

Exploration of the Connotation and Cultivation Path of Craftsmanship under the Reform of Vocational Education

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Abstract: Craftsmanship is a vital spiritual aspect of China's manufacturing industry's transformation and upgrading in the new era. It is also an essential part of the educational reform of higher vocational colleges and universities. This paper definitively discusses the meaning of craftsmanship, analyses the necessity of cultivating craftsmanship from industrial, national and social perspectives, and proposes a clear path for the cultivation of craftsmanship at three levels: school teaching, school-enterprise cooperation and government guarantee.

Keywords: Vocational Education; Craftsmanship; Internal Exploration; Reform of Vocational Education

1. Introduction

With the transformation and development of the social economy, China is transitioning from a low-end, high-energy consuming manufacturing country to an intelligent manufacturing powerhouse. In the process, there are new requirements for talents, especially skilled talents, from the original ability to explore and innovate. In the revised Vocational Education Law of 2022, it was clarified for the first time that vocational education and general education have equal importance, marking a new turning point in vocational education reform. In the process of exploring vocational education reform, the cultivation of craftsmanship spirit is one of the important topics.

However, previous vocational education reforms often focused on emphasizing the employment and skill improvement of students, while neglecting the cultivation of craftsmanship spirit for their spiritual literacy, resulting in most graduates lacking sufficient enthusiasm and patience for their respective industries. Without

sufficient time for diligent research in the industry, it is difficult for graduates to effectively transition from ordinary skilled workers to industry craftsmen. Therefore, how to infuse the spirit of craftsmanship into vocational education and cultivate students into skilled talents with continuous improvement, keeping up with the times, and being dedicated to their work is an essential exploration direction in the development of vocational colleges in the new era.

2. The Connotation and Practical Foundation of Craftsmanship Spirit

2.1 The Connotation of Craftsmanship Spirit

The concept of "craftsman" originated from ancient Chinese, originally meaning the combination of craftsmanship and work. In traditional culture, craftsmen often represent talents who are proficient in craftsmanship or have special skills. These types of talents often use this craft as a means of livelihood, with long-term practice and rich experience accumulation, such as blacksmiths, carpenters, potters, etc. who have mastered specific industries or fields of technology. Compared to apprentices, craftsmen also possessed a high level of technical ability at the time, and their products focused on details and quality. For example, the Ru porcelain fired by the porcelain craftsmen of the Song Dynasty underwent certain innovations and improvements based on the Tang Dynasty craftsmen, and the light sky blue glazed porcelain produced by firing is renowned worldwide. In summary, craftsmen have represented a group of technical talents from ancient times to the present, who possess exceptional skills or special techniques, have a long-term practical experience foundation, and are able to carry out certain innovations.

The term "craftsman spirit" evolved from the ancient term "craftsman" and represents spiritual connotations such as innovation, dedication, focus, excellence, professionalism, rigor, and innovation [2-3]. It is a professional spirit that reflects the behavior and values of practitioners, and is a combination of professional quality, professional ability, and professional ethics. The spirit of craftsmanship is a highly condensed pursuit of oneself and moral self-discipline, as well as a good supplement to the legal aspect and a higher pursuit of labor contracts.

In the context of the new era, the spirit of craftsmanship needs to pay more attention to the innovative connotation of talents. Innovation is bringing a new technology or product. Innovation not only refers to the process from scratch, but also to the process from scratch to excellence. It can be the invention of a new product or technology that has never been seen before, or the improvement of existing technology, process, or product that has not been seen before. This kind of innovation is mostly not a sudden inspiration, but more about discovering problems and making certain improvements based on long-term practice.

Of course, the spirit of dedication, focus, professionalism, rigor, and excellence required by traditional craftsmanship cannot be lacking. Dedication gives workers a love and awe for the industry, helping them work diligently and with focus; Focusing on providing workers with persistence and persistence, especially in achieving the top level in certain industries and overcoming various difficulties in their work; The pursuit of excellence in providing workers with quality is the core of the craftsmanship spirit. Without the advanced technical level accumulated in the process of continuous improvement, the craftsmanship spirit cannot be discussed; Professional and rigorous quality helps workers achieve better performance and results. The above six qualities complement each other, and traditional qualities provide more foundation and connotation for innovation.

In the report of the 20th National Congress of the Communist Party of China, it is emphasized to promote the spirit of labor, struggle, dedication, and innovation, and to cultivate more great country craftsmen and high skilled talents. Emphasizing the spirit of craftsmanship means regulating behavior, guiding ideology, and guiding values at the ideological and moral level. Therefore, the spirit of craftsmanship in the

context of the new era has richer and deeper spiritual connotations and ideological guidance for industries, education, and even social levels.

2.2 The Realistic Foundation of Craftsman Spirit

The development and cultivation of any spirit cannot be separated from the basic conditions of the real socio-economic environment, and the spirit of craftsmanship is no exception. Good socio-economic conditions provide the necessary conditions for cultivating the spirit of craftsmanship and promote its healthy development.

