

**Multi-brainpower Reflects New Direction : Education
Development of Abacus and Mental Arithmetic is the
Base of Multi – brainpower**

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Educators have realized the importance of multi -development, and abacus and mental arithmetic can meet this demand. While spreading abacus and mental arithmetic education on children, Hongkong Abacus and Mental Arithmetic Association emphasizes their participation and behavior as a whole. In addition to academic scores, study attitudes and related effects are also very important to children. Thus, when we design a course, we should not only consider about calculation, but also induct children into full attention, make them have a good memory, and develop their logic and reasoning ability. Once they have realized themselves and have their own confidence, they will further develop their multi-abilities.

What the students feel uncomfortable is their heavy academic burden. For children, the problems become serious in particular as they can seldom change the surrounding and are forced to accept the reality that might be unsuitable for them. Experts on education advocated principles for so-called “five-education” long before, namely, moral education, intelligence education, physical education, collective education and aesthetic education, but few people organized activities to realize these principles systemically. Compared with "five-education, widespread multi-brainpower education in Hongkong can achieve the same goal with different means.

The roles of "five-education" are as follows. Moral education involves the ability of introspection and the sense of responsibility; intelligence education concerns about elaborative faculty; physical education enables children to be in good health and to be confident; collective education can promote sociality and sense of social morality; and aesthetic education is helpful to appreciation and sympathy. There are many explanations for the theory of multi -brain - power. Here we cite the argument of Howard Gardner, a professor on development psychology of education institute in Harvard University. In his opinion, everyone has multi -brainpower that at least include music, body movement, logic mathematics, language, space, communication, personal introspection and nature appreciation. There are many commons between occidental multi -brainpower and oriental " five-education" which can become a targeted goal for training individuals. Abacus and mental arithmetic education should be designed to approach the goals.

Abacus and mental arithmetic is an elaborately de- signed training that is interesting and inspiring, and there is no need for us to commit it to memory.

The emphasis of studying abacus and mental arithmetic is to promote intelligence, and activities in the class- room can also provide an opportunity for children to develop other potential ability and to improve themselves. In response, abacus and mental arithmetic advisors should be trained so as to guide children with certain academic teaching skills, and to make children have right expectation for their futures. In order to care each of learners, we establish teaching assistant and parents communication system. This system will help students' children solve problems by themselves and to exceed their own expectation. In addition, children will enjoy themselves and strengthen relationship during their study. The abacus and metal arithmetic course is suitable for pupils in grade 3 or even lower level, since only children in that period can fully develop multi-brainpower and logic mathematic ability.

We hope children will have the following behaviors after training: love to attend abacus and mental arithmetic class, enjoy its beauty and finish homework by themselves. Thus, they can further promote their multi-intelligences.

In the early history of abacus and mental arithmetic, people calculated with abacus, and they had to drive beads while watching or listening. The fabric of abacus was simple enough to everyone. And more complicated questions only required increased figures and reduced time constraints; therefore, it was accessible to children. In this period, they could strengthen their memory. Now people can calculate with mental arithmetic. Training with mental arithmetic is helpful not only in speedy calculation but also in figure and logic. Therefore, the outstanding advantage of abacus and mental arithmetic is to promote figure and memory ability.

In fact, with the development of computers, the role of calculation is not important, what is more important is to develop multi-brainpower. The current ratio of the number of teachers to that of children makes the communication difficult. Moreover, with heavy academic burden, initiative questions from children fail to draw enough attention. However, abacus and mental arithmetic education can correct this drawback due to its emphasized-participation and its simple fingering fabric. When children finish successfully, confidences induct them to answer questions on their own initiative.

In the abacus and mental arithmetic classroom, children understand the importance of safekeeping abacus and respecting private property of others. While testing each other, they learn how to respect others and express in a proper way. When calculating with concentration, they know how to work effectively. After grasping methods, they have to review consciously which is good to their memory and thinking. Moreover, success in abacus and mental arithmetic encourages children to do other things as well. Take Taiwan's case example. Chinese Taiwan province has a long history of abacus and mental arithmetic, and expell find that children who have learnt abacus and mental arithmetic can also switch their interests and improve scores other subjects. In short, its role in grasping figure and developing multi-brainpower for children is unassailable. We hope that they will further develop themselves once they have fully realized their abilities.

Now, abacus and mental arithmetic is one part of intelligence projects, and it, will be helpful to mathematic and logic ability and multi-brainpower. At last, children will have more choices if ex-class abacus and mental arithmetic activities are able to spread through Hongkong and if we hold academic exchanges at the same time.

Courtesy:

(The author is the President of Hongkong Abacus and Mental Arithmetic Association)