

In today's world, the form of gift appraisal for children, firstly with basic cognitive tests then moving on to advanced ones according to each child's ability, is becoming increasingly popular and developed. In the US, in some schools, there are special programs for gifted students and programs that can identify gifted students based on their IQ and standardized test scores. In Canada, parents often give their children an anthropometric test from a very young age to find out their child's outstanding personality and strengths. However, you should not completely depend on schools for discovering your children's talents and anthropological indicators are also sometimes unable to follow your children after days and years. This is because the change of mindset and thinking should be constantly recorded in a matter of days, and one assessment is certainly not indicative of the entire development process. There are many factors you can apply to identify a gifted child, but some of them go unnoticed in the traditional education system. If your child is gifted, you need to make sure he/she will receive the special attention needed to fully develop. You can recognize a gifted child through outstanding learning, excellent communication skills, thoughtful thinking and deep empathy. According to the synthesis of Professor Howard Gardner from Harvard Graduate School, there are seven most common forms of intelligence in children, including: spatial, kinaesthetic, musical, interpersonal, intrapersonal, linguistic and logical intelligence.

For the first time, CAT used tests to assess the ability and outstanding strengths of children in each specific field such as music, painting, memory and language, etc. The system of questions in the tests is constructed by CAT members in collaboration with the leading team of education experts and psychologists in the United States. The test fully applies the globally proven school of thoughts. In early 2018, CAT, for the first time, piloted 8 cognitive tests and earned the trust of 6 million parents and more than 14,000 children in 5 countries with a developed education sector such as the UK, the US, Germany, Australia and Canada. This is a cognitive test of international standards which helps children develop outstanding thinking, awakens their innate potential and develops their creativity.

The cognitive test is a system of questions concerning different fields and is used to evaluate and classify the cognitive perception of the person performing the test. Awareness is an action or a process of acquiring knowledge and understanding through thinking, experience and senses, including processes such as knowledge, attention, memory, evaluation, estimation, reasoning, computation, problem solving, decision making, comprehension and language use. That path of awareness is carried out through stages from simple to complex, from low to high, from specific to abstract, from external to inner nature. Based on the understanding about the basic principles of that awareness, the questionnaires are divided into 8 tests in 8 different fields with different characteristics that are suitable for children from 0-10 years old according to each appropriate level to accurately, objectively and fully assess their abilities.

Based on this cognitive test, young children can initially shape their talents and strengths, promote and choose to pursue their inner genius. Young Mozart was more musically talented than everyone. He could fully understand and perform any piece of music or difficult guitar technique right after one teaching by his father. When he was 4 years old, he played the piano very well, including difficult pieces. At 5 years old, his first works as a 5-year-old boy with many good songs, like "Melodica", were composed. His father once again marveled at his son's talent because he taught him to play the piano and violin, yet never taught his son to compose music.

The importance of discovering the aptitude of children from a young age is gradually becoming a top concern for parents. They want their children to fully develop themselves and excel at what they are gifted with. The geniuses, from a young age, have extraordinary qualities in certain areas. However, without daily cultivation and practice, the talent will gradually deteriorate and disappear. With the personalization of the curriculum according to each small change of children, CAT guarantees the after-test output quality that children will be able to think and perceive 3 times better than their peers. Many children, after experimenting with the textbook, have initially achieved significant achievements on the way to conquer their talents.

## ***ABOUT CAT SPATIAL ABILITY TEST***

### **1. What is spatial ability test?**

This is a test of the ability to locate and remember the relationship between objects in space.

“Spatial ability is the ability to understand and remember spatial relationships between objects. This ability can be viewed as a unique kind of intelligence, it can be distinguished from other forms of intelligence, such as language ability, reasoning ability and memorization ability. Spatial intelligence is not a specific and clearly identifiable trait, but is made up of countless specific skills, which are related and will develop in parallel throughout a child’s life ”.

### **2. Is this skill important?**

The "visual-spatial" skill plays an important role for success in solving "tasks" in everyday life. For example, when a child uses a map to find the right place in a strange city or to indicate traffic lanes and orient himself/herself in a new environment, these activities are all related to spatial intelligence. Another example of a task that requires visual-spatial intelligence includes estimation (when a child has to decide whether a gift box is just wide enough for all the teddy bears or not) and how he/she uses reflected images (he/she knows and understands that images are reflected in the opposite direction when he/she was combing his hair in front of a mirror).

