# The fusion of craftsmanship and student professional skills in the field of modern apprenticeship

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**Abstract:** The cultivation of craftsmanship under the modern apprenticeship system is in response to the need of "Made in China 2025" for high-tech skilled talents and is an important way to realize the function of modern apprenticeship technology transfer and cultural communication. The cultivation of craftsmanship under the modern apprenticeship requires the formation of common values in the whole society, the role of teachers' words and deeds, the integration of craftsmanship in the curriculum, the creation of conditions for the cultivation of craftsmanship with standardized management, the strengthening of school-enterprise culture integration, and the infiltration of craftsmanship.

### 1. Introduction

In his government work report, Premier Li Keqiang put forward: "Cultivate the spirit of craftsmanship, improve varieties, improve quality and create brands." The pursuit of craftsman spirit once again caused heated discussion. The spirit of craftsman not only reflects the professional attitude of improving the quality of production products and tirelessly improving the skills, but also the professional belief and professional pursuit of constantly updating the concept, innovating technology and creating new achievements. The modern apprenticeship system is an important form of school-enterprise cooperation. It is the joint education between the school and the enterprise. The methods, venues and evaluation of talent training are different from the traditional school education. In the process of development, students' professional beliefs and professionalism are cultivated. Innovative ability and promotion of craftsmanship are effective choices for achieving the goal of talent training. It is a strategic choice for the realization of "Made in China 2025" for the training of high-tech skilled talents and also an inevitable choice for China to move from a manufacturing power to a strong country<sup>[1]</sup>.

### 2. The connotation of the craftsman spirit

Traditional artisan manufacturing artifacts are different from modern large-scale standardized machine production, mainly relying on their skills, personal strict requirements for products and pursuing each product to the best of all, regardless of labor costs, giving the product a personal feeling and spirit. Every product has a fresh vitality. "The craftsmanship was first embodied in the ancient craftsmen with superb skills, the craftsman's pursuit of excellence in craftsmanship and the ultimate responsibility and enthusiasm for the final product." Modern industrial machine production

completely dispels the traditional craftsman's pursuit of craftsmanship. The standardized manufacturing product is a cold ice-cold device assembled from materials and has no vitality. The modern artisan spirit is "a professional attitude of craftsmen who pursue perfection in the production process and pursue the ultimate excellence. It is similar to the professional ethics of professionalism and professionalism that we often say... 'artisan spirit' to work, right the ultimate pursuit of products is more like a belief in life. It pinmarks the meaning, value, sense of accomplishment, honor and dignity of life in the impeccable sense of perfection in every detail of the product." Craftsmanship is not only about skill the tireless pursuit is also a professional attitude and professionalism. The spirit of craftsmanship is "a kind of awe that is full of respect for the profession, dedication to work, pursuit of excellence in products, perfection of service, perfection of life and perfection of life. In artisans, the main performance is focus, patience, perseverance, Excellent quality such as innovation and dedication; in products and services, the main performances are people-oriented, excellence, the pursuit of excellence, the pursuit of perfection and the best quality<sup>[2]</sup>.

### 3. The Necessity and Feasibility of Cultivating Craftsmanship in Modern Apprenticeship

# 3.1. The spirit of craftsmanship is an important support for the realization of a strong manufacturing country

In order to adapt to the fourth industrial revolution, to realize the transformation of China from a manufacturing power to a manufacturing power, in the process of promoting the national strategy of "Made in China 2025" and "Internet +", we must meet the increasing demand of high-tech skilled talents in the labor market. By the end of 2015, the total number of skilled workers in the country was 165 million and the proportion of highly skilled personnel in skilled labor was 27.3%. In the developed countries in the West, especially in some manufacturing countries, the number of highly skilled personnel accounted for the total number of skilled workers. More than 40%. The fourth industrial revolution is based on innovation-driven, intelligent manufacturing, strengthening the foundation and green development and promotes the transition from a manufacturing power to a manufacturing power. The realization of China's goal of manufacturing a strong country requires not only high-skilled technical talents with "artifacts", but also the "artistic" quality of excellence, meticulousness and innovation, in order to break through the low technical content, low-end product quality and lag in development strategy<sup>[3]</sup>. Waiting for the dilemma, to achieve quality manufacturing, high-end manufacturing and intelligent manufacturing, catch up with Europe and the United States to create a strong country. Germany, Japan and the United States are the world's manufacturing powers and their products are exquisitely crafted. The main reason is the company's boutique concept and the craftsmanship of its employees. The development trend of professional and technical workers in China is shown in Figure 1.

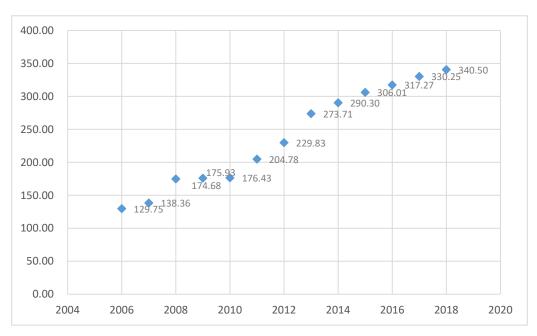


Figure 1: Development trend of professional and technical workers in China

### 3.2. Cultivating the spirit of artisans is an important part of realizing the essence and function of vocational education

The modern apprenticeship system is a modern vocational education model developed on the basis of the ancient apprenticeship system combined with the modern school education form. Compared with the traditional apprenticeship system, modern apprenticeship has the characteristics of employment training to vocational education, from non-formal training to formal education, from the end of education to lifelong education. It is a social system with education as its primary function. The employment-oriented school-running goal in vocational education blurs the essential requirements of education as an educator. The employment function conceals the function of human development and "leads to the narrow path of education and the simplification of educational behavior". Modern apprentices make a vocational education system for the education of students and enterprises. They should not only pay attention to the cultivation of students' vocational skills, but also pay attention to the cultivation of students' professional spirits, so that professional skills and professional spirit can be highly integrated. The vocational education in the inner technical civilization structure should have the pursuit of spiritual value in synchronization with industrial civilization<sup>[4]</sup>.

