

启发儿童智慧的奥秘39

So what are the other criteria? I think these should at least include good supplementary teaching materials, enthusiastic support and encouragement from parents and students' own right concepts of learning and diligence in practicing.

Other than the teaching materials designated by the abacus and mental arithmetic teacher, it would be beneficial to read other supplementary teaching materials, such as those related to oral mental calculation and oral calculation. However, with the abundance of abacus and mental arithmetic teaching materials on the market, one must choose carefully. Choosing supplementary abacus and mental calculation teaching materials is like going to the doctor. If the doctor gives the wrong prescription, then not only will it not cure the patient, but may further damage his or her health. The same applies for choosing supplementary materials. If the wrong materials are chosen, not only is learning progress hindered, learning interest may also be affected. Therefore, it is important to ask for expert advice or teacher's recommendations before choosing supplementary materials. Also, it is important to go from easy to difficult when practicing for best results.

Generally speaking, support and encouragement stimulates diligence. Throughout the course of learning abacus and mental arithmetic, children are bound to encounter obstructions and setbacks that affect their learning results. Therefore, parents ought to offer support and encouragement. Support decreases the sense of failure and encouragement stimulates learning confidence and interest. Both of these motivate hard work in children. It is important as a parent to be aware of how children are doing in class to know whether they have encountered difficulties and in turn help them solve problems.

In addition, a parent ought to spare some time to study with his or her children, both to supervise and to let them know that they place importance on their schoolwork to prevent them from becoming lazy. Smart, careful parents may even use the time before and after school to help their children practice mental calculation with license plate numbers, signs and phone numbers. This is an economic learning method that makes good use of time.

I'm sure everybody believes that grades have a lot to do with attitude in class. I've never heard of a student who pays no attention in class but does well in schoolwork. Usually, if a student pays attention in class and studies with the teacher, the results are much better than practicing at home alone. In other words, if a student doesn't pay attention in class, and even skips class, then eventually he or she will not be able to

follow and will have no idea what the teacher is saying and lose interest in learning. Another type of student pays attention in class, but is shy by nature and afraid to speak or ask questions. This is also a learning disability. For these two types of students, if they cannot change themselves, even the best of teachers won't make a difference. Thus, to learn abacus and mental arithmetic and reap harvest, one must develop the right learning attitudes, listen attentively in class, not be afraid to ask and answer questions and learn from mistakes.

Due to pressure from tests and exams, most students fear tests and exams. But without tests or exams, how would we know a student's level and progress? Hence, an appropriate amount of tests and exams is the best way to evaluate a student's progress. For someone learning abacus and mental arithmetic, tests are a kind of practice; it is different from the tests for other subjects. Most abacus and mental arithmetic teachers like to use tests to discover and track student progress and review teaching material and methods.

Thus, abacus and mental arithmetic students ought not to reject tests, but instead realize that only through constant testing can fast improvement be attained. Teachers and parents should also encourage students to enter national abacus and mental arithmetic tests or contests so that students can have more opportunities to practice and make significant progress. If in the case that students don't pass a test or rank high in competitions, there is no need to be discouraged; just try persistently and good results are bound to come.

Other than the few people who have a particularly high IQ, most people are unable to learn abacus and mental arithmetic without perseverance and willpower. Besides practicing according to schedule, I'm afraid there are no other routes. Only through an accumulation of efforts, will one reap an abundant harvest. The great inventor Edison once said, "Success is 99% hard work." This explains that to succeed, one cannot be lazy or rely on luck. The saying "there is no free lunch" has the same reasoning.

According to many years of teaching experience and research, I've compiled the following results (please see attached chart). A beginner in abacus and mental arithmetic will need about five years to reach level ten in mental arithmetic by practicing an hour at home per day. By practicing two hours a day, it will take three years. For abacus arithmetic, the time doubles. As you can see, to reach a certain level in abacus and mental arithmetic, one must practice with perseverance and willpower. This is exactly why out of the many people who learn abacus and mental arithmetic, so few reach level standards.