

ACADEMIC METHODOLOGY

The methodologies of the course are based in the morphology studies of the human brain and it's functioning, in addition to those capabilities as yet unexplored. Earlier we were explaining the synaptic process that takes place in our brain when we read, and we have identified and described the fundamental problems, incorrect habits and limited perceptions that slow down our reading abilities. In order to overcome all these obstacles and reach the appropriate speed, the course includes various types of exercises which, when correctly carried out, will achieve the following objectives:

1. **Development Receptive eye cells**
2. **Development of the Horizontal reading field**
3. **Development of the vertical reading field**
4. **Development of the peripheral and centrifugal reading fields**
5. **Sense independization**
6. **Development of the conceptual understanding**
7. **Practice of all abilities**

This course is structured in three levels containing eight modules each. At all levels, two modules are dedicated to the development of each of the four objectives mentioned, i.e., the Eye Receptor Cells and the Reading Fields. Additionally, all modules contain an exercise dedicated to the senses' independence.

1. Development of the receptive eye cells

Finding the Problem: We already know that images enter our retina at the speed of light (300,000 km/sec) and that we have 500 million receptor cells which identify shapes, sizes and colors. Through a corrective therapy, the exercises destined to develop these cells will optimize their functioning and performance.

Corrective therapy
The exercises should be performed using the Synaptic BITS as indicated in the Operational Methodology of each module, at the highest possible speed. This way, we will habituate the retina, and therefore its receptor cells, to perceive the symbols and letters at the same speed that we perceive the images of the objective world.
Modules: 1, 5, 9, 13 and 17

2. Development of the Horizontal Reading Field:

Finding the problem: As explained above, our Visual Field (180º) is about 10 times larger than the Text Field (20º) and about 90 times larger than the Reading Field (2º). So, if our Visual Field is so wide, why do we reduce it so much when reading? This is due to the nature of the traditional teaching method, where we learn to read a letter first, then a syllable, and finally a word; by completing the whole process, we are able to put the words together and thus come to understand the sentence. However, the learning method should not have this process when we are able to read a single word at a glance, but should extend the information received at that glance to several words, a sentence, and even a whole line.

Corrective therapy:
The exercises should be performed using the synaptic BITS as indicated in the Operational Methodology of each module, in this way we will perceive more and more words in a horizontal sense at a glance, and finally we will equate our Horizontal Reading Field to the entire line, ie, we will be able to perceive all the words contained in a line at a glance.
Modules: 2, 6, 10, 14 and 18

3. Development of the vertical reading field

Finding the problem: Same as the traditional teaching process has limited our Horizontal reading field , also in the vertical way. Given the circular shape of the eyeball, the retina perceives 180º both horizontally and vertically. However, when we read, we only focus on the word and later go to the line, leaving aside the lines below it. Additionally, we force our eyes to make a strange and uncomfortable diagonal movement to jump to the lower line and thus continue our reading which, for this reason, has been uselessly interrupted.

Corrective therapy:
The exercises must be done using the Synaptic BITS as indicated in the operative methodology of each module. In this way, we will be covering with the eye a larger and larger portion of the Text Field in a vertical direction and finally, we will be able to avoid the diagonal movement that takes time away from our reading and interrupts our concentration.
Modules: 3, 7, 11, 15 and 19

4. Development of the Peripheral and centrifugal reading field

Finding the problem: As we know, the eye ball has receptive cells and a wide visual field, that allows it to receive the periphery and the global field,and besides , is supported by four straight muscles and four oblique muscles that allow it to make a complete circular movement. However, in the exercise of reading, these muscles are underused, since we hardly make a horizontal and a diagonal movement. The development of these muscles of vital importance, since they are in charge of helping the Receiving Cells of the Eye to cover the totality of our Visual Field.

