

Mathematics tuition, piano lesson, brain development programme, art appreciation and the list goes on for Singapore's well-meaning albeit over-enthusiastic parents. Eager and anxious about their children's future, parents pack-off their offspring to a plethora of enrichment classes at a tender age.

They hope that these will help their children better prepare for the challenges in school. However, it is often the case that these 'great learning opportunities' turn out to be a form stress for children.

WHY?

Every individual has different learning ability - including children. This learning ability is often linked to the potential of the brain. Unlocking this potential opens the door for limitless learning ability. To achieve this, the development of the right and left brain have to be balanced by stimulating the full use of both sides of the brain.

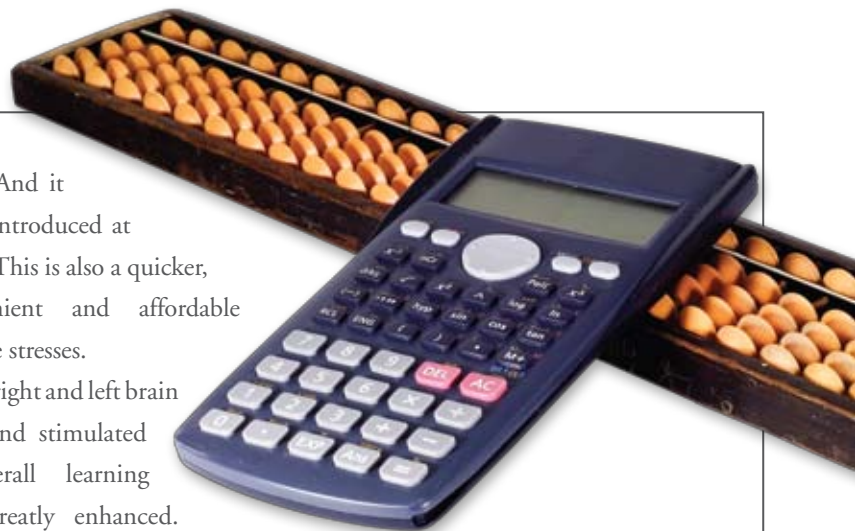
MENTAL ARITHMETIC

Studies have shown that using the abacus to aid mental calculation is effective in developing the brain. "People think mental calculation is about improving

COUNTING ON THE ABACUS

It is often the case that too much learning can be stressful for children. Alice Kong unravels the mysteries of effective learning for young minds with CMA Mental Arithmetic Singapore CEO Tay Shy Ching.





mathematical skills, but it does more than that. Total brain development is the ultimate goal and this method stimulates both sides of the brain, greatly enhancing the learning abilities of children,” says Mr Tay Shy Ching, the CEO and trainer of CMA Mental Arithmetic.

USING THE ABACUS

An abacus is a rectangular shaped instrument, lined with beads fitted on vertical rods and divided into an upper and lower section. It can be used to add, subtract, multiply and divide, and help solve fractions or square and cubic roots. Unlike a calculator, the abacus does not do the actual computing. Instead, it helps users keep track of numbers while they do their own calculating. Users must utilise their own mental powers and in doing so, sharpen their ability to process numbers.

Mr Tay says that CMA students are taught to manipulate the abacus beads with both hands, which is excellent in helping the development of both sides

of the brain. And it can be easily introduced at a young age. “This is also a quicker, more convenient and affordable alternative,” he stresses.

When the right and left brain are engaged and stimulated together, overall learning capacity is greatly enhanced.

Children can perform complex arithmetic faster and concentrate better. As listening intently to complex equations is also part of the process of learning, it enhances memory power and develops keener senses.

PARENTS’ ROLE

“Acquiring total brain development skills will expand the child’s potential, equip him for life and make learning an enjoyable process,” says Mr Tay.

Parents can play an important role in encouraging their children in this activity. “Children need a lot of discipline, encouragement and patience to make

this activity work,” explains Mr Tay.

For young children newly introduced to the abacus, CMA makes use of multimedia devices and flash cards to capture their attention. Using these devices, parents can bond with their children by guiding them at home.

“We also upload some of these valuable teaching materials on the Internet where parents are given access to these websites,” says Mr Tay. Teachers at CMA are happy to lend a hand to parents who face difficulties in guiding their children at home. We encourage parents to regularly communicate with our teachers,” he adds.

LEFT BRAIN RIGHT BRAIN

The theory of the left brain and right brain was developed by Dr Roger W. Sperry, who subsequently received the 1981 Nobel Prize in Physiology or Medicine. In his research, he identified that the right and left hemisphere of the human brain is each a conscious system in its own right and responsible for different functions of the mind.

THE LEFT BRAIN specializes in analytical and logical thought. It processes facts or regulates information that requires structure, rules, categorizing, rationality and deductive reasoning; particularly for mathematics, language, planning, technology and science. Developing these qualities is the predominant focus in most schools and society.

THE RIGHT BRAIN is more holistic and powerful in capturing images. It deals with intuition, emotions, dimensions, visualization, creativity, colours and plays

a definitive role in developing artistic and musical talent. It has the ability to capture information instantly with its photographic memory.

Most people, however, tend to use one side of the brain more than the other. With emphasis on linguistics, scientific and mathematical skills in formal education, one often stimulates the use of the left brain more than the right brain. The left brain tends to take time to analyse and process information, making learning less efficient and contributing to a slow respond.



Mental calculation more than just improves mathematical skills, says Mr Tay Shy Ching.

For more information, please go to www.cma-sg.com