

# Research on the Cultivation Strategy of "Craftsman's Spirit" and Engineering Ability of University Students

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**Abstract.** Based on the craftsman's spirit with excellence as the core connotation, this paper analyzes the necessity of integrating the Craftsman's spirit into teaching in Colleges and universities, and puts forward feasible measures to integrate the Craftsman's spirit into teaching, in order to promote the further development of college education and transport professional and technical talents with comprehensive professional quality for enterprises.

**Keywords:** Craftsman's Spirit; Curriculum Thought and Politics; Practical Teaching; Engineering Ability.

## 1. Introduction

On March 5, 2016, Premier Li Keqiang mentioned in the government work report that we should cultivate a new generation of "Craftsman's spirit" with excellence. In the report of the 19th National Congress of the Communist Party of China, it is proposed to "build a large army of knowledge-based, skilled and innovative workers, carry forward the spirit of model workers and craftsmen, and create a glorious social trend of labor and a professional atmosphere of excellence".

In today's era, the Craftsman's spirit can fully forge our college students, make them have the temperament of "sink" and "potential", make down-to-earth contributions to the great rejuvenation of the Chinese nation and constantly strive to realize their self-worth. The return of Craftsman's spirit is a need of the times. Inheriting and innovating the Craftsman's spirit of college students is an important way to improve the innovation and entrepreneurship ability of college students and the requirement of cultivating "great craftsman" in China. It is of great significance and value to improve the innovation and entrepreneurship ability of college students and the whole society. Therefore, it is imperative to cultivate and carry forward the Craftsman's spirit.

## 2. The Necessity of Integrating Craftsman's Spirit into Teaching

### 2.1 The Cultivation of Craftsman's Spirit Conforms to the Development Status of Our Country

China is a big manufacturing country. As the "mother of industry", the mold industry has always lagged behind the world's advanced countries, in part because of the lack of excellent technicians. We need more employees with meticulous and meticulous patience and rigorous and meticulous work attitude. Therefore, if China wants to change from a manufacturing power to a manufacturing power, we must pay attention to the cultivation of Craftsman's spirit.

### 2.2 New Requirements of Market Development for College Students

Modern enterprises have higher and higher requirements for technical talents, which not only requires them to have solid and extensive basic knowledge, but also requires them to have advanced technological innovation consciousness and professional dedication to their own work. This requires that colleges and universities should not only strengthen the improvement of students' skills, but also pay attention to the cultivation of students' professional attitude. This kind of enterprise's

requirements for graduates' innovative consciousness and professionalism is one of the core connotations of Craftsman's spirit in the new era. Manufacturing enterprises realize excellent creation, better products and customer-oriented service system through manufacturing technical talents with Craftsman's spirit.

### **3. Measures to Integrate Craftsman's Spirit into Teaching**

Colleges and universities run the Craftsman's spirit through theoretical and practical teaching, which can promote the Craftsman's spirit to be internalized into college students' noble spiritual quality and externalized into excellent behavior habits. Skilled professional skills are the basis of the career of Applied Technology students, and the Craftsman's spirit of internalization and externalization is the lasting driving force for their long-term development.

#### **3.1 Give Play to the Important Role of "Curriculum Thought and Politics" in the Cultivation of "Craftsman's Spirit"**

By optimizing the curriculum system, changing teachers' teaching methods and taking Craftsman's spirit as an important teaching content and entry point, we can cultivate students' Craftsman's spirit.

Through the explanation of "course thinking and politics", each specialty penetrates the Craftsman's spirit of the specialty, and teaches the historical process, specific connotation, external performance, representative figures and classic cases of the formation of the Craftsman's spirit unique to the industry, so as to make students feel the charm of their specialty and focus more on the study of professional knowledge. At the same time, make students' own thinking, words and deeds more professional. Let college students have a macro level understanding of engineering ability and Craftsman's spirit. Spirit theory is the basis for the cultivation of Craftsman's spirit.