Corrective therapy:
The exercises aimed at developing the eye muscles do not require BITS, however all other instructions of the Operational Methodology must be followed. The performance of these exercises constitutes an intense ocular gymnastics that will develop and optimize the functioning of the straight and oblique muscles, and that, therefore, will contribute to the previous exercises, the last necessary factor to cover the whole text in a single glance. In this way we will equate our Reading Field to the Text Field
Modules: 4, 8,12, 16 and 20

5. Sense independence

Finding the problem: In the process of reading and understanding, theoretically only two organs should be involved: the eye and the brain. However, as we have already seen, in practice the ear and the phonation system are also involved. We see a word, and, by means of the SINAPIS, we assign to it the sound that we have been taught according to our mother tongue, then we emit aloud the phonetic identification of the word, that is to say, we pronounce it, we listen to it, therefore it enters again in our brain but this time by the ear, and only then we understand it. This process is called vocalization; some people do not repeat the word aloud, but with the movement of the lips or muscular subvocalization; there are even other people who do not move their lips but perform the repetition in their mind or mental subvocalization. Undoubtedly, this bad habit of repeating the words while reading not only reduces the speed of the reading but also dissipates the concentration and therefore the understanding.

Corrective therapy:
The habit of repetition is, perhaps, the one that requires the most practice to be eliminated, for this reason, an exercise has been included in each module, in order to carry out continuous practice. Through these exercises we will make our senses independent, and we will use each one of them only when necessary.

Additionally, they will help us to develop a greater capacity of understanding and retention, since they include some practices to activate and develop the memory. These therapies do not require the use of BITS and are performed in two ways: by placing a pencil in our mouth in order to immobilize the phonation device, or by humming while we read in order to exercise the independence of the senses.
Modules: 1 to 20

6. Development of the conceptual understanding

Finding the problem: We already have talk of the way that our brain works, of how the need creates interest about an image and a concept and unleashes the complex process for which our brain captures, holds and transmits information. However , we all know that this very natural process does not always happen. Sometimes, we are very interested in the content of the text we are reading, and yet we easily forget it. How many times do we say: "I read something very interesting about this or that topic, but I don't remember well the names of the protagonists or the dates, etc... Why don't we understand and remember things well, if they interest us? Simply because traditional teaching has convinced us that this exercise is complicated and requires a lot of effort, something like having to read a text several times and even take notes to manage to retain it. But reality is not like that.

Corrective therapy:
Throughout the course and through the proposed therapies you will find that your retention capacity and long-term memory are optimized. By simply putting into practice some simple mnemonic rules and exercising conceptual understanding, which we thought required so much effort until now, it will become a simple habit. The specific exercises intended for this purpose, appear at the end of all modules, as an evaluative test, are those that we will always find accompanied by the necessary illustration.

However, it is important to mention that this type of exercise is also developed simultaneously to all the others, throughout the whole course.

7. Practice of all skills.

Once you have completed these 20 modules, your reading speed and comprehension capacity will have been multiplied by "n" times; therefore it is time to practice and improve your skills. The last four modules have been designed with this in mind. They have been prepared in the form of texts similar to those we find throughout our lives: a newspaper, a magazine and a book. To finish the course, the last module is a general review of all the exercises and skills you have already developed. These four modules include, like the others that make up the course, an evaluation based on one of the texts presented within the publication.

These modules have been designed to culminate in the development of the Eye Receptor Cells, the development of the Reading Fields and Conceptual Development; thus by reaching these modules you will have acquired a Global Reading Field as well as a total understanding of the text.

Modules: 1 to 20

Final module is a review of the acquired skills that should be addressed in the same way as all previous exercises, depending on their nature.

