

FAST READING AND COMPREHENSION - UPGRADING COMPETENCE FOR ESP

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Abstract. *A variety of studies of human cognition in the areas of the psychology of language, linguistics, development and behavioral science bring the pieces of a broader picture together, where reading is to be defined as an integration of numerous processes that are acquired and learned. In this sense, reading is inseparable from language comprehension. If we define reading as a basic life skill, then fast reading should be defined as basic academic skill that may be acquired at any age. Faster reading leads to better understanding, better understanding of meaning and implications in a text lead to time efficiency in reading, resulting in higher self-confidence and improved performance of an individual. Publishers, editors, researchers, scientists, critics and students receive the highest benefits. With other professionals, reading e-mails, letters, reports, notes as an everyday routine leaves more time for work management and essential procedures. The ESP teachers' practice perfectly matches this frame.*

Key words: *reading, fast reading, comprehension, the brain, senses, skills, mental development*

1. FAST READING AND COMPREHENSION – AN INTELLECTUAL NECESSITY

Once upon a time I was a student. Recollections of pictures from that period of life bring back tons of books, scripts and other forms of written texts to be read, comprehended, analyzed, memorized, and learned. Prioritizing tasks and staying committed to their fulfillment did not always result in better time-efficiency. 'Old ways' were at our disposal. I remember having read that some international schools offered speed reading courses, but they were not available in our country of residence. I remember feeling the excitement of even knowing that such trainings exist, somewhere. Discussions with my friends and colleagues on the topic, at that time, were ending all in sighing "If only..." Fortunately enough, fast reading with comprehension is a skill that may be acquired at any age, now we know. If reading is a basic life skill, then fast reading is certainly basic academic skill, worth considering.

2. READING: A SKILL OR A PART OF BROADER MENTAL DEVELOPMENT?

Reading may be defined in numerous ways, depending on the perspective.

“Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information” (Anderson et al., 1985).

From teachers’ perspective, reading is a skill to be acquired in early education, a part of a child’s general language development, inseparable from listening, speaking and writing. Learning to read is a process of acquiring meaning from printed material that requires a set of skills used methodologically through several stages in the process of becoming literate. Literacy as an acquired proficiency is only the first step of the ‘reading adventure’. A simple, effortless skill further “builds on cognitive, linguistic, and social skills developed in the years before reading typically begins.”¹

Acquiring competence in reading may be compared to acquiring competence in playing a musical instrument, because it requires appropriate preconditions and periods of practice. As with musical scores, identifying letters and words does not constitute reading. The performance is complete only when they are all gathered smoothly into a whole. Again, as with musical pieces, there are various interpretations that depend on the reader’s background, knowledge, the purpose of reading and the context. The meaning of the same text may vary to a great extent with various people, because of the differences in knowledge they possess, as may the performances of the same musical pieces when played by different musicians.

From the perspective of neuroscience, there is an entire brain circuitry at work behind reading. The process of translating written words into meaningful language starts in our eyes and is activated by print. The *fovea*, the center of the retina, with its fine enough resolution, allows the recognition of small print. The movement of our eyes over the text must, therefore, be constant. We recognize words whenever our eyes stop. It is the point at which words get decomposed into fragments and are again brought back together before they are recognized. By using our visual system graphemes, syllables, prefixes, suffixes and word roots are extracted. The phonological ‘brain path’ converts letters into speech sounds, and the lexical one leads to mental dictionary of word meanings.

Numerous studies of human cognition in the areas of the psychology of language, linguistics, development and behavioral science bring the pieces of a broader picture together, where reading must be defined as an integration of numerous processes that are acquired and learned. In this sense, reading is inseparable from language comprehension. Text comprehension depends on a reader’s prior knowledge, experience, attitudes; they are all linked together in defining the meaning of what has been read. As the foundation has been set in childhood by learning decoding of words, developing vocabulary, inferring meaning, there are further strategies for comprehending and interpreting texts in various subject matters.

