

## Research on the Ways to Cultivate the Craftsman Spirit of Higher Vocational College Students in the New Era

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**Abstract:** Under the background of new normal economic development in China, the grand plan of “Made in China 2025” will be bound to usher in a new round of great development of China's manufacturing industry. Meanwhile, craftsman spirit will be highlighted in the public's vision. The connotation of craftsman spirit is "loving and dedicating to work, focusing on excellence, cherishing things and thanksgiving, and pursuing beauty and novelty", which constitutes the talent guarantee to promote the transformation of the driving mode of China's economy and to adjust and upgrade the structure. This paper discusses the historical inheritance and changes of craftsman spirit, the practical significance of carrying forward craftsman spirit to China's economic and social development, and the ways to cultivate path explorations of craftsman spirit.

### 1. Introduction

Nowadays, the society is impetuous, eager for quick success and instant benefits. All trades and professions blindly pursue the short, flat and fast benefits, ignoring the quality soul of products. It is urgent for the society to call for the return of craftsman spirit. Premier Li Keqiang proposed in the government report of the National People's Congress and the National People's Congress on March 5, 2016 that "enterprises should be encouraged to carry out customized and flexible production, to cultivate craftsman spirit who strive for excellence for increasing varieties, improving quality and creating brands". Subsequently, the term "craftsman spirit" came back into the public's vision, triggering a nationwide study and discussion of "craftsman spirit". "Craftsman spirit" is returning with the connotation of "pursuing skillful and good work, the practical concept of the unity of knowledge and practice, and the professional belief of morality and art". To build a strong manufacturing country, talent-based is the basic principle. Vocational education bears the important task of training high-quality workers and skilled personnel. It is the most effective way to cultivate students' craftsman spirit. How to cultivate students' craftsman spirit will be one of the topics that vocational colleges need to discuss in the future.

### 2. Historical Retrospect, Inheritance and Connotation of Craftsman Spirit

#### 2.1 Historical Tracing and Inheritance of Craftsman Spirit

“Craftsman Spirit” is not the patent of modern society. It has a long history. Craftsman spirit can't be separated from the rise and prosperity of handicraft industry in the process of development from germination to maturity. Handicrafts worked basically alone to complete the products. The quality of products directly affects the quality of life of workers. Therefore, workers are highly responsible for the quality of products when making products to strive for perfection, focusing on the promotion of handicraft, improving product quality and innovating products functions. They pursue reputation and expand product sales to achieve both fame and profit.

The image description of craftsman spirit can be traced back to the Spring and Autumn Period and the Warring States Period at the earliest. The Book of “Songs, National Style and Wei style” says, “If everything is negotiated, if it is pondered.” This describes the elaborate processing of ancient artifacts from the side. Lu Ban's legend has been circulated for thousands of years. Too

many exquisite things show that Chinese people always pursue exquisite skills. There is a process of accumulating skills in which the craftsmen constantly sublimate their own understanding and laws in their work to achieve “the unity of skills and ways”, and create a better living environment in the promotion of self-worth. However, in the long history of feudal society in China, the development of craftsmen and craftsmen was depreciated under the influence of the ranking of the four people of “scholar-peasant industry and commerce”. Their technology was called “exquisite skill” and was not recognized by the mainstream value of society.

In foreign countries, the formation of craftsman spirit is deeply influenced by the religious beliefs and national spirit of their own country, and they are developed and inherited by mutual integration, reference and popularization. In Germany, it has played a role in shaping craftsman spirit, such as the German ethics of “the concept of heaven and duty”, “fair competition market economy system”, “enterprise decentralization system” “standardized industrial standardization” and “dual system” of vocational education system. Similarly, “craftsman spirit” is called “professional spirit” in Japan. It interacts with the animism of local Shintoism and the contemporary significance of Buddhism of later generations, forming a culture of respecting craftsman and taking “life-threatening” as “professional ethics”.

## **2.2 Change and Return of Craftsman Spirit**

In modern society, the explosive expansion of the production scale of products greatly meets the general needs of the society with the large-scale mechanized production triggered by the industrial revolution. It causes a catastrophic impact on traditional handicraft industry, especially on the production line mode of products, breaking the tradition of craftsmen participating in the whole process of product production. For reason of modern line operations, each worker only needs to be responsible for a component or a process of products. Whether the practitioner has enough experience or not, whether the skill level is high or not, producers will naturally refuse to innovate resulting in Craftsman spirit falling into trough. In the process of mass production and labor in this society, the way of inheritance of skills has changed from traditional apprenticeship to centralized education in schools.