Module 24

OPERATIVE METHODOLOGY

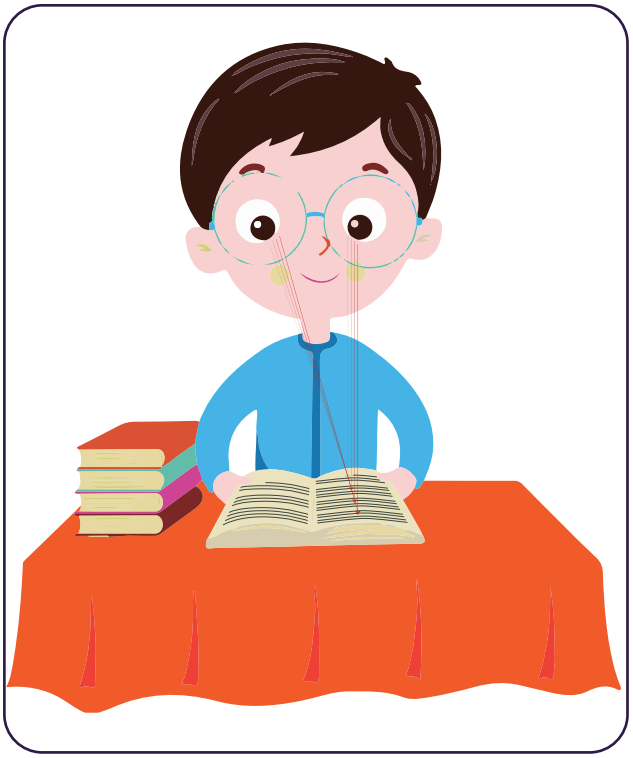
Below you will find the necessary instructions to perform the exercises contained in this course correctly. It is very important that you read these instructions carefully and follow them to the letter.

The following instructions are general to all modules. Later, at the beginning of each module, you will find specific instructions on how to use BITS and other techniques unique to each of the therapies.

POSTURE

1. Sit down with your back straight in front of a table where you will place your module about 10 cm from the edge of the table.

2. If you are right-handed, take the left edge of your module with your left hand and open it. Practice this movement.



3. If you are left-handed, take the module from the lower right-hand side with your right hand and practice the movement indicated above.

4. When you open the module, your view should always be in line perpendicular to the page, avoid moving your head or changing your position, and always position your module so that your gaze is fixed in the center of the column you are going to work on.

THE BITS

1. In those exercises that require the use of the SYNAPTIC BITS, adopt the position described in the previous point.

2. Place the SYNAPTIC BITS, in such a way ordered according to their numbering above the edge superior to its module.

3. If you are right-handed, take the BIT with your right hand and place it over the first word on the page so that you can see that word through from the BIT window.

4. Slide the BIT vertically down without stop, so that the words through the window.

5. The speed at which you must pass the BIT will be fast enough so that you do not have time to repeat the word that appears in the window, and that you barely manage to identify that word.

6. When you pass to another column, you should not change your posture or move your eyes; they should be exactly in front of the column you are working with. To this end, you should slide the module horizontally with your left or right hand, as the case may be, until you achieve this location.

7. Repeat this operation with the BITS indicated in the specific Instructions of each module.

THERAPIES OF INDEPENDIZATION OF THE SENSES

These therapies don't require BITS and are carry out in two different ways:

Pencil therapy

1. Always adopting the posture described at the beginning and without moving horizontally the head or the look, but the module as already indicated, take a pencil.

2. Place the pencil on the tongue, press it until the tip of the tongue touches your upper incisor teeth. Read the indicated therapy page synaptically.

3. This exercise is done in order to immobilize the phonation device and thus avoid the bad habit of repetition.

Humming therapy

1.Always adopt the posture at the beginning, without moving horizontally the head or the glance, but the module as indicated.

2. Choose a familiar melody and read synaptically the page of the indicated therapy, humming constantly this melody.

At the beginning of each module, you will find specific instructions for it. These instructions will indicate when to use the BITS and which ones to use, as well as the type of therapy for sense independence appropriate for each exercise.

WORK METHODOLOGY

In order to optimize the effort and achieve a satisfactory result you should perform the exercises with the periodicity indicated below:

1. You must perform the exercises EVERY day, in three sessions of 15 minutes each.

2. You must rest at least 4 hours between sessions, since both your eyes and your brain are making a great effort.

3. At the end of each session you should write down the results of the session on the WORKSHEET included at the end of the module. The correct way to fill out this sheet will be specifically indicated at the beginning of each module.