(1). Changes in industrial work requirements
Since the State Council released the "Made in China 2025" strategy in 2015, China's manufacturing industry has taken solid steps towards green environmental protection, high-end, and intelligent development, and is gradually approaching this goal. Under the guidance of national strategies and the development needs of each industry, there have been significant differences from the environment of the first two decades of self reform and development.

In the early stage of reform and development, due to the generation of low value-added products, the entry threshold for workers in various industries was relatively low. Employers often only required workers to master a simple skill when recruiting employees, and most workers also switched jobs in different units or industries.

Since entering a new era, various industries in China have gradually transformed and upgraded. In this context, the skill level requirements for skilled talents continue to increase, and the innovative problems encountered in their industry have surged. This requires workers to have a professional and rigorous spirit, be dedicated to their work, strive for excellence, and innovate based on it to create greater industry added value. Therefore, the cultivation and development of the spirit of craftsmanship have a social and economic foundation.

(2). Changes in national education orientation

In the early stages of reform and opening up,

vocational education in China was in its infancy. During this period, the Ministry of Education mainly introduced advanced vocational education experience from abroad, and vocational education showed extensive development. After 1985, the country began to attach importance to the important position of vocational education in national development and increased resource investment in vocational education. However, during this period, most of the investment was focused on employment rates and technological levels, neglecting the cultivation of craftsmanship spirit, and vocational education focused mainly on theoretical knowledge, neglecting the cultivation of practical skills and professional competence. In the new era, with the revision of the Vocational Education Law, vocational education has been given corresponding status from a legal perspective, which also marks a new era for vocational education. At the same time, vocational colleges are gradually shifting from theoretical education to the cultivation of practical skills and professional qualities. The orientation of national education is from introduction, to emphasis, and then to establishing equal importance. This series of changes is influenced by social and economic development factors, as well as the gradual accumulation and transformation of vocational education and vocational colleges themselves. The essence of vocational education is to cultivate professional and technical talents, and the continuous deepening and development of professional and technical talents cannot be separated from the spirit of craftsmanship. The spirit of craftsmanship and the development of vocational education complement each other. Therefore, the development of vocational education has entered a new stage, providing an educational foundation for the cultivation and development of craftsmanship spirit.

2.3 Changes in Social Concepts

The rapid development of our country's economy has made the pursuit of high

salaries and high social status a mainstream concept. However, vocational education has a weaker long-term status and social recognition than general education, resulting in the neglect of craftsmanship skills and a dedicated and focused work attitude. Moreover, young people generally pursue popular industries, which has led to the marginalization of professions that require long-term persistence and refinement.

In recent years, the gradual transformation of social attitudes and concepts towards vocational education, as well as the reignited interest of young people in non popular industries, have accumulated a social cognitive foundation for the cultivation and development of craftsmanship spirit.

3. The Cultivation Path of Craftsmanship Spirit in the New Era

3.1 Education and Teaching Guide Shaping Values

Teachers are one of the shapers and guides of students' pre social values. To implant the spirit of craftsmanship into vocational education and cultivate students' craftsmanship, it is necessary to first play the important role of schools and teachers in it. Give full play to the different roles of public course teachers, professional course teachers, skill masters, and relevant functional departments of the school.

(1). The Value Guidance of Teacher Teaching

Public courses, especially ideological and political courses, play a crucial role in cultivating morality and talent among vocational college students. One of the important responsibilities of ideological and political education teachers is to cultivate more new vocational education workers who conform to the correct social values, and to enhance the effectiveness and pertinence of ideological and political work. The craftsman's spiritual values will be embedded in the ideological and political curriculum education of students, and teachers of ideological and political curriculum will be actively encouraged to

design daily curriculum teaching, especially the advanced deeds of great craftsmen regularly publicized by the state and the deeds of provincial and municipal model worker. For example, for new students who have just entered university campuses, their sense of freshness and curiosity is relatively strong. At this time, advanced deeds that reflect the spirit of dedication, dedication, innovation, etc. are interspersed in the curriculum, igniting the new students' patriotism, laying a foundation for the cultivation of the value of introducing craftsmanship, and providing value guidance for the study of professional courses.

Professional course teachers need to introduce the spirit of craftsmanship in professional courses and integrate it into the form of ideological and political education in the curriculum. It is often difficult to introduce such ideas and spirits into professional courses, as the course content taught may not be perfectly interwoven, which tests the teaching ability of teachers and leads to most teachers not paying much attention to this aspect. However, traditional professional courses often only focus on teaching professional knowledge and theories, and excessively output cold professional knowledge to students. Students have difficulty digesting and absorbing knowledge, leading to a continuous gap between teacher teaching and student listening, seriously affecting the overall teaching effect.

Therefore, clever design of ideological and political elements in the curriculum is particularly important. A good design can ensure that the teaching of course knowledge does not conflict with ideological and political elements, while also enhancing the activity of students in the classroom. Combining cold professional knowledge with passionate examples of craftsmanship spirit, especially when students are in a state of knowledge saturation after listening to a large amount of professional knowledge, a relaxed and enjoyable story can not only alleviate students' tension and fatigue, but also

promote the absorption of knowledge and sow the seeds of craftsmanship spirit.