In modern society, people’s ordinary material needs have been greatly satisfied, and then pursue “high quality”, “individuality” and “customization”. Enterprise production has also shifted from scale development to “small-scale” and “flexible” production. More emphasis has been placed on product innovation and rapid iteration, which requires that product design and production pay more attention to user experience. Practitioners, researchers’ personnel, management personnel and entrepreneurs will be required to have the spirit of “love and dedication, dedication and excellence, thanksgiving, beauty and innovation” in the new era.

## **2.3 Connotation of Craftsman Spirit in the New Era**

In terms of connotation, “craftsman spirit” should be a series of spiritual combinations in the new era, which contains the spirit of loving and dedicating to work, the attitude of focusing on excellence, the virtue of cherishing things and thanksgiving, and the feeling of advocating beauty and seeking new.

### **2.3.1 Cherish Posts and Devote to Work**

This is the basis and source of strength of craftsman spirit. Only workers loving their profession, their enthusiasm for work will be stimulated. Meanwhile their professional skills will be enhanced, and their self-worth will be realized in the course of their work.

### **2.3.2 Focus on Excellence**

This is the external manifestation of craftsman spirit. It fully demonstrates the spirit of highly responsible workers to consumers, and never satisfied pursuit to their own skills. Craftsman spirit can help workers to refine products and improve product quality.

### **2.3.3 Gratitude for Things**

This is the intrinsic quality of craftsman spirit. The mentality of cherishing resources also helps workers to work more attentively and strive for perfection. This is the key to solving the problems of production development and ecology.

### **2.3.4 Appreciate Beauty and Seek Innovation**

In today's era, craftsman spirit has been endowed with another meaning, namely injecting innovation and vitality into products, aiming to realize the transformation and upgrading from "Made in China" to "Made in Intelligence" in China. This is the soul of craftsman spirit and reflects the unity of aesthetic standards and consumer demands of workers. It is the guarantee of continuous innovation and improvement of products.

## **3. Problems in Vocational Spirit Training of Higher Vocational College Students**

### **3.1 Students' Learning Objectives, Professional Perception and Career Orientation is not Clear.**

Some students don't know the major they are studying when they choose to apply for an examination, which affects their learning enthusiasm after they enter the university. At the same time, the learning motivation and career direction is not clear. Students have low professional awareness, ambiguous career, and negative professional attitude, meanwhile they can't objectively understand themselves, lacking the initiative to learn, and are not good at dealing with interpersonal relationships. In this case, if students encounter unsolvable problems, they will lack the motivation to work hard to solve them. These are all manifestations of the lack of professionalism.

### **3.2 Neglect the Cultivation of Professional Spirit in Daily Teaching**

The cultivation of students' professional spirit is a gradual process, which should run through the whole process of Vocational education. It is necessary to integrate the cultivation of professional spirit into daily teaching activities. Higher vocational colleges continue to deepen the research on talent training and curriculum construction. According to the requirements of talent training objectives of higher vocational education, in curriculum design, students' vocational skills are emphasized, and courses are set according to the actual needs of enterprises, but the cultivation of professional spirit is neglected. In the process of cultivating students, we should pay attention to the cultivation of Vocational skills, but not to the cultivation of professional spirit. It is easy for some students to change their roles and integrate into the enterprise quickly after they enter the job. It will affect their work enthusiasm and even lead to frequent job-hopping, which will seriously affect their own development.

### **3.3 Lack of Scientific Evaluation Criteria for the Learning Effect of Vocational Skills and Spirit**

Professionalism belongs to the emotional experience of the spiritual level, and it is difficult to take a quantitative assessment. In the assessment of students' learning effect in higher vocational colleges, written examination, skill operation examination or the establishment of test bank for students to operate on the computer are often used. Course assessment mostly adopts the evaluation method of "Peacetime Achievement & Final Achievement", in which the final exam scores generally account for 60-80% to check the students' mastery of knowledge or skills; Peacetime scores are often given according to attendance rate, classroom performance and homework. At present, the assessment is based on the mastery of vocational skills. Without the assessment of professional spirit such as honesty, trustworthiness, love and dedication, students can't attach importance to the cultivation of professional spirit.

