

# Research and Practice on the cultivation mechanism of craftsman spirit in Vocational Colleges

Shengying Xiao

Shandong University of Engineering Technology, Jinan 250200, China

**Abstract:** as an important subject of implementing the strategy of rejuvenating the country through science and education, education shoulders the important task of providing talent support for Chinese modernization. At present, the vocational undergraduate colleges are in the initial stage, and the cultivation of craftsman spirit is a new problem faced by vocational undergraduate colleges in the cultivation of high-level technical and skilled talents. By organically integrating craftsman spirit with the talent cultivation process, we can truly cultivate high-level technical and skilled talents with craftsman spirit, high enterprise and social satisfaction, It is a problem that vocational undergraduate schools need to explore, improve and improve for a long time.

**Key words:** vocational undergraduate colleges; Craftsman spirit

## 1. The basic connotation of craftsman spirit

1. Dedication is a kind of spirit. In today's society full of temptation, persistence and concentration are often reflected in self-control and the spirit of persistence and concentration. On the road of life and career, even if they may face failure, they can at least have real inner peace, endure loneliness, work slowly and carefully, be down-to-earth, reflect value in persistence and create value in concentration.

2. Keeping improving is a noble quality. People with craftsmanship spirit pursue perfection in quality and perfection in technology. With the spirit of nails, they work tirelessly to pursue perfection and refinement, and optimize "products" step by step into "boutiques". They are always on the way to climb the highest peak in their work.

3. Meticulous is a realm. Meticulousness is the adherence to details and rigorous attitude, and it is the working state of being careful and attentive. In this dedicated working state, the skilled skills and accumulated rich experience of workers can be better used in the manufacturing process to achieve the perfect realization of high-quality products.

4. The pursuit of excellence is an ideal and belief. The pursuit of excellence is the lofty ideal and belief, and the driving force of pursuit, passion, continuous innovation and eternal climbing. It is a state of playing its own advantages, capabilities and available resources to the extreme, pursuing the top level of the industry and striving for the first class bravely.

## 2. Establish the cultivation mechanism of craftsman spirit

### 1. Campus culture highlighting craftsman spirit (guarantee)

Through the process of penetrating the construction of craftsman spirit into the campus culture, we should adhere to the fundamental mission of Building Morality and cultivating people, adhere to the "three complete education", create a unique school running concept and school running orientation conducive to the cultivation of craftsman spirit, build a dual campus culture, carry forward the excellent traditional Chinese culture, and integrate the craftsman spirit into students' learning and life, Constantly cultivate students' socialist core values, and inherit the campus atmosphere of "advocating morality and technology".

First, spread the craftsman spirit through the main front of the classroom. The elective course "craftsman spirit" is opened to introduce the significance and connotation of craftsman spirit and typical examples of craftsmen in large countries to students, so that students can systematically understand what craftsman spirit is and form the ideology of craftsman spirit. In the course of Ideological and political education, the spirit of craftsman is integrated, and the charm of Chinese traditional culture is imperceptibly influenced by students, so as to cultivate the professionalism and dedication of craftsmen from large countries.

The second is to use the publicity media to create a spiritual atmosphere for craftsmen. Make good use of some publicity methods and media of the school, such as wall newspaper, school newspaper, radio station and other media, to publicize and report the craftsman spirit, so that it can be integrated into the daily life of teachers, students and staff, and various occasions of the school, so that the craftsman spirit can inspire teachers and students all the time and everywhere.

Third, infect students with real people and facts. Invite outstanding artisan talents and entrepreneurial graduates from the society to give a report to the school, pass on lessons and send treasures to teachers and students, and use craftsman spirit to infect students and cultivate their professional quality and feelings.

### 2. Build a talent training program to cultivate students' knowledge and ability, craftsman spirit and professional quality (content)

The reform of talent training mode is mainly reflected in the reform of teaching and curriculum. Classroom, experimental training and practice are important parts of talent training in undergraduate vocational colleges, which are not only the main content of teaching, but also the focus of curriculum reform.