3. FAST READING WITH COMPREHENSION – A FAST TRACK TO MANY BENEFITS

Human senses are the link of our outer experience and the brain. The quality of memory depends on the condition and activation of our senses. In the process of receiving stimuli

¹ Rayner, Keith; Barbara Foorman; Charles A. Perfetti; David Pesetsky; Mark S. Seidenberg (2001). "How psychological science informs the teaching of reading" (PDF). *Psychological Science in the Public Interest*. 2. 2: 31–74. doi:10.1111/1529-1006.00004

through the senses, our brain performs coding and decoding of received information. The more senses are activated, the better are the results in creating long-term records in our brain. However, it is not possible to intentionally and constantly stimulate the brain at all times.

Speaking of reading, mentally it is a monotonous activity, involving only the dominant sense of vision through the linear movement of eyes. Other senses may be active, but as they are not required in the process, they may only collect distractions and interfere with the reader's focus. Staying focused on the subject matter, especially over a longer period of time, may turn into a 'mission impossible', if a reader is not trained well enough. The outcome may sound familiar to many people - we find ourselves fidgeting and drifting away, unless the text we are reading is motivating and interesting enough to be grasped. Our brain is restless, always trying to find something more interesting to rest on. Of course, if we allow it to do so - and we will, unconsciously.

With the mastery of speed reading techniques, our focus becomes stronger, 'chunks' of words become bigger, requiring more space in the brain to be processed. Therefore, the brain is left with no time to wander, because coding and decoding becomes much faster, our mental activity runs at higher speed, eliminating inner and outer distractions in the reading process.

Just like any muscle in our body, our brain needs exercise and training. If not continuously and intentionally stimulated and used, it may not be capable of performing at its peak. The good news is that there are ways to maintain and even improve the sharpness of the brain throughout life. Neuroscience and recent studies of the brain plasticity show that our brain can benefit from mental exercise at any age. As reading is a process encompassing all aspects of academic life, reading faster with the same or higher level of comprehension is a perfect match of mental and professional development. Setting the goal of achieving greater speed at reading and maintaining it long-term is definitely worth attention of every academician or intellectual. Faster reading leads to better understanding, better understanding of meaning and implications in a text lead to time efficiency in reading, resulting in higher self-confidence and improved performance of an individual. Publishers, editors, researchers, scientists, critics and students receive the highest benefits. With other professionals, reading e-mails, letters, reports, notes, as an everyday routine leaves more time for work management and essential procedures.

Further illustration of the principles and techniques in mastering fast reading with comprehension will be based on a training, *Fast Forward (FFD)*, founded on proven methodological practices, with transparent records on progress measurement for each and every individual participant.

4. FASTFORWARD (FFD)

FFD is a one-time dynamic training of fast reading with life-long benefits. During the five week's training, participants get physically and mentally activated, with the ultimate goal of increasing their speed of reading by minimum 50% compared to their preliminary testing results, with the same or increased level of comprehension.

It is important to emphasize that this discipline, as any other, requires time and effort and the expected results do not come over night. Continuous work over a period of time is the only way that leads to long-lasting results. The training is not about fast reading, it is not theoretical presentation and description of techniques to be applied, but is the

application and action in practice. Unlike many courses that teach and practice dynamic reading, the results participants achieve attending this programme can only improve further in life, because it is their brain that is made to focus on releasing old and acquiring new reading habits. The training is accompanied by a variety of reading and comprehension exercises, speed reading tests and physical exercises that aim at building eye muscles and expanding peripheral sight, forming the foundation to work on. Goal setting and motivation are certainly the main drives, but being committed instead of being only interested makes a huge difference. There are also other internal and external factors that may influence the rate of one's progress, such as mental and physical condition of a participant, where rest, sleep and nutrition are certainly not to be neglected.

5. GETTING RID OF THE OLD READING HABITS

A person reading less than 300 words per minute reads slower compared to their capacity of comprehension. According to the statistics² the average reading speed ranges between 160 and 220 words per minute - it matches the average speed of speech. It is not a mere coincidence, and it stems in the process of becoming literate.