4. You must work with the same module for 7 consecutive days, at the end of which you will have completed 21 practices, and it is necessary that your achievements are, at this time, evaluated by one of our Neuro-pedagogues.

Remember that persistence is fundamental for your efforts to obtain the desired results.

EVALUATIVE METHODOLOGY

We have already mentioned that it is extremely important to fill in your WORKSHEET every time you finish a practice, so that both you and the assigned Neuro-pedagogue can identify and optimize your progress.

In order to establish a starting point in the development of your reading speed and comprehension capacity, at the beginning of the course, the Neuro-pedagogue will give you an evaluation test where, through the formulas that appear in the evaluation sheet, the values that determine your situation at the beginning of the course will be obtained.

Each time you complete 21 practices, that is to say 7 days of work in 3 sessions per day, to complete a module, an evaluation of your progress is necessary. This evaluation will be done by the Neuro-pedagogist and consists of three parts as follows:

1. Evaluation and correction of the way you are performing the exercises. In this part, the Neuro-pedagogue will personally evaluate your posture, speed, etc... as well as the WORKSHEET you have filled out.

2. Evaluation of the Conceptual Development: the Neuro-pedagogue will give you one minute to observe this page and memorize as many words as possible. At the end of the exercise, you will write all the words you remember on the final pages of the module for notes and you will make a written summary of what this graph represents to your imagination. Let your creativity fly and show all your qualities as an observer. Title your summary and sign it like a good writer.

3. Evaluative Reading: the Neuro-pedagogue will count the time in seconds that you spend reading a text, and then ask you some comprehension questions. Thus, through the formulas described on the results page, your achievements in developing speed as well as comprehension and memory will be determined.

This evaluation should be done periodically at the end of each Module.

EXPLANATION OF THE FOLLOWING MODULE

The Neuro-pedagogue will now have enough elements of judgment to determine if the student deserves to move on to the next module.

If so, he or she will make the corresponding scientific and methodological explanations and will ensure to it that the student carries them out in their entirety so that there is no room for error in the execution of the following practices.

The human mind:
More powerful than the atomic bomb

E=mc² master formula, discovered by Albert Einstein, genius of geniuses, who by investigating the narrow relationship that exists between space and time, between the inertia of a body and its energy, eliminated, from the absolute concepts of space, time and the independence that was assigned to matter with respect to such concepts. He thus formulated his "general theory of relativity" and created his famous equation: *E=mc²*. A formula that allowed the design of the release of nuclear energy. Einstein researched and discovered the release of nuclear energy and created the formula that made it possible, for better or for worse. Enrico Fermi and Leo Szilard were who designed years later, based on that equation and with many other economic and experimental aids, the atomic bomb... *What an outrage!*

Author's courage

By just emulating Einstein, genius of geniuses , is a boldness from the author, who worried about the education and learning gridlock through the traditional reading, has created this program of Synaptic reading which objective is reading through images, phrases, sentences, texts or paragraphs that contain an idea, reason or full judgment and enter the brain at a single glance and leave in the mind an image of the subject, the action and complementary predicates that end grammatically with a separate point.

The historical and didactic reasons in order to stop reading by words and do it by sentences, to reach the super learning, the scientific bases in order to achieve the general and specific objectives of the course as well as the intellectual, academic, operational and evaluative methodologies are explained in the instructive module and develop in the following twenty four (24) virtual modules so that you dear student learn this revolutionary system to read synaptically.

We will train and capacitate the 500 millions receptive cells in each of one of your eyes so they will cover at a glance the whole sentence you want to read and never read by words again (just as you never read a word by letters again). Your eyes will learn to move through the text covering sentences that will reach your brain where the 100,000 million neurons that your prodigious brain possesses will receive them and through the synapse will connect them at a frequency between (-70 and + 40 millivolts) as they are stimulated by the need or interest with which you have read.