### **3.4 Shackles of Traditional Cultural Concepts**

"If you study well, you will be an official", "If you work hard by brain, you will govern others; if

you work hard by physics, you will be governed by others." Cultural concepts such as "people" and "exquisite skills, gentlemen do not do" are still imprinted in people's bones, and intermittently hurt the present. In terms of utilitarianism, those who are eager for quick success think that money is success, success and fame are more realistic than ever. Driven by this value of money, on the one hand, people enjoy the wisdom fruits of craftsmen with ease, on the other hand, they are prejudiced and even contemptuous of craftsmen. The "almost spirit" in modern workplace is contrary to the spirit of craftsmen. These negative concepts cause craftsmen to lose their dignity and sense of social identity, and form the flood of "official standard" and "book-only" thoughts of leisure and loathing, talking about soldiers on paper, speculation and ingenuity.

### **3.5 Students Lack Subjective Initiative of Craftsman Consciousness**

Vocational college students will hardly add extra burden to their study besides completing the theoretical and practical hours stipulated by the school. Students lack the spirit of initiative learning, initiative exploration and creativity, and neglect to conduct in-depth research on the problems they have learned. When facing difficulties, lack of determination, confidence and perseverance makes it more difficult to cultivate craftsman spirit. Vocational education is more and more inclined to employment education, and students pay more attention to the employment situation after graduation, often ignoring the understanding and transformation of their spiritual world. The technical and skilled talents trained by vocational education are not only a worker or a skilled worker, but also a professional person with craftsman spirit. Students with craftsman spirit can not only regard work as a means of livelihood, but also the spiritual need for work excellence, continuous carving, creating value and enjoying it. Therefore, the lack of craftsman spirit in vocational education urgently needs to be returned. This is not a recall of traditional craftsmen, but a spiritual call to the present reality.

## **4. Practical Significance and Value of Craftsman Spirit in the New Era**

### **4.1 Craftsman Spirit is the Realistic Need for the Continuous Optimization and Upgrading of the National Economic Structure in the New Era.**

This year marks the Seventieth Anniversary of the founding of New China and the forty-first anniversary of China's reform and opening up. After entering a new era, the national economy has achieved rapid growth. At present, economic reform has entered the deep-water area, highlighting many deep-seated contradictions and problems, such as overcapacity, ecological damage, unbalanced development, etc. Adjusting industrial structure and constantly optimizing and upgrading are the only way under the new normal economic situation. In this context, highlighting craftsman spirit is much of great practical significance. Firstly, to carry forward craftsman spirit and constantly improve product quality is the inevitable choice to solve the contradiction between excess capacity of low-end products and insufficient supply of high-quality products. Secondly, to carry forward craftsman spirit and establish a good working atmosphere is the inevitable choice to break the bad atmosphere of economic and social impetuosity, counterfeiting, quick success and quick profits. Thirdly, to carry forward craftsman spirit and build a country brand is the inevitable choice to promote Chinese manufacturing from a big manufacturing country to a strong manufacturing country.

### **4.2 Craftsmen are Needed in the Transformation of New and Old Kinetic Energy of National Economic Development in the New Era.**

The transformation of new and old kinetic energy is the change of driving mode that China's economic development must face. From factor-driven, investment-driven to innovation-driven, innovation is the soul of a nation's progress and the inexhaustible driving force of a country's prosperity. Innovation of scientific and technological increasingly determines the development process of a nation and a country. Forty-one years since the reform and opening up, China's economy and comprehensive national strength have made rapid progress. The development of

science and technology has also changed with each passing day. We have made progress in many fields, and even in some areas, having been in the forefront, such as convenient online payment, leading quantum communication and so on. But in recent years, ZTE has been in a dilemma of life and death because of the discontinuation of chip supply by American suppliers. From this point of view, our country still lags far behind the world-class in some basic science and technology fields, such as chip manufacturing technology and hardware and software development based on chips shown in ZTE case. In terms of engine technology, we still have a big gap compared with Russia and the United States. These gaps are not only in design ideas, but also in basic scientific and technological research, such as material research and development, processing technology and so on. These studies rely on a large number of repetitive, long-term experiments and explorations. What they need is not only scientific researchers, but also all practitioners' constant exploration, practice and innovation. Innovation is the distinct feature of craftsman spirit. Promoting craftsman spirit will enable all members of Chinese society to strengthen on-the-job technology research, continuous technological innovation and continuous accumulation, especially micro-innovation, which will eventually lead to qualitative changes in China's scientific and technological progress, more independent intellectual property rights of scientific and technological achievements and products, and further promote China's economic development and enhance the comprehensive strength of the country.

