

## 卓越思考題訓練

IMA Creative Thinking Programme

人類的大腦可分成左、右兩個部分。左邊的腦稱 為左腦 (操控文字): 右邊的腦則稱為右腦 (操 控圖像)。雖然它們都可在問題上進行思索,但 大多數的孩童都只用左腦進行文字思維解題, 那 是因為他們缺乏了右腦思維訓練。

當孩童通過文字進行思考時, 由於向來局限在左 腦的教學方式, 所以不能在思考上進行突破。這 使到孩童在7歲開始進行思考時, 往往不加以思 索, 單憑一個共、剩、分、平均的字眼來決定加 、減、乘或除的題型。當他們進入10歲以上時, 父母才發現其思維能力不強, 而欲想辦法加以補 救, 但那時往往無法發揮到最佳效應。

卓越中國珠心算為了培訓孩童運用右腦思考。因 而通過借助右腦的圖像來訓練孩童進行"自主探 索"。"自主探索"即藉由圖像進行思維思考後 再通過文字學習並鼓勵孩童在探究的過程中掌握 知識。在學習此概念時, 孩童需先從右腦的圖像 形式思考。例如:通過敘述4支鉛筆、5個蘋果和 3本書等, 孩童就可將這些數字轉化成珠子並在 算盤上撥珠數數, 那麼他們就能輕而易舉地掌握 此技巧。

The human brain can be divided into two parts (left and right). The left side of the brain is called left brain which controls languages and characters; the right side of the brain is called right brain that manipulates images. Both halves of the brain can be used for thinking, however, most children only use their left brain to think and solve problems due to the lack of right brain training.

While children always think through characters, they could not make a breakthrough in their thinking for being restricted by left brain thinking method for a long time. Starting from seven years old, children sometimes neglect to think about the answers whenever they are doing the maths application questions. They have formed a habit to give answers by reading specified words such as "total", "left", "divide" or "average" to do addition, subtraction, multiplication or division. When they reach the age of ten or above, parents just realize that their children's thinking ability is weak. Nevertheless, it is too late.

In order to encourage children to think by using their right brain, Intelligent Mental-Arithmetic has carried out a "self-exploration" method for them. It is a method to think by dint of the images and learn by words after that. During the process of exploration, children will be able to acquire knowledge well. In the learning of the concept, children are required to think through the pictorial form of right brain. For example, when four pencils, five apples, three books and so on are described in words, children should transfer the numbers into beads on the abacus so that they will master the skill gradually.

The result of "self-exploration" is obvious. It not only accelerates the analytical speed of students in solving the mathematical problem but also makes the questions easier at





## TMA Creative Thinking Programme







透過"定向思路" 訓練學生如何對圖像進行圖像思考 To teach students how to think through pictures





## 卓越思维训练丛书 TMA Creative Thinking Series



## 透過思考題的操練打造高階層記憶 To Create a High-Level of Memory Through Creative Thinking



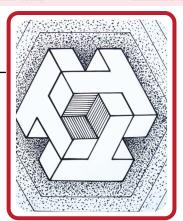




空間變化記憶 Spatial Transformation



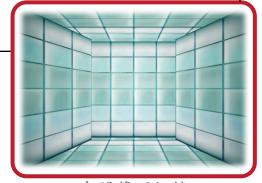
空間記憶 Spatial Memory



視覺記憶 Visual Memory



聽覺記憶 Auditory Memory



空間管理記憶 Memory Management