

Research on the Integration of Vocational Skills and “Craftsmanship Spirit” in Higher Vocational Colleges

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Abstract

Vocational education aims to train a group of high quality technical and skill personnel. The organic integration of “craftsmanship spirit” and vocational skills is the key to training high quality technical and skill personnel. This article provides an in-depth analysis of the current situation of the integration of craftsmanship spirit and vocational skills, exploring ways to integrate “craftsmanship spirit” and vocational skills from aspects such as campus culture, school enterprise cooperation, and vocational skills competitions.

Keywords

Craftsman spirit, vocational skills, integrate, school-enterprise cooperation.

1. Introduction

From 2016 to 2019, “craftsman spirit” was written into the government work report three times, and became the national will and the consensus of the whole people, and gradually became the professional belief pursued by various industries in the society. “Craftsman spirit” is a kind of professional spirit, but also the embodiment of professional ethics, professional ability, professional quality, and is a professional value orientation and behavior of practitioners. In the face of the situation that China's manufacturing industry is large but not strong, the scientific and technological content is not high, the development is increasingly weak, and the task of structural adjustment and transformation and upgrading is becoming more and more urgent, carrying forward the “craftsman spirit” has become an inevitable trend to promote the development of China's manufacturing industry and meet the needs of personalized customized flexible production. Only by integrating artisan spirit and professional skills and cultivating high-quality artisans from large countries can we improve the quality of Chinese products, create more excellent brands, and thus improve the core competitiveness of Chinese enterprises.

On the other hand, according to the 2019 Employment Report of Chinese College Students released by Mycos, theoretical knowledge and professional skills are the important evaluation criteria and basic evaluation elements of enterprises' requirements for technical talents, while craftsman spirit is the core evaluation criteria and key evaluation elements of enterprises' requirements for talents. Most enterprises put the work attitude, adaptability, communication ability and other components of the artisan spirit of employees in the first place of talent requirements, respect for the profession, dedication to work, responsibility for products, attention to details, and constant pursuit of perfection and perfection. High-quality technical and skilled personnel who can integrate the spirit of meticulous craftsmanship into every link of work are urgently needed by enterprises. This also requires vocational colleges to integrate the spirit of craftsmanship with the training of vocational skills in the process of talent training, attach importance to the cultivation of students' professional qualities such as dedication, excellence and continuous innovation, improve the comprehensive quality of students, and ensure the demand for talents for regional economic development.

2. Analysis of the current situation of the integration of craftsmanship spirit and vocational skills in two vocational colleges

2.1. Lack of awareness of incorporating craftsmanship spirit into vocational skills teaching

In terms of the current situation of vocational school training, many schools are guided by technical skills in the training process, focusing on standardized and mechanized technical skill standard teaching, and do not attach enough importance to the professional literacy and craftsmanship spirit of students. In teaching, the emphasis is either on teaching theoretical knowledge or teaching students practical operations, neglecting the linkage and integration of professional knowledge, technical skills, and spiritual qualities, and failing to organically integrate the spirit of craftsmanship with daily teaching. Teachers mainly evaluate students based on their theoretical and practical abilities, without incorporating the spirit of craftsmanship into the student evaluation system, which misleads students in their learning direction. Students also did not truly incorporate the spirit of craftsmanship into their learning plans, and placed high emphasis on academic performance and skill training during the learning process, while placing low emphasis on cultivating the spirit of craftsmanship. Some students have insufficient understanding of the spirit of craftsmanship, only attending classes to complete tasks, playing with mobile phones, and sleeping are common phenomena. Exams only require "60% longevity", and they only master basic skills in academic studies, practical training, and internships, which are superficial and lack the awareness and consciousness of deep exploration and research. The learning outcomes of students who know the truth but do not know the reason result in insufficient craftsmanship skills. Although they have certain operational abilities, they are unable to strive for excellence in their business, and their professional qualities need to be improved.

2.2. Lack of cultural atmosphere in the cultivation of craftsmanship spirit

Affected by the social environment, more students still choose white-collar jobs such as management, scientific research, and sales when seeking employment, while their sense of identification with blue collar jobs on the front line is not high. Some people believe that the working environment for frontline technicians is poor, the pay is low, and they work hard, and their social status is not high. Some students blindly pursue economic benefits and have no patience or willingness to engage in work that requires hard research and dedicated training to produce results. Campus culture is an important component of vocational education and an indispensable part of college students in school. However, nowadays, there are very few campus cultures that can reflect the spirit of craftsmanship. Students are more immersed in entertainment oriented online platforms for their campus culture. A survey shows that students understand the spirit of craftsmanship more in the classroom and society, and campus culture lacks in cultivating the spirit of craftsmanship.