#### **4.3 Fulfilling the Workers' Core Values of Chinese Socialism Requires Craftsman Spirit.**

Over the past 40 years of reform and development, the rapid development of China's economy and society, from the past shortage of supply to the present overcapacity, has made the masses lose the direction of progress, but also lost the long-standing craftsman spirit. The development of the whole society is too impetuous. Today, although we have occupied more than 100 of the world's top 500 enterprises, there are more than 3000 enterprises in Japan with a global life span of more than 200 years, the largest in the world, more than 800 in Germany, more than 200 in the Netherlands and nearly 200 in France, while our country has a very small one-hundred-year-old brand. In terms of the average life expectancy of domestic enterprises, the average life expectancy of large group enterprises is only 8 years. The average life span of SMEs is about 2.5 years, which is one tenth of that of similar enterprises in Europe and America. In order to survive, enterprises must inherit craftsman spirit. Socialist core values and craftsman spirit, both of which originated from the excellent traditional Chinese culture, have homogeneous relationship, depend on each other in practice and help each other. The practice of socialist core values and the promotion of craftsman spirit are of great significance to the implementation of the five development concepts and the realization of the Chinese dream of great rejuvenation.

So far, craftsman spirit in the new era is not only unique to the producers in the field of manufacturing, but also extends to everyone in society. The progress and development of society need to cultivate craftsman spirit. The transformation and upgrading of the whole Chinese society will be assisted by craftsman spirit.

#### **5. Ways to Cultivate the Craftsman Spirit of Higher Vocational College Students in the New Era**

Craftsman spirit is the product of historical category, but also an advanced social consciousness, with universal significance of value orientation. The cultivation of craftsmanship spirit must be closely related to its philosophical attributes, starting from the system level, salary level, market level, social atmosphere level and school education level. Individual decision-making and information screening "methodological competence", "technical skills instrumental" professional competence, "social competence" of professional spirit will form "you have me, I have you" and complementary professional competence, ignoring a certain ability can't produce a complete, qualified, pure and sustainable growth of skilled personnel. The cultivation of professional ability and craftsman spirit should always run through the process of educating people, and neither of them can be blocked. The reestablishment of craftsman spirit in vocational education can be based on the

path of ideological value, craftsman system, education orientation, work practice and cultural inheritance.

### **5.1 Adhere to the Educational Idea of Moral Education and Core Values of Chinese Socialism**

Vocational colleges should insist on moral education and build ideological and political education platforms in many ways, such as organizing and watching large-scale artisan documentaries, propaganda of precedent deeds, enterprise visits and other thematic education activities, combining artisan spirit and socialist core values with campus cultural construction, penetrating the human mind and blood, and breaking down the hearts of some current higher vocational students through the transmission of positive energy. The mistaken traditional concept of "the hard worker governs the people, the hard worker governs the people" helps them to establish the glorious pride of labor, cultivate the fine quality of "patriotism, dedication, honesty and friendliness", establish a strong sense of ownership, and foster the spirit and value concept of excellence, dedication, dedication and innovation.

### **5.2 Deepen the Integration of Industry and Education and Realize the Deep Cooperation between School and Enterprise to Cultivate Craftsman Spirit.**

Vocational colleges should deepen the integration of production and education, realizing the deep cooperation between schools and enterprises and cultivating craftsman spirit, the students' study and practice must be flexible alternately. On the one hand, the theory learned by schools should be practiced in enterprises, combining theory with practice, and the teaching effect will be greatly improved. On the other hand, it is very easy to feel the atmosphere of enterprises, especially craftsman spirit in enterprise culture, and learn while doing in production practice. Reaching a resonance with students can bring about a subtle effect on students. At present, the co-development of school-enterprise cooperation talents in China has been going on for many years, but the effect is not good, which is reflected in the low level of school-enterprise cooperation and the form is much more than the content. Firstly, the economic attraction of enterprises is not enough, so the enthusiasm for participation is not high. Secondly, the stability of students is not good, which leads to many concerns when enterprises participate in cooperation. Therefore, we need to strengthen the state's policy support for enterprises participating in school-enterprise cooperation, and enhance the attractiveness of school-enterprise cooperation to enterprises.

