

## 启发儿童智慧的奥秘32

Liou Shan Tang, Chief Secretary of Jilin Province's abacus calculation association, sums up nearly fifteen years of empirical results into five intelligence-inducing functions of studying abacus and mental arithmetic:

### 1. stimulates early development of children's brainpower

Before studying mental arithmetic, Mao Dong Jie from Jingyu County's experimental class ranked eighteenth in her homeroom. After a year of studying abacus and mental arithmetic, she leaped forward to become top of her class. Her father, who teaches junior high school, noticed significant improvements in Mao Dong Jie's memory, attentiveness and analytical ability. This is common among children who study abacus and mental arithmetic.

### 2. strengthens children's memory

In preparation for entering the knowledge of national conditions contest, an elementary school in Longshan District of Liaoyuan City selected a few students with higher language skills to proceed with training. However, after a long period of time, these students were still unable to memorize the contest problems. With less than a week left until the contest, the school picked five students from the abacus and mental arithmetic experimental class, who quickly memorized the problems, which contained thousands of words and went on to win the contest. The school pointed out that after entering junior high school, students who studied abacus and mental arithmetic not only excelled in math, but also did better at memorizing English vocabulary.

### 3. makes calculation easier for children

Chiang Liang, who attended the twenty-fifth elementary school in Jilin City's Changyi District, went back to his old school after entering junior high school and realized that every day his classmates exhausted themselves in the maze of math and physics numeral calculation problems, dazzled by the piles of worksheets. With a background in abacus and mental calculation, he used only ten percent of the time his classmates used to complete complicated calculations easily, and studied foreign language or practice the keyboard in the extra time he had left, thereby achieving outstanding results in many subjects.

### 4. raises grades in all subjects

In a general exam held by Gongzhuling City's education bureau for the fourteen elementary schools in its twenty subsidiary counties, the fifth grade average score was 81.8 for average classes and 88.6 for abacus and arithmetic classes, a difference of 6.8 points. The percent of passing grades was 97.3% for the whole city and 100% for students in abacus and

arithmetic classes, a 2.7% difference. The percent of outstanding grades was 42.5% for the whole city and 59.7% for abacus and mental arithmetic classes, a 17.2% difference. In addition, in Liaoyuan City's Gongnong Village, four out of the twelve second grade classes in the whole village were abacus and mental arithmetic experiment classes; these four experiment classes took the top four places in the general exam.

#### 5.cultivates supernormal intelligence in children

Most children who study abacus and mental arithmetic possess supernormal intelligence to a certain extent; however, they were not born gifted, but have acquired the effect of "learning migration" in the process of studying abacus and mental arithmetic. Evidence shows studying abacus and mental arithmetic is a great path for cultivating supernormal intelligence in children.

Many parents desperately hope their children receive more effective education during kindergarten to lay down a good foundation before elementary school. On the other hand, kindergarten teachers are perplexed about "underfed" knowledge education, music and art that "don't quench thirst" and "stereotypical" outdoor activities. For preschoolers, in particular, one can neither move elementary courses to kindergartens nor find effective teaching methods. Thus, abacus and mental arithmetic, which have worked effectively in elementary schools, were implemented in kindergartens and achieved great results.

At the second railway kindergarten in Shijiazhuang City of Hebei Province, a two-year experiment was implemented. After just ten months of training an hour every day, fifty six-year-old children had reached or surpassed the second grade math level. The whole class was able to add and subtract numbers that are four-digit or more using the "Two-Handed Method". Sixty-nine percent of the class could move the beads blindfolded and mentally add and subtract ten lines of two-digit numbers. Thirty percent could mentally add and subtract ten lines of three-digit numbers and a very small percent could mentally calculate four-digit numbers.