

# Using Imagery to Enhance Memory and IQ

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Many children face problems in remembering a large amount of information for the examinations. Regardless of their intelligence, I have personally encountered children who have spent plenty of time in memorising spellings, dictations and information for various subjects, and yet were unable to recall them later. This undoubtedly impacts their performance in the school examinations.

Memory is a major topic in psychology. It is defined as the process of keeping information from past experiences for present and future facilitation. Memory also plays an important role in learning as it is essential for all activities. We rely on memory to retain knowledge and keep track of ideas etc. More often than not, our education seeks to nurture creativity and logical thinking, and memory becomes a by-product of the process instead of an active pursuit. It is important to keep in mind that memory is often the foundation to more advanced skills.

## Using Imagery to Facilitate Memory and IQ

The engagement of our brain's imagery helps to promote learning and cognitive development as it trains one's ability to construct mental images of tangible and intangible objects in one's mind. There is evidence that training in this aspect not only enhances the vividness of one's imagination but also facilitates memory and IQ. Yet, imagery training has largely been overlooked and has not been given the attention it deserves in the education sector.

In 2002, 3 imagery-trained students between 10-12 years old were invited for a memory demonstration in Singapore. Students in the audience (who comprised both primary and secondary school-aged students) were invited to come forward for a memory challenge. All the challengers and the 3 imagery-trained students were given an essay. None of them had seen this essay before. All were allocated 15 minutes to memorise it. Subsequently they were asked to recall verbally, and were judged individually by the audience. The 3 imagery-trained students were ranked 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> whereas the challengers were ranked 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> respectively in terms of their abilities to recall. Research conducted at several universities has also indicated that the facilitation of imagery and working

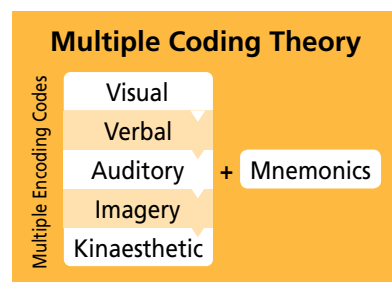
memory training in education not only promotes better memory performance, it also improves fluid intelligence (IQ).

## Use It or Lose It

By the age of four, children are cognitively ready to create mental images in their brains. The vividness of imagery in children tends to turn weaker and eventually diminish when they grow older if they do not engage the imagery function in their brains. As a result, young children tend to visualise better than teenagers and adults.

## Multiple Coding Theory

There are many aspects of the human experience that helps us perceive the world. To remember text-based information for examinations, we



can incorporate learning tools like Visual, Verbal, Auditory, Imagery and Kinaesthetic and Mnemonics, as shown in the Multiple Coding Theory. One can apply an individual code such as the 'Visual Code', or combining with other codes for better

cognitive functioning. However, one of the most important codes would be the 'Imagery Code'. Memory heightens in learning process when you incorporate more codes.

To apply the Multiple Coding Theory in remembering spellings, first of all, look at the word you want to learn, highlight any parts that seem difficult and break the word into smaller parts based on pronunciation, if necessary (Visual Code). Next, read the word out loud to yourself and sound out all the letters (Verbal and Auditory Codes). Next, cover the word, visualise it in your mind's eye (Imagery Code) and write it down without looking at the original (Kinaesthetic Code). Finally, check to see if you have spelt the word correctly; if it's incorrect, try again. Repeat continuously over a course of time to reinforce the memory. The mnemonics strategy can be used for managing information in our brains.

The various codes can be successfully applied in most learning processes once we understand the concept of each code. Effective memory and learning can then be achieved.

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Ric Chong is a cognitive psychologist and founded Ric Cognitive Approach® in 2005. He was educated in England and graduated from University of Wolverhampton, UK, with a B.A (Hons). He also holds a Master of Science degree from Keele University, UK, and a Master of Education in Psychology of Education from The University of Manchester, UK. During his studies of Doctorate in Education (Ed.D) at the University of Leicester, UK, specialising in learning and teaching, he developed his unique "Multiple Coding Theory" and invented "Imagery Drawing Test" in 2006. He specialises in **Evidence-based Cognitive Training for IQ, Memory and Academic Performance**. Please visit [www.riccognitive.com](http://www.riccognitive.com) or [www.ricpsy.org](http://www.ricpsy.org) for more information.