



## **Establishment on the Necessity for Abacus Education**

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We are now in an era of so-called IT or computer. Common people, especially those who are not so familiar with education, tend to draw a superficial conclusion that abacus education is useless. It is a real pity, and we are hurt at it.

I have been thinking about how to understand the abacus correctly, especially about "how to improve its future education".

Here, I would like to inform you my conclusion at first. That is, as a basic element and affixed capacity of human being, abacus and mental arithmetic education is absolutely necessary. What is more, we should work beginning from children so as to maximize its role.

The main reason why some people regard abacus education as useless is that they do not realize its great necessity. In other words, they are unable to identify with "its significance".

In response, we need to do some R&D on its fundamental principles. Without these, we cannot value it correctly.

So far, researches on fundamental principles of abacus education can be induced as follows.

1. As more and more people grasp the technology of abacus; they are sensitive to figures and able to calculate quickly.
2. Abacus-based practice will be effective in improving mental arithmetic ability.
3. The practice on abacus and mental arithmetic will strongly stimulate the right brain, which is beneficial to harmonize our brains.
4. The above practices can activate brains of children and notably improve their academic scores compared to other children.

The first two principles have been accepted by the society.

Related experts proposed the third principle twenty or thirty years ago.

The fourth principle is very essential, and was made by Chinese researchers' investigation. But it has to be studied with more empirical investigation and researches so that we can recognize its entire significance.

Thus, we hope more papers on the last two principles come out. Or more accurately, we must strengthen the study on this field. The author will focus on them in the remainder of this paper.

By making a comprehensive view of current development situations around the world, we can say that even in our new IT era, the real driving forces are not computers, but the experts who use internal command and then control the computers. Thus, considering the development of the nation, society and business, we must educate capable persons.

Then, how can we do that?

For example, when we take photos, we should focus the camera so that observed objects are clear enough. However, the backgrounds might be obscure. We do not need capable persons like cameras. Capable persons we need are "photographers" who can take photos clearly both for the objects and for the backgrounds. In our eyes, the goal of education is to educate capable persons who not only can observe and adapt them to the society (objects), but also can analyze and predict future (back-grounds). That is to say, those who are "advanced" to prepare for the future are welcome.

If future leaders have no such "advanced" characters, then there is no hope for our nation, our society or our business.

For "advanced" capable persons, their right brains have been activated.

Many academic courses play a role in activating the right brain. Among them, the most practical and most effective subject is "abacus and abacus -based mental arithmetic". It is a good instrument to activate the right brain and to educate capable persons with "advanced" character.

There are three types of leaders in modern nation or society, and the most progressive and advanced leaders have developed right -brains. These leaders always look forward; they have intuitive inspiration and good ideas based on visualization, which enables them to quickly adapt various situations.

Now, all nations pay much attention to this type of leaders. Therefore, in order to improve mentality, we should continuously make a balance in developing the two parts of a brain.

"Using hands" is very important for training. Two hands and a brain, regarded as a nerve circle in psychology, connect with each other. To some extent, the hands are the extension of a brain. From this point of view, the abacus education is absolutely necessary for children.

The brain is divided into two parts: the right brain and the left one, and they are closely connected. The former determines the abilities of language, calculation and theory, while the latter is responsible for image, sense and art. These two parts need to cooperate. For example, when we speak our languages, the brain begins to work with its word memory conjunction and grammar conjunction respectively. With the help of the two parts, we can use our languages freely.

For the brain, language only reflects its partial role. Unfortunately, the center of modern education is language; and the left-brain is trained more than its counterpart. Since current education favors the former, we can conclude at least that it will not improve entirely children's mentality.

Generally speaking, the right -brain' mentality is much higher than its counterpart, thus we have enough reasons to argue that it is absolutely necessary to develop the right brain. For example, someone once pointed out that rapidly improved memory further promoted personal ability. If he or she accepted more trains, his or her ability would be improved, or even changed entirely.

Now, let's think about the mechanism of the abacus. The process of driving beads involves with the conception of "figure" which is related to the left -brain, and with kinds of senses that closely connect with the counterpart, thus both sides have been trained. Especially mental arithmetic can do a good job.

In the eyes of psychologists, the method of training the right brain is to relax and concentrate. Actually, it entirely coincides with the training of mental arithmetic. To be frank, the practice on abacus and mental arithmetic is the same as that of developing the right brain.

Compared with those who have not been trained in abacus education, abacus learners have the advantage of strongly activating their brains and making the both sides work in harmony.

It has been approved that the harmonized ability for two sides is not inherent but postnatal. Only by continuous training, the two parts can work well. The process of promoting the function of a brain is called surplus study and repeat study by psychologists.

Once we have realized the fundamental principle of abacus and mental arithmetic, we can educate more advanced and excellent capable persons with efforts.

From that point of view, it is quite essential for colleagues and researchers on mental arithmetic by image of abacus education around the world to reach an agreement, and make efforts to do more researches in rapidly establishing new significance of its fundamental principles. These principles should be easily understood and accepted by common people. That is the conclusion of this paper, and that is hope the author wants to issue no matter what happens.

### **Courtesy:**

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