With the printed material, so far edited , thousands of students have overcome the 10.000 words per minute with a full comprehension of 100% (100/100). Now virtually more within reach of your desires for learning to improve yourself.

Thrilled with the previous statement and alongside the virtual launch of my work, I dare today, December 15, 2019 at 9:05am, to launch my synaptic formula with which science and academia will be able to measure a human being's synaptic capacity for understanding, a value that will also determine his or her true IQ.

Synaptic reading formula

$$BIT = nfc$$

n – Neurones (100.000'000.000)
f – Action potential (de -70 a +40 mV/ms)
c – Speed of light (300.000 km/seg)

$$BIT = 12\ (10^{17})$$

Student speed and understanding in a test.

BIT - Amount of information that can be read in a specific time

$$BIT = ViCi$$

Vi- *Student's speed - amount of words read per second*
Ci - *Student's understanding- hit rate*

Human mind created the computers
Álvaro Rojas Anzola created the Synaptic Reading

The Byte is the unit of basic information used in computing and telecommunications and is equivalent to an e 8-bit set, so it is also called an octet.

Byte = 1B = 8Bits

8Bits in computer architecture is an adjective used to describe integers, memory addresses or other data units comprising up to 8Bits (1 octet) wide to refer to a CPU and ALU architecture based on registers, address bus or data bus of that width.

When the computers showed up, this author dreamt of reading and understanding all the books that had been written until then. **¡An utopia!** … I only had enough time just to "look over" the school texts and the occasional magazine or newspaper. These were edited to 8 columns and not even one line of a column was capable of reading. **How frustrating!**...

My research and stubbornness in reading those 5 or 6 words of a line in a single glance coincided with the appearance of an ordered set of 8 bits as a basic unit of information used in computing. **Eureka!** with my designer, Alirio Sánchez, I developed the 8 synaptic beats for the synaptic reading, with which my students would develop the receptive cells and the horizontal, vertical, peripheral, centrifugal and global reading of their eyes, in the first 16 modules (2 levels of 8) basic and intermediate of my work.

The following eight (8) modules for the advanced level will no longer required support of the **synaptic BITS**, thus with the achieved learning, the student will be able to read with a single glance, the 5 or 6 words of the line of the column of a newspaper and at the time, 5 or 6 vertical lines.

Then from module 17 the student's eyes will become and they will start reading texts in a growing line until they reach lines of 15 or more words and obviously paragraphs of 15 or more lines with a single glance. This is the wonder I achieved with my invention: **8 Synaptic BITS**.

When your eyes are converted into **Synaptic BITS**, the nerve impulses generated by your neurons will be transmitted between them by the synapse, giving an immediate response of total understanding to what is seen or read by your eyes.

My daring to compare my formula with that of the genius Albert Einstein underpinned it by emulating the design of nuclear energy release, developed based on the General Theory of relativity, with the approval of the neuronal scientifics that most of the energy consumption of the human brain is produced by the sodium-potassium dependent ATPase pump or simply sodium pump (neural pump defined as a protein that actively transports - using ATP - substances across the membrane by consuming energy).

The neurons are cells responsible for generating and transporting the nerve impulses.They are considered as structural and functional units of the nervous system and to them are attributed the most complex functions in information processing. The synapse is the term that comes from the Greek that means embrace and is used both to name the structure where the neurons are put in contact, like the process of interneuronal communication. ***How ironic!*** The atomic bomb causes death and destruction. The neuronal pumps produce neuronal life essential for the synapsis.

Thanks to the ***Synaptic reading*** (today'svirtual reality) you will learn by embracing with your eyes full sentences with your eyes and understanding them through the synapsis of your neurons, which are responsible for generating, responding to and actively transporting nerve impulses.

Neural pumps perform this function by using ATP and neuron action-voltage switching potentials (-70 to +40 mV) consuming energy ... ***How wonderful***!.

NOTES