When children are taught how to read, they are first introduced to the alphabet. They learn to pronounce the sounds aloud, associating them with letters and then they practice connecting letters into syllables and words by reading aloud. It is the process that is constantly repeated over a period of time, long enough to make the brain acquire the habit of relating sounds and speech to the graphic symbols. When a child has learnt to pronounce the sounds correctly while reading aloud, he or she is instructed to read silently. However, the vocalizing process continues - they start to vocalize to themselves, or they start to *subvocalize*. It is not only that the 'inner voice' remains, but also, very frequently, the movement of lips and activation of all muscles of the vocal tract, releasing no sound.

"Leaving the child in this state, in which it remains until it is an adult, is very much like assuming that, once a baby has learnt to crawl, the process of locomotion is complete! Yet the worlds of walking, running, dancing and related activities have all been left unexplored."³

The primary obstacles to faster reading relate to subvocalisation. Acquiring a new habit is easier than getting rid of the old one. There is a set of exercises to be used to eliminate these 'inner voices' while reading. The goal is to break the link in the brain associating reading with sound. For example, if a person bites a pencil and starts reading aloud, the written words do not change, but what they hear is no longer what they see. The brain fails to recognize the words by movement of lips or the sounds pronounced during this activity. If the exercise is repeated over time and each time long enough, as it is in the nature of the brain itself to eliminate the use of unnecessary senses and organs used in the activity of reading, the 'inner voice' will become silent, the lips still. The vision will remain active, and the brain will begin processing visual information only. Taking into account the fact that the brain is an amazing information processor that works

² Buzan, Tony, *The speed reading book*, A PLUME BOOK, 3rd edition, Penguin Books Ltd, First Plume Printing, January, 1991

³ Ibid.

based on the “whole to parts” principle, now reversing the process based on “parts to whole” principle related to sound and speech while we were learning how to read, and that our eyes are the most amazing optical instrument ready to receive bundles of words perceived as ‘mute pictures’ faster than they can be pronounced, the increased speed of reading may seem a very likely outcome, evolving from the speed of spoken word to the speed of thought.

Other obstacles in the way to fast reading with comprehension are the habits of re-reading a text by going backwards, reading word by word and stopping and resting on some words while reading. The results are that the eyes get tired, level of comprehension drops and the process of reading becomes slower and less time-efficient. Overcoming these habits requires exercises, such as peripheral sight training, reading of paragraphs, getting used to rhythmical reading, reading between the lines and, finally, self-discipline in applying the exercises regularly.

6. GETTING EYES ‘INTO SHAPE’

Our eyes offer more than we actually use. Developing a habit of constant eye movement is of great significance for fast reading. Our eyes make linear movements and even when we try to make circular ones they will more resemble a square or a rectangle. The movement of eyes is controlled by six extraocular muscles and in the process of reading they are under voluntary control. If an appropriate set of exercises for stretching and strengthening of eye muscles is regularly performed over a period of time, the movement of eyes becomes more sophisticated and faster, creating a solid base for fast reading training. Furthermore, movement of eyes is associated with different regions of the brain. Exercising extraocular muscles may further stimulate brain regions related to memory, visualization, emotional intelligence, construction of words and sounds, among other regions.

While reading, our eyes ‘jump’ over words, they are moving and pausing continually, these pauses consuming the most of reading time. But it is the pauses they make that allow our brain to collect information. These pauses are referred to as fixation points. The fewer the ‘jumps’, the faster the reading. If the aforementioned habits of re-reading a text by going backwards, reading word by word and stopping and resting on some words while reading are eliminated, the number of fixation points decreases, therefore, the time required for reading becomes shorter. Reading becomes rhythmical and more efficient. There is a set of exercises that aim at developing a new habit of rhythmical reading, after the old ones have been released. These exercises may involve manual markers and tools for guiding of eyes, assisting them in moving while reading and preventing old habits from occurring in the process of the new ones being acquired.

