

# Research on Path for Science and Technology Talent to Strengthen Their Humanistic and Artistic Accomplishment

Yujin Liu, Zhimin Chen, Danjiao Wei

Baoding University, Baoding, China  
Email: 18031235906@163.com

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## Abstract

In order to cultivate highly innovative science and technology talent, the Party should adhere to overall leadership over the work of young science and technology talent, and an innovation platform and institutional environment that conforms to the law of young science and technology talent's growth should be built. In the process of education and cultivation, science and technology talent's understanding and practice of sensibility are different from those of rationality. Strengthening the humanistic and artistic accomplishment of science and technology talent can enable them to effectively integrate their sensitive and rational ways of thinking, thus achieving the mutual and healthy development of talent and society.

## Keywords

Science and Technology Talent, Cultivation, Humanistic and Artistic

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## 1. Introduction

Young talents are the source of national strategic talent power. Cultivating and making good use of young scientific and technological talents in an all-round way is an important breakthrough point for China to build strategic scientific and technological strength and solve the current key core technologies. Fully stimulating the vitality of the young scientific and technological talent team and building a good young scientific and technological talent team are important parts of China's future scientific and technological development plan and an important factor in determining future scientific and technological competition (Zhou, 2019). The cultivation of scientific and technological talents not only needs to cultivate scientific thinking and rational thinking, but also needs to

think about how to integrate science and rationality into life, which requires organic supplements of artistic thinking and perceptual thinking. To jointly build a high-quality talent, it should have three necessary factors: scientific innovation, subject professional ability, humanities and artistic literacy, and return to the essence of personality shaping, thinking expansion, and humanistic and artistic literacy development (Cai, 2019).

## 2. Existing Problems of Cultivation of Science and Technology Talent in China

Many problems are faced with in the development of science and technology. For colleges and universities, whether they are cultivating basic education talent or high-tech talent, they must take cultural construction and cultural cultivation as the important contents of improving the cultivation system of integrated talent. The problems in talent cultivation are summarized as follows:

### 1) Lack of cultivation awareness of humanistic and artistic accomplishment and insufficient cognition of artistic accomplishment

Humanistic and artistic accomplishment is the basic knowledge of human beings in the field of humanities (mainly in the field of spiritual life), such as historical knowledge, literary knowledge, political knowledge, legal knowledge, artistic knowledge, philosophical knowledge, moral knowledge and language knowledge. Science and art are two sides of the same coin, and this coin is culture. A Nobel laureate once pointed out the connection between science and art. According to a survey conducted on science and technology talent, about 10% of them said that they did not listen to classical music, and 70% of them only appreciated music occasionally. Obviously, it is far from reaching the point that artistic accomplishment can strengthen people's image thinking ability. Students who only understand technology but do not understand art will be inevitably lack of innovative spirit. The fact proves that, professionals with high artistic accomplishment and agile image thinking are usually more creative in professional activities. Science and technology talent should pay more attention to cultivating their own artistic interest and strengthen artistic edification. The rapid development of Huawei is due to the fact that the company has made great efforts to improve the humanistic and artistic accomplishment of employees. Professor Zhou Haihong, deputy dean of the Central Conservatory of Music, mentioned in a lecture held in our university that he is invited to hold an art lecture for Huawei employees every year. Professor Zhou pointed out that development is what the science and technology talent need to pay attention to, and emphasized the importance of sensibility cultivation. Science and technology talent should develop themselves moderately in the field of humanities. In this way, people-oriented high-tech products can be created.

### 2) Lack of infiltration of humanistic and artistic accomplishment

Due to the lack of understanding of the role of humanistic and artistic accomplishment in talent cultivation, it is often impossible to implement it in talent cultivation, so there is no infiltration of humanistic and artistic accomplishment

and humanistic care.

### 3) Inadequate system of humanistic and artistic accomplishment cultivation

From the perspective of education, art education is an effective link to cultivate humanistic feelings and enhance aesthetic ability. In the process of education and cultivation, science and technology talent's understanding and practice of sensibility are different from those of rationality. The establishment of a humanistic and artistic accomplishment system can enable them to effectively integrate their sensitive and rational ways of thinking, thus achieving the mutual and healthy development of talent and society.

## **3. Unique Role of Humanistic and Artistic Accomplishment in the Cultivation of Science and Technology Talent**

### 1) To form a perfect personality

Humanistic and artistic accomplishment is a world outlook and a value generated by humanistic thoughts and methods, and is an important foundation for personality perfection.

