Humanistic Spirit Cultivation for College Students under the Background of “New Engineering and Technical Disciplines”

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Abstract: The education of humanistic spirit is of great significance for the cultivation of talents in the context of new engineering and technical disciplines. In order to achieve further development, the engineering majors in colleges and universities should reshape the educational concept and integrate engineering education into the Chinese traditional culture. Only in this way can higher education promote the interdisciplinary integration of humanities education, science education and engineering education. Only in this way can we achieve comprehensive innovation in modern education and promote the continuous development of new engineering and technical disciplines.

1. Introduction

Under the situation of “China Manufacturing 2025”, “Internet +”, “Belt and Road” and other national strategies such as “Industrial 4.”, the reform of traditional engineering education should also adapt to the country's strategic planning. The background of new engineering and technical disciplines is the development concept of innovation, coordination, green, openness and sharing. According to the interpretation of the Ministry of Education, new engineering and technical disciplines are interpreted as the new concept of engineering education, the new structure of disciplines, the new model of talent cultivation, the new quality of education and teaching, and the new system of classification development. Compared with traditional engineering, new engineering and technical disciplines emphasize the intersection of science, humanities and engineering. The new engineering and technical disciplines education is a combination of comprehensive and comprehensive engineering talents. The goal of new engineering and technical disciplines is to equip students with integration, global vision, leadership and practical skills.

According to the new engineering and technical disciplines education concept, it is necessary not only to cultivate students' subject professional knowledge and scientific innovation ability, but also to cultivate students' humanistic artistic quality. However, due to the lag in the development of domestic school history, humanities education has always been marginalized in China's science and engineering universities. Based on this, we must reconstruct the cultivation of humanistic spirit in engineering education.

2. Significance of Humanistic Spirit

2.1 Concept of Humanistic Spirit

The concept of “humanistic spirit” originated from Western culture, also known as humanism or humanism. The humanistic spirit was originally a literary trend of thought that rose during the Renaissance. The humanistic spirit takes humanity, rationality and transcendence as the core content and value pursuit. Later, with the development of society and the integration of culture, the humanistic spirit was gradually given a deeper social connotation. At present, the concept of humanistic spirit has been endowed with profound social connotations. The humanistic spirit includes different disciplines such as natural science, literature, art, morality, religion, philosophy,
etc. True, good and beautiful is its ultimate goal.

Humanistic spirit is one of the essential qualities of contemporary college students. An important part of quality education in the history of humanities education has a positive effect on improving the overall quality of college students. 

2.2 Significance of Cultivating Humanistic Spirit in Colleges and Universities

The cultivation of humanistic spirit is the core content and soul of modern education. In modern society, college education bears the heavy responsibility of spreading cultural knowledge. The humanities education in colleges and universities can cultivate the creators and communicators of new social ideas. The creators and communicators of these new ideas are driving the continuous development of the entire social value system. The university is an incubator of new ideas and a repository of outstanding talents. Human beings are the creators of culture and the builders of society. Today's universities can adapt to the development trend of modern society only by cultivating modern talents with perfect personality, advanced thinking and individuality. Higher education is an important position for the state to train high-quality talents. It is reasonable to strengthen humanities education to promote social development and progress. 

3. Status Quo of Humanities Quality Education in Engineering Colleges 

3.1 Significance of Cultivating Humanistic Spirit in Colleges and Universities

Due to the late start of China's economic and social development, the study of humanistic quality education is also slow. Humanities education is very important to improve the overall quality of students. However, it is still difficult for engineering colleges to establish a good atmosphere for humanistic quality education. Many colleges only pay attention to the setting of professional courses, and the humanities quality education is marginalized. 

3.2 Utilitarianism of Student Learning

Some students have a strong utilitarian after entering the university. The primary purpose of these students to study is to find a good job or to get a better education. Therefore, these students regard the study of professional courses as a top priority. In addition, these students have also invested a lot of experience and time to obtain professional certificates, thus ignoring the improvement of their own humanities. 

3.3 Poor Self-control of Students

There are also some students who are indulged in online games because they are less self-disciplined. These students' professional studies are still not taken care of, let alone the improvement of self-humanity. 

3.4 Humanities Literacy Related Curriculum System is Incomplete

At present, most engineering Related colleges have fewer courses related to humanities literacy. Many majors tend to pay more attention to professional courses when developing curriculum plans. 