The first is to build a talent training teaching reform mode conducive to the cultivation of craftsman spirit. It is mainly to cultivate high-quality technical and skilled talents with the spirit of craftsman in a big country, realize the reform of teaching methods in the three

education reform, and build a talent training mode of "first line, two integration and three stages". Front line: combination of education and training, with the main line of cultivating students' technical skills, knowledge and training application and innovation, entrepreneurship and efficiency creation ability as the main line, two fusion: the integration of schools and enterprises, three stages: the first stage (1-3 semesters) of integration of theory and practice, basic practice, school enterprise cooperation, quality training, and the second stage (4-6 semesters) of docking posts, project practice, school enterprise co education, and ability training, The third stage (7-8 semesters, extracurricular + vacation) is post following, industry university research and innovation, school enterprise integration, and innovative training. The whole training mode is divided into three different stages step by step, and the craftsman spirit is integrated into each stage of the teaching process, so as to cultivate compound and innovative technical skilled talents with international vision, professional quality and craftsman spirit who are competent for the information technology post group.

The second is to create a curriculum system conducive to the cultivation of craftsman spirit. Through the professional public training base supported by the government, we will continue to vigorously promote the reform of teaching modes such as the integration of theory and practice, the combination of work and study, knowledge reserve, and professional quality, form basic ability modules, core ability modules, and professional quality ability modules, expand the general core courses, optimize the professional core courses, and achieve the goals of curriculum content, industrial specialty, professional ability, professional quality. The seamless connection of Ideological and political education, teaching process and production process of the course, the use of curriculum standards, teaching plan courseware and classroom teaching, promote the integration of craftsman spirit into all courses, and continuously strengthen the cultivation of the whole process, so as to contribute to the promotion of the development of science and technology and the actual production of enterprises in our province.

Third, the teaching mode of continuously promoting the cultivation of craftsman spirit in the teaching reform. To integrate "teaching, learning and doing", the "321" teaching design reform is proposed, that is, the new product development projects of enterprises and the works of College Students' engineering machinery entrepreneurship, innovation and efficiency competition are combined in one; The design, processing, production and manufacturing of the competition works are combined with the contents of teachers' teaching, the cultivation of students' innovative thinking of professional ability and the promotion of professional posts are combined, and the theoretical knowledge system of teaching courses is reorganized and optimized to promote the continuous development of curriculum teaching reform; Promote the reform of teaching methods and methods, integrate imparting knowledge, cultivating ability and improving quality, constantly strengthen the teaching of professional courses, and form a targeted, practical and practical curriculum system; Constantly strengthen the combination of students' professional training skills knowledge and post skills assessment content, integrate the assessment content of "1+x" vocational qualification certificate and the training content of skills competition into the teaching practice process, and make the classroom the main channel for inheriting "craftsman spirit".

### 3. Establishing a resource sharing center for school enterprise cooperation (measures)

The cultivation of craftsman spirit of students in vocational colleges is not achieved overnight, but a systematic and long-term work, which requires the joint efforts of schools, enterprises and society. It is necessary to continuously strengthen the education, practice and experience education of craftsman spirit, so as to organically combine craftsman spirit with practice, experiment and training, skill and technology training, and cultivate students' Moral Situation and hard-working spirit.

Establish and make good use of the cooperation and co construction of school enterprise cooperation and sharing resource center. The enterprise arranges instructors to enter the school, inputs raw materials, machinery and equipment, and assigns production tasks to students. The enterprise instructors and school teachers jointly guide students to carry out production training, so that students can experience the real production environment and feel the "ingenuity" and "Craftsmanship" of the enterprise, So that the cultivation of "craftsman spirit" can be organically combined with teaching practice.

On the other hand, teachers participate in the construction and operation of the school enterprise co construction engineering specialty and public training center, strengthen the technical skills training of teachers, and let students complete the whole production process training under the joint guidance of teachers and enterprise supervisors. Constantly strengthening the understanding of the management of corporate culture and the process of tackling key technical problems has also promoted the improvement of teachers' skills, knowledge, practical ability and practical experience, and strengthened teachers' in-depth understanding of the cultivation of craftsmanship spirit. For example, we employ enterprise technical experts as guest lecturers, formulate management specifications for guest lecturers, and continuously improve one-to-one assistance. The guest lecturers bring the latest R & D means and technologies of industrial enterprises, the development and practice experience of the latest projects, and the latest management skills into the classroom, With the joint efforts of full-time teachers in the school, both sides' special teaching ability and enterprise practical ability are continuously improved.