### **3. How does it affect future development?**

Spatial capacity plays an important role for success in many areas such as mathematical research, natural sciences, engineering, predictive economics, meteorology, architecture and all related careers. The use of spatial skills is required: for example, an astronomer must visualize the structure of a solar system and the movement of objects

in it. Or an engineer must visualize the interaction of machine parts to assemble the right parts. They are the people who must be able to explain the images on medical x-rays. Spatial observation skills are also important in recovery lost information in structures, molecules or medicinal ingredients. Clearer evidence of the importance of spatial ability in mathematics and education science is compiled by many researchers, including Humphreys, Lubinski, Shea, Wai and Webb. Some of their works are cited in the reading section of books.

In other areas, computer graphics technology is being used frequently to create complex visual images that simulate the processes that occur in the natural world. Techniques are used to describe the complex activities of immune systems, meteorological interactions occurring in the development of a thunderstorm, tsunami, or tornado, and the relationships of atoms and molecules in chemistry.

Despite being important in many areas, in education science, spatial intelligence most of the time goes hand in hand with other abilities, for example it needs to be accompanied by logic, excellent reasoning, a sharp memory and good language skills. Thus, most of those who are able to locate things in space often have extremely good memories.

#### **4. How to develop this ability?**

Ideally, your education should be combined with your child's ability and interests so that your child can be challenged appropriately and have the maximum motivation to learn. It is important to know as much as possible about your child's strengths and interests in all areas. You will probably have many opportunities to get feedback on your child's language and math skills, but spatial intelligence is different and difficult to identify. Therefore, the test score will give you valuable information to determine a route and combine it with your other abilities.

The education plan should be an ongoing process with both short and long-term goals established. Children and parents should establish a close working relationship and talk to their teachers and custodian as soon as possible.

With valuable information and careful planning, children, parents, and schools can ensure an excellent education.

It is important to note that skills that create spatial intelligence are the result of long-term learning and training. Someone's level of spatial intelligence can change over time. A child can gain this skill by working hard, training and studying, but he/she can also be worse at it compared to those who get more experience to support their performance or develop better progress in their intellectual development.

So, if you are concerned about your child's long-term retention of spatial skills, we encourage you to help your child practice his/her memory at any time. If you want to raise the level of performance that your child has achieved, an important factor is enhancing it through practice, training and repeating such a circle. Modern computer software, or the CAT pathway itself, will provide many options to practice about positioning objects in space. Even video games can help your child develop his or her brain, such as "Block Out" and some versions of "Tetris", which have been verified to contribute to enhancing children's spatial abilities.

#### **5. What is your child level in this skill?**

Congratulations, your child is **EXCELLENT** in this area. Your child's judgment and memory are extremely good. He/she can also change between different fields, especially those related to analysis, research, and mathematics. Besides, with good memory, he/she can develop more deeply in the areas related to space.

However, parents should not be subjective to the test results. People still say that genius is only 1% and 99% is practice in order to be successful. Therefore, we also need to give them the right direction to develop 100% of their talents.

You can help develop your child's skills while accompanying the development of other skills by teaching and playing jigsaw games. The leading researcher and psychologist Jamie Jirout of Rhodes University said: "Our findings show that space games are particularly relevant to children's spatial reasoning skills." This is very important because giving children the chance to experience space games such as puzzle and jigsaw is a very easy way to promote the development of children's spatial intelligence right from the first years of life, especially those with little movement space.

The ability to be aware about space and how to use objects in space is an important part of everyday life. It helps us navigate the roads in a city, assemble parts of objects, and use household devices. And these skills are especially important for success in specific academic and professional fields including science, technology and math. Reliable data show us the importance of choosing toys for children. At the same time, parents should encourage their children to express their opinions on issues related to the orientation of things to stimulate their imagination and their logical intelligence.

Emphasize the role of spatial orientation in acquiring knowledge, B.G. Ananhiep also affirmed that there is no form of children's activities in the learning process in which spatial orientation is not an important condition to comprehend knowledge as well as the formation and development of skills, techniques and children's thinking ability. Please pay attention to this to keep track of your child's "performance" in spatial orientation.

"Teaching children to orient in space", especially for young children, is a problem that CAT always cares about and thinks hard to find the best measures to teach children. CAT gives you and your child a pathway to develop the ability to locate things for free. CAT will follow your child's development. Your child's success is also the hope and pride of CAT.