2.3. The construction of the teaching staff is relatively lagging behind

The teacher team is still a bottleneck that restricts the development of vocational education. For a long time, the number of double qualified teachers in vocational colleges has been relatively small, and the quality of double qualified teachers is not strong enough. There is a large gap between the skills of the craftsmen in enterprises and some teachers in vocational colleges who directly join after graduation from universities lack enterprise experience, have limited understanding of the system and culture of enterprises, and are difficult to undertake the responsibility of inheriting the spirit of craftsmanship. Made in China 2025 has put forward new requirements for technical and skilled talents, and has also challenged the teaching and

nurturing abilities of vocational college teachers. Therefore, it is urgent to build a high-quality dual teacher team.

3. The Path and Method of Integrating Craftsman Spirit and Vocational Skills in 3 Vocational Colleges

3.1. Identifying the Positioning of "Craftsman Spirit" in Higher Vocational Education

When the Chinese economy undergoes strategic adjustments and the industrial model is upgraded from the end of the manufacturing industry chain to an innovative and skilled development model with craftsmanship spirit, it is bound to require vocational education to integrate the cultivation of technical and skilled talents with the cultivation of craftsmanship spirit, so as to transform Made in China into Made in China. Vocational colleges should fully recognize the value of "craftsmanship spirit" for vocational education and the practical significance of institutional reform and innovation development, and abandon the erroneous idea of emphasizing skills over cultivating "craftsmanship spirit". Based on the characteristics of different professions and combined with market demand, the excellent professional qualities and meticulous and precise professional attitudes of craftsmen are integrated into the entire process of cultivating technical and skilled talents in vocational education. Starting from the top-level design, the quality awareness of striving for excellence is integrated into various systems of school education and teaching, guiding all teaching staff to strive to practice the "craftsmanship spirit" in their different educational positions, infecting and educating students with exemplary behavior and unremitting pursuit. In the process of curriculum teaching and extracurricular practical activities guidance, the craftsmanship spirit of students is vigorously cultivated, and their professional character and quality are improved. To make students fully aware that the spirit of craftsmanship is of great help in improving their professional abilities and levels.

3.2. Strengthening the Effective Integration of Campus Culture and Corporate Culture

Culture plays a subtle role in shaping and influencing people. During the process of studying in school, students will naturally be influenced by campus culture. To allow the spirit of craftsmanship to take root and sprout in the hearts of vocational college students, and to blossom and bear fruit in their professional positions, vocational colleges need to focus on building a campus culture that embodies the spirit of craftsmanship. Professional culture is an important manifestation of corporate culture, and achieving effective integration between corporate culture and campus culture can cultivate students' career ideals and sense of belonging. The integration of campus culture and corporate culture can, on the one hand, promote industry and corporate culture that emphasizes quality awareness, and carry out various campus activities with the theme of attention to details, rigorous focus, and exquisite specialization, so that students can have a more comprehensive understanding of the craftsmanship spirit of enterprises. On the other hand, schools can introduce corporate culture into the campus through various forms such as industrial culture entering the campus and corporate culture entering the classroom, and closely integrate the promotion of craftsmanship spirit with student second classroom activities throughout the entire process of talent cultivation, promoting students to listen, understand, and practice craftsmanship spirit, promoting their own growth and success, and promoting the cultivation of craftsmanship spirit among students.

3.3. Deepening School Enterprise Cooperation to Create Conditions for Cultivating Craftsman Talents

Deeply promoting school enterprise cooperation is a necessary path for higher vocational education, and vocational skills and craftsmanship spirit are also the basic requirements of enterprises for talents. Therefore, in the teaching process, it is necessary to deeply promote school enterprise cooperation, so that students can understand the practical requirements of the enterprise for the craftsmanship spirit and professional skills of employees in the learning process, master the professional abilities required for future career development, and have good professional literacy.

There are various ways of cooperation between schools and enterprises. Taking the Electrical Automation Technology major of Wenzhou Vocational and Technical College as an example, the school and industry enterprises have deeply linked and conducted multiple professional research activities. Conduct research on the situation of over 80 automation related job groups in enterprises and institutions in Zhejiang Province through industry and enterprise expert interviews or symposiums, graduate visits, questionnaire surveys, etc., and analyze the occupational positions and abilities. School enterprise collaboration holds a talent training program demonstration meeting and a curriculum system reconstruction seminar. Facing the core positions of upgrading the electrical industry in Wenzhou, based on the national professional teaching standards for electrical automation technology, vocational skill level standards such as industrial vision system operation and maintenance, industrial robot application programming, etc., the curriculum system is restructured, talent training plans are formulated, and curriculum standards are revised to lay the foundation for the integration of craftsmanship spirit into the entire education and teaching process.