#### **3.2 Give Play to the Important Role of "Practical Teaching" in the Cultivation of "Craftsman's Spirit"**

Craftsman's spirit is brewed, produced, sublimated and solidified in practice, and its cultivation should also be internalized in practice and experience. Practical teaching has a greater impact on students' vision and touch. It is easy for students to feel the sense of achievement of transforming professional theoretical knowledge into direct productivity, and it is easier for students to appreciate the charm of specialty.

Combined with the characteristics of enterprise production products and talent demand, the engineering training practice course is designed to take the typical work tasks of enterprise production as the teaching project. In terms of content structure and evaluation methods, the teaching is carried out with the cultivation of "Craftsman's spirit" and the improvement of engineering ability.

(1) Adopting the "flipped classroom" model, designing repeated evaluation teaching projects and strengthening training projects, using classroom interaction and in the form of groups to think and answer the key and difficult points in the classroom, which can not only cultivate the team cooperation ability of college students, but also tap the personality advantages of college students and improve their engineering ability. Cultivate the Craftsman's spirit of cooperation and progress among college students.

(2) Through repeated training, students' skill level is improved and the cultivation of "ingenuity" for excellence is promoted. The "exquisite and excellence" of Craftsman's spirit is also the key to realize high-quality products in the process of repeated practice and pursuit of excellence.

(3) When carrying out various skill competitions, the design topics should be related to the actual production as much as possible, and enterprise executives and technical experts should be invited as special guests of the competition. In this way, we can not only promote the corporate culture and Craftsman's spirit, but also find and select excellent talents in the competition, but also overcome difficulties through the platform of colleges and universities.

(4) In the internship of students during graduation, teachers and internship units jointly cultivate and investigate students' craftsmanship spirit. Let students learn the enterprise spirit and integrate into the enterprise culture as soon as possible, learn the spiritual qualities of excellent employees, such as due diligence, efficiency and pragmatism, excellence and courage to innovate, and further understand and strengthen the Craftsman's spirit in the post practice.

### **3.3 Cultivate Teachers with Craftsman's Spirit**

Colleges and universities should regularly arrange teachers to go deep into the front line of enterprises to collect information such as cutting-edge technology, management innovation and development trend, perceive and be familiar with the most core and essential Craftsman's spirit, and widely collect the most vivid and vivid real cases reflecting the Craftsman's spirit, so as to help cultivate the Craftsman's spirit of college students and influence students imperceptibly through words and deeds.

## **4. Measures to Integrate Craftsman's Spirit into Teaching**

Colleges and universities should integrate Craftsman's spirit elements into the construction of campus material culture and spiritual culture, and focus on the edification and cultivation of Craftsman's spirit of college students. For example, they should regularly hold activities such as excellent corporate culture, "great country craftsmen", intangible cultural heritage inheritors and professional talents to enter the campus and classroom, to bring fresh Craftsman's spirit and professional quality into classroom teaching, Spread the positive energy of Craftsman's spirit and establish a new position for the cultivation of Craftsman's spirit. Promote the integration of excellent corporate culture and campus culture, so that students can directly feel the power of Craftsman's spirit on campus.

## **5. Conclusion**

In the process of China's transformation from a "manufacturing power" to a "manufacturing power", craftsmanship spirit is the professional quality and work wisdom that every technician must have. This requires that colleges and universities have the responsibility to implant and infiltrate the professional spirit of excellence, dedication, dedication, innovation and enterprising advocated by the Craftsman's spirit into all links of engineering education. Therefore, the cultivation of College Students' professional quality led by "Craftsman's spirit" is not only the need to implement the economic development strategy, but also the requirement of helping to realize "made in China 2025" and build an industrial power.

## **Acknowledgments**

This work was financially supported by 2021 Shenyang Aerospace University Undergraduate Teaching Reform Research Project. Project fund number: JG2020048.

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