### 3.3. Modern apprenticeship has a history of the same spirit as craftsmanship

The traditional apprenticeship system teaches the knowledge and skills to the apprentice through the master. The professional technology theory is not formed. The apprentice can only experience, experience and sum up through observation and experience. While the master taught the traditional skills to the apprentices, his research and dedication to the skills also infected the apprentices. In the process, they accumulated the craftsmanship spirit and passed down from generation to generation. The craftsman spirit is the creative spirit that the artist combines reason and practice and takes this as the basic professional ethics and accomplishment. In the course of work, he strives to achieve the excellence of craftsmanship and artifacts and realizes the spirit of human spirit in the constant pursuit of skill. With the spiritual freedom, the ideal state of combining technology and Taoism is

realized. Therefore, from the perspective of the development of traditional apprenticeship and artisan spirit, apprenticeship is the carrier and effective way to carry forward and inherit the spirit of artisans<sup>[5]</sup>.

# 4. The fusion of craftsmanship and student professional skills in the field of modern apprenticeship

## 4.1. Vigorously promote the spirit of craftsmen and form a consensus on the value of the whole people

In our country, due to the influence of traditional ideas such as "learning and being good," "laboring people, laborers treating people", manual workers have been in a deprecated position. In such a social environment, physical strength It is difficult for workers to establish professional pride and the craftsmanship is even more difficult to talk about. In today's job market, ordinary workers still do not receive respect and equal treatment. In the face of social reality, only by improving the social status of artisans and enabling the skilled craftsmen and technical experts in all walks of life to obtain corresponding respect, can we create a common value concept of the people who are glorious in labor, valuable in skills and create greatness. The state must vigorously promote the spirit of craftsmen and create a good atmosphere of respecting knowledge, respecting labor, respecting skills and respecting innovation among the whole people. We must dare to break through the employment system and let ordinary workers work as decent and respectful as civil servants. The talented craftsmen with high moral character and outstanding skills give policy inclinations in the promotion and promotion, set up a skill contest for ordinary workers, reward excellence, promote innovation and let the craftsman spirit play a leading role in the whole people. The fusion of craftsmanship and student professional skills in the field of modern apprenticeship is shown in Figure 2.

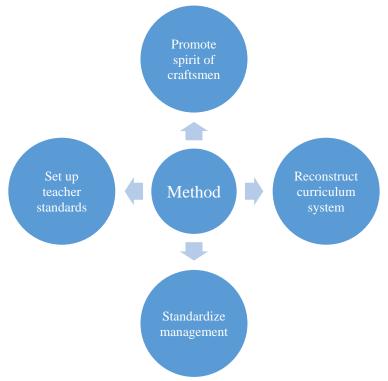


Figure 2: Fusion of craftsmanship and student professional skills in the field of modern apprenticeship

### 4.2. Set up teacher standards and put the craftsmanship in the teacher's words and deeds

The modern apprenticeship system means that the school signs an apprenticeship contract with the receiving enterprise. The apprentice obtains the specific skills of the post under the guidance of the experienced personnel of the enterprise. The training and theoretical study alternate, the reasonable remuneration during the apprenticeship and the qualification recognized by the state after graduation. Kind of training system. Apprentices complete training according to certain standards. In the process of apprenticeship training, teachers and masters are the main subjects of apprenticeship training. The spirit of artisans will have an impact on the subtle influence of schools and enterprises, teachers and masters<sup>[6]</sup>.

## 4.3. Reconstruct the curriculum system and integrate the craftsmanship into the professional curriculum

The course is a vehicle for apprenticeship learning skills and heritage culture. The curriculum system under the modern apprenticeship system is a practical teaching system that integrates students' humanities literacy, professional knowledge and vocational skills. The professional theory and practice teaching are integrated and the theory guides practice and practice rich theory. The modern apprenticeship curriculum breaks the traditional knowledge-based curriculum structure, which cultivates the comprehensive professional ability required for typical work tasks and acquires the knowledge of the work process in the real work situation. The craftsman spirit should be integrated into the typical work task.

# 4.4. Standardize the management of modern apprenticeships and establish the spirit of craftsmen with rules

The cultivation of the craftsman spirit is carried out under the system of norms and standards. To cultivate the spirit of craftsmanship, it is necessary to have a sound system and standardized management as a guarantee. The modern apprenticeship system in the UK and Australia has a national qualifications framework. The German "dual system" regulates apprenticeship standards, access to vocational qualifications, corporate standards, apprenticeship management and assessment. At present, China's modern apprenticeship system is still in the stage of pilot exploration and the system and management are still not perfect. Therefore, we must first establish a professional qualification framework for modern apprenticeship and integrate apprenticeship training with professional qualification level. In the qualification framework system, apprentices are mastered. Professional skills must have a certain level of professionalism and professional ethics, otherwise you can not complete apprenticeship training.

#### 5. Conclusion

The modern apprenticeship system involves two cultures in which schools and enterprises seem to be in conflict with each other. These two cultures have their own characteristics in terms of cultural connotation, function and development trend, but they have the same in terms of personnel training and social services. feature. Taking the integration of school and enterprise culture as the starting point, we gradually infiltrated the craftsman spirit in the school-enterprise culture integration. We can use the cultural propaganda positions such as radio, television, school newspapers and shop windows to publicize the spirit of craftsmen and integrate the craftsmanship into the campus culture.

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