### 2) To develop innovative thinking

There is no doubt that artistic accomplishment can stimulate people's feelings, creativity, imagination, judgment and understanding.

## **4. Analysis of the Path for Science and Technology Talent to Improve Humanistic and Artistic Accomplishment**

On one hand, in view of the weak atmosphere of the humanistic and artistic accomplishment, the education concept of humanistic and artistic accomplishment should be put forward and strengthened, and the role of humanistic and artistic accomplishment in talent cultivation should also be strengthened; On the other hand, it is necessary to create new training mechanism and approaches, build an all-in-one platform for education on humanistic and artistic accomplishment, and explore new carriers and models of such education.

### 1) Fully understand the unique role of humanistic and artistic accomplishment in talent cultivation

The education concept of humanistic and artistic accomplishment and the supplement of humanistic knowledge should be strengthened, and the role of humanistic and artistic accomplishment in talent cultivation should be fully understood. Through humanities and artistic education, science and technology talent can not only develop themselves healthily, but also project the humanistic feelings generated from the education into the scientific theories and technical products developed by them.

### 2) Build a scientific knowledge structure of humanistic and artistic accomplishment and cultivate artistic accomplishment

In 2016, the Ministry of Education issued the "13th Five-Year Plan" for Education Informatization, proposing to explore the STEM subject system. It is an educational initiative proposed by the US government. It is an interdisciplinary education concept that emphasizes practice and is an effective path for the culti-

vation of scientific and technological talents. It has gradually become a consensus in the field of science and technology education at home and abroad (Gao, 2021). Drawing on the concept of STEM education innovation model, it proposes to build a knowledge structure and curriculum training system to improve the humanistic quality of scientific and technological talents. For example, set up humanities and arts courses, take literature, history, art theoretical knowledge, and basic skills of art subjects as the basic learning content of humanities and arts cultivation, strengthen the basics of humanities and arts education, form an assessment system, and evaluate the courses studied every year, so as to Promote and improve the humanistic and artistic quality of scientific and technological talents.

3) Establish a perfect training system for humanistic and artistic accomplishment, enhance the understanding of humanistic and artistic accomplishment and stimulate humanistic awareness

Build a multi-in-one humanities and art literacy education platform, create an integrated environment for humanities and art literacy practice and scientific practice activities, and create a good humanities and art environment and atmosphere. An art platform is not limited to a specific art form, but can involve one art form or multiple art forms, reflecting the connection between different art disciplines. Create an educational platform including music, art, dance, drama (including opera), film and television, calligraphy, etc. Different artistic expressions are suitable for people with different artistic requirements, and they can choose the appropriate art form according to their own situation, so that their spiritual life can be maximized. The practice of art takes many forms and requires a process of creation, expression and appreciation. The process of art practice incorporates behaviors that connect artistic activities, works, personal viewpoints and related cultures, and infuses the thoughts, emotions and cultural propositions of creators, performers, communicators and participants with different cultural identities. This connection will break through the limitations of disciplines and become a comprehensive practical activity that integrates various art disciplines with other disciplines, which plays an important role in the cultivation of the humanistic literacy of scientific and technological talents.

An all-in-one education platform for humanistic and artistic accomplishment should be built to explore new carriers and new models of education on humanistic and artistic accomplishment, and build an innovation platform and an institutional environment that conform to the law of science and technology talent's growth. An integrated environment for science and technology talent's humanistic and artistic accomplishment practice and scientific practice activities should be created. Good cultural and artistic environment and atmosphere should be built. To achieve this, gathering social, cultural and artistic forces to realize resource complementarity, giving play to the educational role of the art space communication position, and focusing on the construction of a high-end art education communication platform all play important roles in the cultivation

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of the humanistic and artistic accomplishment of science and technology talent.

## 5. Conclusion

It is a lengthy course to strengthen the humanistic and artistic accomplishment of science and technology talent. It is not just to spoon-feed the humanistic knowledge, but also to cultivate and internalize the humanistic and artistic accomplishment of science and technology talent. In the world today, qualified talent should be equipped with both technical knowledge and artistic accomplishment. Professor Zhou believes that a man has two major mental abilities: rationality and sensitivity. Rationality represents science, and sensitivity represents art. They are like two wings of a bird. In the cultivation of science and technology talent, if the two are integrated with each other, the field of science and technology will surely usher in another boom.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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