### **5.3 Planting Social Soil for Cultivating Craftsman Spirit**

The cultivation of craftsman spirit is inevitably inseparable from a set of perfect craftsman system to ensure that the legitimate rights and interests of each craftsman are effectively guaranteed. First of all, we must raise the income level of the craftsmen, establish the corresponding incentive system, improve their income and social status, and make them live a decent life. If craftsmen can't get social recognition and improve their living conditions through hard work, then it is very difficult for them to have motivation and passion to do their work. Secondly, the innovation of craftsmen needs to be guaranteed in the form of intellectual property rights or patents at the legal level, especially micro-innovation, which may not have high scientific and technological content, but also is the accumulation of craftsman work exploration and experience, which requires the recognition and encouragement of enterprises or countries, in order to protect the initiative of innovation and creation of craftsmen. The third is the sustainable development of craftsmen. We must establish the institutional guarantee for the sustainable development of craftsmen, expand more education systems in line with the development of craftsmen, and give craftsmen more ways to rise and space for development.

### **5.4 Rebuilding of Ideological Value**

The core of remodeling ideological value lies in not being bound passively by the past, building correct values, forming the admiration and respect for craftsmen and their unique crafts and techniques. German excellent craftsmen and scientists, famous Japanese cuisine and engineers all have the same lofty social status. Developed countries pay attention to vocational education,

craftsmanship and the cultivation of students' personality. This is what we should learn from. To be a "craftsman", we should first be a "virtuous craftsman". The society needs to construct a good public opinion environment, not only to admire and respect craftsmen's skills, but also to transform craftsmen's spirit into "common sense" in the marrow, and to restore the society and impetuous mentality with craftsman spirit. The state should improve the social status of craftsmen. Without such a sense of social identity, fostering craftsman spirit through vocational education can only be an empty word. The state should build a matching "advanced channel" for the professional development of craftsmen, abandon the social prejudice that is not equal to "white-collar" and give those corresponding salaries and remuneration.

### **5.5 Focus on Rebuilding of Practical Value and Culture Value**

Work practice is the most direct and important way to penetrate the spirit of craftsmen. Vocational colleges should strengthen students' practice in schools and enterprises. Craftsman spirit is not talking but not doing. It can't be understood only by mouth. This spirit needs to be internalized into students' professional quality in work practice. On-the-job practice is a necessary link in the integration of artisans' spiritual will. Repeated practice is the only way to achieve proficiency in vocational skills learning. At this stage, artisans' spiritual externalization behavior should be strengthened, permeated in vocational skills training, and promoted to volitional behavior. Make use of the natural advantages brought about by school-enterprise cooperation, let students practice in enterprises, experience enterprise culture, improve students' professional quality, link the actual work situation with tasks, so that students focus on the work process, pursue excellence, and practice with experience. In this way, it not only cultivates the students' self-esteem and self-confidence, optimism and positive mentality, but also enables them to have a sense of accomplishment in fulfilling their tasks and develop the professional feelings of craftsmanship.

It is worth mentioning that craftsman spirit belongs to recessive culture, which needs to be nurtured and developed with substantial and long-term spiritual encouragement. Vocational colleges should highlight the role of this craftsman culture, create a social and cultural model of craftsman spirit in the construction of campus culture, and maximize the benefits of cultural value. Besides directly experiencing, comprehending and forming professional feelings in education, teaching and practical training, vocational colleges can fully integrate campus culture and craftsman spirit in the overall capital construction planning, use banners, slogans and other forms to display the school landscape, buildings, landscape stones and other eye-catching locations, carry out skills lectures, organize teachers and students to carry out skills competitions, etc. Activities to introduce corporate culture; regular "corporate master into the campus" and other lectures, so that students feel the spirit of craftsmen in the enterprise, cultivate love and loyalty to work.

## **6. Summary**

"Made in China 2025" gives us a blueprint for the development of made in China. The transformation from "Made in China" to "Made in Intelligence" is the trend of the times. In this process, the one who can establish the preemptive advantage and let consumers enjoy the most extreme product experience will stand out from the fierce competition and become a "new national product". In the next few years, we believe that we will surely see the new "China Intelligent Manufacturing" of domestic products, and recast the brilliance of Chinese manufacturing. The broad masses of people, especially the students in higher vocational colleges, see that the efforts of the craftsmen have been harvested, all the efforts paid are rewarded, and they can achieve a peaceful and happy life. At that time, the students will strive to grow into a new generation of craftsmen, jointly promote China's manufacturing industry to advanced and powerful, promote China's society to civilization and democracy, and promote the prosperity and prosperity of the great motherland.

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