Based on the school enterprise joint teaching team, an off campus training and internship steering group was established to jointly study and formulate student training and internship plans, and seriously implement them. Enterprise instructors conduct internship guidance and attendance for students. Teachers with rich experience in professional projects and strong sense of responsibility serve as internship instructors in the school, cooperate with enterprises to guide students, jointly solve enterprise problems, and jointly cultivate craftsman spirit.

The school enterprise sharing resource center provides teachers with an in-depth understanding of the craftsman spirit, the quality online open courses built in the school, and the platform for provincial resource sharing courses. It constantly updates practical videos, question banks, cases, and the characters and deeds of the craftsman spirit, so that students can constantly master new knowledge and

training skills in the course of Ideological and political education, not only for students to learn, At the same time, it also provides a guarantee for the creation of a "double qualified" teaching team and the cultivation of craftsman spirit. Follow the industry, turn around enterprises, and deepen the integration of production and education.

### 3. Constructing a diversified student evaluation system reflecting the "craftsman spirit"

1. Diversification of assessment objects. The cultivation effect of craftsman spirit is not only reflected in students, but also has a great relationship with the role of teachers and business mentors. Therefore, we should change the traditional mode of taking students as the only assessment object, and take students, teachers and business mentors as the assessment objects. Teachers and enterprises assess students, focusing on the evaluation of students' knowledge and ability level and professional ability and quality; Enterprises and schools assess teachers, focusing on the evaluation of teachers' "double qualified" quality; Both schools and enterprises assess the enterprise instructors, focusing on the evaluation of the technical skills and teaching ability of the enterprise instructors. The diversity of assessment objects not only assesses the training effect on students, but also assesses the ability and level of teachers and business mentors in talent training, so as to promote the high-quality development of teachers.

2. Diversification of assessment indicators. Different assessment schemes are specified for students, teachers and instructors to assess students' learning ability, practical ability and professional ability. The assessment scheme covers nine aspects, including learning attitude, interest, ability, basic practical ability and comprehensive ability, as well as professionalism, innovation, lean and professionalism. The weight of process assessment is increased. In addition, in the formulation of graduation assessment indicators and practical assessment indicators, enterprises' assessment opinions are added. Schools and enterprises jointly formulate assessment plans, focusing on professional ability and job skills, integrating the cultivation of craftsman spirit into them, and jointly building a diversified student evaluation and assessment system with enterprises. The combination of professional practice and post vocational skills assessment, the combination of practical training of vocational skills and technology competition and experimental training cases in teaching materials, and the combination of examination content of vocational qualification certificate and experimental training courses provide the basis for the cultivation of craftsman spirit of vocational undergraduate.

In addition, teachers and enterprise instructors will be assessed in terms of enterprise training, skill recognition and apprenticeship performance.

3. Third party evaluation is introduced. The achievement of talent training objectives and the satisfaction of parents and Society (enterprises) are important indicators of the evaluation system. Through questionnaires, interviews and other forms, we can understand the satisfaction of students' parents, employment units and society on the talent training of the school, and listen to their opinions and suggestions on talent training, so as to continuously improve the talent training work of the school.

### 4. Problems and thinking

The cultivation of craftsman spirit is a new problem faced by Vocational Colleges in the cultivation of high-level technical and skilled talents, especially how to organically integrate craftsman spirit with the talent cultivation process and incorporate it into the quality evaluation system of undergraduate vocational colleges, so as to truly cultivate high-level technical and skilled talents with craftsman spirit and high satisfaction of enterprises and society, It is a problem that vocational undergraduate schools need to explore, improve and improve for a long time. We should constantly sum up experience in educational practice, innovate and develop in finding and solving problems, implement the fundamental task of Building Morality and cultivating talents, and make craftsman spirit inevitable in talent training in vocational colleges.

### References:

- [1] Tianshu Wang Discussion on the cultivation strategy of craftsman spirit of undergraduate vocational college students [j]Journal of Kaifeng Vocational College of culture and art, 2020 (11): 148-149
- [2] Jinfeng Xia Research on the talent training practice of "craftsman spirit" in Vocational Colleges [j].2021 (1): 110-111

**About the author:** xiaoshengying (1982-), female, born in Tai'an, Shandong Province, is a graduate student and associate professor. Her main research direction is vocational education.