The brain sees words as pictures. Seeing takes less than split of a second, while hearing and pronouncing takes far more time. Apprehending words as pictures may be practiced through exercises aimed at improving photographic reading, such as tachistoscopic training. Studies have shown that practicing photographic reading also improves general brain processing, visual processing, cognitive functioning, memory, creativity, problem solving, and intuition.

Another important tool for fast reading available to us is our peripheral vision. It refers to a part of our vision outside the central gaze, everything we see around the spot or object we are focused on. It allows us to see objects that surround us, without turning our heads or moving

our eyes. It is closely related to the sense of motion. By exercising our peripheral vision, our night vision may also improve. It is of key importance in sports, as well. A set of exercises for expanding and building on peripheral vision may improve the speed of reading to a significant level. Rhythmical reading supported by strengthened peripheral sight, matched to the brain principle of 'seeing a whole' and photographic apprehension of 'word chunks' reduces the number of fixation points, maintains and increases our mental activities and ultimately results in faster reading with higher level of comprehension.

7. EFFECTIVE COMPREHENSION TECHNIQUES

The level of reading comprehension is dependent on a person's age, experience, knowledge, word recognition and decoding, vocabulary, ability to make inferences, reading fluency, interests, motivation, active engagement with the text and other internal and external factors. "Reading comprehension is the ability to read text, process it, and understand its meaning."⁴

As explained earlier, with a reference to the processes in the brain, better comprehension comes with faster reading. Comprehension may be further improved by using different strategies that are, actually, conscious plans applied with the aim of making better sense of the text and keeping control of what has been read. These strategies involve sets of different exercises that readers have at their disposal to make most of the reading process.

'Word Hunter' and 'GET RADAR' are two of the techniques used in FFD programme. They are both based on the aim of making reading more purposeful and preparing the reader for reading. Extracting key words that underlie meaning while reading and getting information about what is to be read will prepare the brain to grasp and interrelate more information, thus leading to higher level of comprehension.

8. THE BENEFITS OF MASTERING FAST READING WITH ESP

ESP is a very demanding field of expertise. The preparation of vocabulary, texts and concepts for teaching ESP requires research, dedication, and, generally, raising competence in the subject field. FFD fast reading programme is fully compatible with different subjects of study, based on specific ESP needs. Not only that undergoing FFD training will lead to faster reading and better comprehension for each participant, but the texts and other materials used in the training itself may relate to the required field of expertise, contributing to building general competence in the desired subject field. In this sense, the programme is fully adjustable to the teachers' needs. For those teachers that aim at gaining more knowledge in medicine, for example, medical texts will be used in the FFD training. The ultimate result will be faster reading, better comprehension, and a higher level of competence in the field of expertise.

Another benefit of the programme is real-time monitoring of the participants' progress using FFD on-line platform. All participants are registered on the platform and they are required to perform daily exercises on-line. The entire system and exercises are transparent

⁴ "What is Reading Comprehension?". Reading Worksheets, Spelling, Grammar, Comprehension, Lesson Plans. 2008-05-29. Retrieved 2016-05-13

to the instructor of fast reading, including the exercises participants regularly complete and the progress they make measured through reading and comprehension tests on-line, as well as in the classroom. Being aware that their commitment and regularity of exercising and testing is being monitored, participants of the programme feel more responsible, they are more dedicated and efficient in mastering this discipline, and they feel more motivated.

A practical presentation of FFD programme, organized as a workshop, should demonstrate:

- methods and techniques used in mastering fast reading and comprehension,
 - ways the progress of each participant is observed and measured,
 - testing of reading speed and comprehension of each participant
- All of which is to be discussed in relation to the general statistics in this field.

9. REACHING OUR 'READING DESTINATIONS'

Holidays and vacations are what people always look forward to, because these are the periods to spend some quality time and recharge. Destinations to consider depend on numerous facts and conditions. Means of transportation is certainly to be taken into consideration. Foot, car, train or plane makes a huge difference if the journey itself is not the end goal, with limited time off at our disposal. Instead of one, fast readers reach several 'reading destinations', because they have the time and the skill not to miss any part of the journey. My advice to all 'academic voyagers' would be to read fast and live life leisurely.

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