3.5 Poor Staff of Humanities Literacy Related Courses

The number of teachers in the existing humanities quality education is lacking, and the quality of teachers is also urgently needed to be improved. In many institutions, various subject declarations and vocational training tend to be professional curriculum teachers. This phenomenon has also caused the enthusiasm of the humanities quality teachers to work to a certain extent, thus affecting the teaching effect. 

3.6 Campus Lacks a Humanistic Atmosphere

Some engineering colleges are located in small cities or remote, lacking opportunities for cultural exchanges. Some engineering colleges have a short time to establish schools, and the school's historical accumulation and cultural heritage are scarce. These circumstances will cause the
overall cultural atmosphere of the campus to be not strong.

4. Cultivation Strategy of College Students' Humanities Spirit Under Background of New Engineering and Technical Disciplines

College ideological and political education advocates the return of humanistic spirit and attaches importance to the cultivation of scientific spirit. It aims to cultivate college students with a scientific spirit and a good humanistic spirit. Colleges and universities must not only impart students scientific knowledge and professional skills, but also shape students' values and world views.

4.1 Advocating Mainstream Values

Contemporary colleges and universities must disseminate the correct socialist core values to college students. In the process of higher education, schools should pay attention to the subjective status of the educated, and emphasize the differences in students' individuality and care about the individual needs of each student. Only in this way can colleges and universities stimulate the initiative and innovation of college students, thus promoting the all-round development of college students.

4.2 Attach Importance to Spirit of Science and Humanism

The history of college education proves that humanistic education lacking scientific spirit and science education lacking humanistic spirit are incomplete education. In the process of ideological and political education in colleges and universities, colleges and universities should carry forward the educational philosophy of attaching importance to scientific spirit and humanistic spirit while paying attention to scientific development.

4.3 Change Concept of Education and Correctly Understand Importance of Humanistic Quality

Real talents are not only outstanding in practical skills, but also should have the innovative ideas and independent ideas of simultaneous development, aesthetic taste, noble morality, and comprehensive development of mind and body. Although higher education is gradually becoming popular education, humanistic education is indispensable. The main purpose of humanistic quality education in engineering colleges is to cultivate students' humanistic spirit. Humanistic quality education can enable students to love themselves, love others and society, and learn to live in harmony with others. Therefore, it is necessary to change educational ideas, establish a correct concept of talents, and recognize the importance of human qualities.

4.4 Establish Reasonable Humanities Quality Education Curriculum System

As a non-professional technology education, humanistic quality education has its own development law. Engineering colleges should fully integrate the specific conditions of the school to carry out humanities quality education. In engineering colleges, humanistic quality education can be carried out in various forms. Classroom teaching is one of the most important forms of humanistic quality education. Setting scientific and reasonable humanistic quality courses in engineering colleges can make humanistic quality education more effective. The curriculum of a single engineering major is not conducive to the cultivation of students' humanistic qualities. Therefore, setting a reasonable humanistic quality course can provide good conditions for the cultivation of humanities quality of engineering college students.

4.5 Optimize Faculty

The cultivation of humanities quality in engineering colleges requires the construction of a group of excellent teachers. The impact of teachers on students is direct and far-reaching. The human qualities of the teacher's personality, life philosophy, values and other factors will have a subtle influence on the students. However, it is undeniable that the majority of engineering colleges have poor professional talents. In such an overall environment, the construction of a team of outstanding
humanities teachers is a must. In order to ensure the quality of the humanities teachers, relevant personnel and professional teachers should be trained and evaluated, and excellent humanities professionals should be recruited to join the teaching team.

4.6 Create Campus Human Atmosphere

A good campus culture is the foundation for building a school spirit. A strong cultural atmosphere can enhance the effect of humanistic quality education. The development of various campus cultural activities can enhance the humanities quality of college students and optimize their temperament and accomplishment.

5. Summary

The cultivation of humanistic spirit is an important part of higher education. It is very necessary for engineering colleges to establish a reasonable humane quality training system. Of course, the process of humanistic education in engineering colleges is long and arduous. The cultivation of humanistic quality should go through the whole process of talent cultivation. Only in this way can college students master more subject knowledge and thinking methods, improve their minds, cultivate their good social habits, and promote their overall growth.

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References

