

# Ace Your Exams with the Cognitive Approach

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From elementary school to tertiary studies, sitting for exams are inevitable. As school exams are stressful events, students can look for approaches which can help them cope and learn better during exam preparations, and also help them to ace their exams. One such way is the cognitive approach. In contrast to rote-learning, the evidence-based cognitive approach emphasises the application of mental processes to support learning and memory.

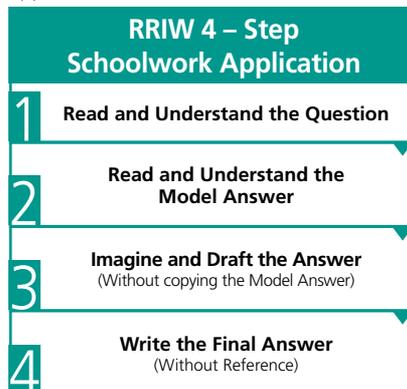
## Cognition and Metacognitive Abilities

Cognition involves mental processes such as thinking, remembering and problem-solving which guide us in learning, planning, decision making and comprehension. At the same time, cognitive processes also involve paying attention, perception, rehearsal, encoding and retrieval. Under metacognitive abilities, the information processed is stored via sensory memory, working memory and long-term memory. By taking the cognitive processes and metacognitive abilities into account, the following approach has been proposed to guide students along:

The 8-Step Cognitive Approach to Academic Progression places emphasis on both Cognitive Training (Step 3) and Schoolwork Application (Step 6). The cognitive training aims to increase the working memory of students through the engagement of mental processes based on Multiple Coding Theory. Upon achieving satisfactory working memory abilities and/or IQ progressions, students will learn how to apply the approach to their schoolwork.

## Thinking and Remembering + Rehearsal, Encoding and Retrieval

The cognitive approach emphasises on thinking and remembering. Therefore, thoughts and senses are being engaged i.e., multiple encoding codes. This is subsequently followed by rehearsal, encoding and retrieval within the cognitive processes i.e., the RRIW 4-STEP. This is how the RRIW 4-STEP is being applied to schoolwork:



For Steps 1 and 2, if students still do not understand the question and model answer, they can consult a tutor or teacher. In Step 3, students are required to engage mental and cognitive processes, by imagining and recalling the key words and concepts to

apply in the answer. By Step 4, students should be able to solve the question with ease. The tutor or teacher may re-test the students after a period of time as a form of revision, especially during exam preparation.

## Case Studies

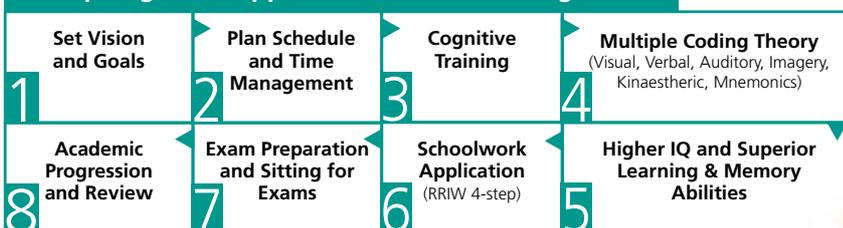
**Case 1:** A Primary 6 participant, who started cognitive approach training at the start of the school year, performed poorly in CA1, with all subjects graded D. After 7 months, student attained 1A, 2B's and 1C for PSLE.

**Case 2:** A Secondary 1 participant failed a few school subjects and barely passed the others during the term tests. After a year of cognitive approach training, this student scored 5 A's and passed all others with flying colors.

Apart from enhancing the exam performance of many students, studies conducted by many universities have also shown that, appropriate scientific cognitive training can significantly enhance a person's IQ, which is closely linked to his/her future academic and professional success. Therefore, consider investing in your child's future by exploring the cognitive approach.

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## 8-Step Cognitive Approach to Academic Progression



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.sg](http://www.ricpsy.sg) for more information.