Various skill masters in vocational colleges should also be an important driving force in cultivating the spirit of craftsmanship among students. Because they have rich practical experience and skill levels, their personal experience is a vivid banner for promoting the spirit of craftsmanship. In the process of teaching courses aimed at students, combined with the country's demand and current situation for vocational education skilled talents, using one's own work experience and the excellent deeds of others in the industry, supplemented by the influence of craftsmanship spirit, help students establish correct professional values.

(2). Auxiliary guidance from school functional departments

The relevant functional departments of the school, such as the Academic Affairs Office, also need to play a supportive and guiding role. The cultivation and shaping of the spirit of craftsmanship solely rely on the teaching approach of teachers, which is too singular. Sometimes, it can only stay at the conceptual level, making it difficult for students to truly feel the core of this spirit.

School functional departments can assist in guiding and promoting the spirit of craftsmanship from the following aspects: creating a campus atmosphere and environment for the spirit of craftsmanship, such as building a month for promoting the spirit of craftsmanship, a Q&A or debate session on the knowledge of craftsmanship, and inviting craftsmen from enterprises or industries to give speeches; Through competition to promote learning, in various skill competitions, students can fully appreciate the professional, rigorous, and striving for excellence character, and under the careful guidance of skill masters, comprehend the connotation of craftsmanship.

(3) Optimization of Education and Teaching Evaluation System

The optimization of the education and teaching system requires vocational colleges

to effectively transform traditional education and teaching concepts, and incorporate the cultivation of craftsmanship spirit into moral education. Vocational colleges need to effectively incorporate the cultivation of craftsmanship spirit and the guidance of values into and construct specialized talent training programs and curriculum teaching plans, and strengthen the promotion and cultivation of spiritual values in a planned, systematic, and complete manner. Teachers are encouraged to explore the ideological and political elements of craftsman spirit in the curriculum, flexibly apply the typical deeds of great artisans and model worker to the teaching process, and summarize and compile characteristic textbooks. Establish a student motivation and evaluation system guided by correct professional values, remove previous systems that conflict with the values of craftsmanship, and incorporate the craftsmanship spirit into the evaluation process of students' "Three Good Students", "Excellent Youth League Cadres", and scholarships, forming a more value oriented, scientific, and comprehensive evaluation system.

3.2 Collaborative Cultivation of Craftsmanship Culture Between Schools and Enterprises

Practice is the cornerstone of cultivating and promoting the spirit of craftsmanship. The practice of vocational colleges cannot be separated from school enterprise cooperation, for example, the dual education system is a typical example of deep cooperation between schools and enterprises. One of the key to deepening school enterprise cooperation is to establish stable cooperative relationships with enterprises in the industry. This relationship can be reflected in the following aspects: sharing resources such as teaching, equipment, and venues, and jointly building practical education bases or on campus factories; Actively conduct research and on-the-job training activities with enterprises, and establish a talent resource pool; Establish order classes and enterprise classes, with teachers and engineers from

both sides teaching together; Collaborate with enterprises to develop talent training programs, teaching plans, and develop related courses and textbooks.

By further deepening the cooperation between schools and enterprises, actively integrating enterprise elements into vocational education, integrating advanced technology, management, and concepts into the curriculum, breaking the bottleneck of traditional educational theories being difficult to effectively transform into practice, we can not only cultivate skilled talents that meet the needs of enterprises and industries, but also pass on the concept and connotation of craftsmanship spirit to students in the process of combining theory and practice, subtly guiding students to establish the character required by craftsmanship spirit, and efficiently transmitting craftsmanship spirit between schools and enterprises.

3.3 Building a Craftsman Culture Guarantee System

Guiding the spiritual value of craftsmanship at the school level, and then deepening the connotation of the spirit at the enterprise level, this process also requires the government to build an effective craftsmanship culture guarantee system. For example, measures such as providing policy preferences for pilot colleges to promote the spirit of craftsmanship, establishing certification systems related to the level of craftsmanship skills, setting up special funds for the spirit of craftsmanship, formulating tax preferential systems for cooperative enterprises, and establishing industry associations and systems guided by correct values [12]. At the same time, it is also necessary to ensure the intellectual property rights of enterprises and schools in the process of craftsmanship spirit and culture, and to clarify the legal definition of risks involved.

In addition, the government can also formulate some incentive policies, such as encouraging colleges and enterprises to deliver craftsman spirit values to the areas

along the "the Belt and Road". Integrate one's excellent culture, values, and spirit with education and business to form an industrial business card with Chinese characteristics.

4. Summary

China has entered a new era of economic development, and the spirit of craftsmanship has increasingly become an excellent value concept that the country, industry, and vocational colleges need to promote and cultivate. In exploring the cultivation path of craftsmanship spirit and further exploring its profound cultural connotations, it is necessary to further explore the difficulties and needs faced by the country, industry, enterprises, and vocational colleges at multiple levels. Collaborating efforts from multiple fields to build a soil for the dissemination of craftsmanship spirit, and widely promoting the culture of craftsmanship spirit in universities, industries, and society, will also continue to promote the progress of China's manufacturing industry.

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