Deeply integrating schools and enterprises to jointly build a dual mentor team that promotes the spirit of craftsmanship. The cultivation of the spirit of craftsmanship requires a team of teachers who can spread culture. This team is composed of personnel from both the school and the enterprise, including backbone teachers from the school and masters from the enterprise. Professional teachers intern, practice, and exercise in enterprises, learning the culture, management experience, and training experience of various enterprises in a real work environment, making practical exercises more targeted and effective, and further improving their teaching level and practical ability. Collaborate on teaching and research projects, jointly build textbooks, and integrate new technologies, processes, standards, typical production cases, and job requirements of enterprises into professional education and teaching content; Collaborative education, professional teachers entering enterprises, and skilled craftsmen entering classrooms, integrating the cultivation of craftsmanship spirit into classroom teaching, internships, and practical training, allowing corporate culture to permeate the entire teaching process, allowing students to be immersed in it, and improving the quality of talent cultivation. The school enterprise joint construction of an industry education integration training base provides necessary conditions for students to carry out skill training through real or virtual enterprise projects. Through training, students can experience the corporate atmosphere, corporate culture, and standardize their professional habits in an environment highly similar to the actual positions and tasks of the enterprise. While improving their skills, they can also develop good professional habits, laying a solid foundation for subsequent job internships and on-the-job employment.

3.4. Building a skills competition platform, motivating competitions, and implanting the "craftsman spirit"

The vocational skills competition is an important platform to reflect the educational and teaching abilities of vocational colleges. Our college has integrated the competition standards of skills competitions into the curriculum standards in its curriculum construction, and

reformed the existing education and teaching content. Integrating the concept of "craftsmanship spirit" into the design of vocational education content can guide teachers and students to conscientiously abide by professional standards and complete various tasks meticulously. At the same time, in line with the characteristics of vocational college students, optimize classroom ideological and political education, and promote the spirit of craftsmanship in classroom teaching. This can not only cultivate students' skills, but also continuously integrate the spirit of craftsmanship into teaching, so that both go hand in hand, achieve a balance between skills and spirit, comprehensively enhance students' vocational skills and qualities, and adapt to the comprehensive quality requirements of industry and enterprise development for high skilled talents. According to the requirements of the vocational skills competition, revise and improve the teaching evaluation system. At the same time, integrate the content related to the spirit of craftsmanship into the assessment and evaluation, and urge students to attach importance to the spirit of craftsmanship from the heart. In their daily theoretical learning and skill operation, students become more focused, dedicated, and strive for excellence, naturally practicing the spirit of craftsmanship.

4. Conclusion

The spirit of craftsmanship is a pursuit of uniqueness in design, excellence in quality, and perfection in craftsmanship, embodying valuable qualities such as dedication, rigor, steadfastness, dedication, innovation, and hard work. Deepening school enterprise cooperation, actively creating a campus culture that promotes the spirit of craftsmanship, building a dual teacher team with the spirit of craftsmanship, and integrating the excellent professional qualities and meticulous and precise professional attitudes of craftsmen throughout the entire process of cultivating technical and skilled talents in vocational education are effective paths for the organic integration of craftsmanship spirit and vocational skills to cultivate high-quality technical and skilled talents.

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References

- [1] Li Jie, Xing Shikai The Basic Concepts and Optimization Strategies of Vocational Education Teaching Reform from the Perspective of Lifelong Education [J]. China Adult Education, 2022 (1): 46-51.
- [2] An Analysis of the Cultivation of Craftsman Teachers from the Perspective of Craftsman Spirit [J] Dong Xianhui Vocational Education Forum 2018 (02).
- [3] Exploration of Cultivating the "Craftsman Spirit" Based on the New Era Vocational Skills Competition [J] Zou Xiaoli, Shang Jinyan, Wang Yong Education and Teaching Forum 2020 (07).
- [4] An Analysis of the Cultivation Model of Professional Literacy and Its Integration into Skill Teaching Process [J] Bi Shusha Education and Career 2018 (20) .
- [5] Li Xiaomin Training Strategies for Skilled Talents in Vocational Colleges Based on the Spirit of Craftsmanship [J] China Adult Education, 2021 (04): 26-28.
- [6] The spirit of craftsmanship leads the reform of innovation and entrepreneurship education for college students Qian Zheng, Zhang Yucheng Adult education in China 2018 (03).

- [7] Liu Yingxia. Value research and path exploration of promoting the construction of academic atmosphere in vocational colleges through skills competitions [J]. Journal of Shandong University of Commerce and Technology, 2021, 21 (1): 36-40.