Re-training vocational education to nurture craftsmen for the new era

Chuanli Wei *, Depeng Lv
Harbin University of Commerce, Harbin, 150028, Heilongjiang Province, China

Abstract. A great nation rises, craftsmanship builds dreams. The working class occupies the position of the leading class in China, as the main force of reform and opening up as well as the construction of socialist modernisation. The construction of the new era of socialist economy with Chinese characteristics cannot be separated from the new era of craftsmanship, however, to carry forward the spirit of craftsmanship, excellent professional knowledge and skills is an indispensable quality of the workers group. Therefore, we should focus on the development of vocational education, comprehensively improve the level of vocational education, provide more skilled personnel support for regional modernisation, breed new-age craftsmen in line with the development requirements of the times, motivate the majority of young people to take the road of skills to become a success and serve the country with their skills, accelerate the construction of an army of knowledge-based, skilled and innovative workers, and provide strong talent support for the comprehensive construction of a modernised socialist country.

1 Content of vocational education to cultivate craftsmanship in the new era

The so-called craftsmanship refers to the attitude of pursuing excellence in creation or work, and it is also the embodiment of professional ethics and character, as well as a kind of professional value orientation and behaviour of practitioners. For individuals, craftsmanship is a kind of doing a thing, loving a thing, specialising in a thing, and doing a good job of a thing, down-to-earth and serious, persistent, meticulous, fine polishing spirit. For enterprises, craftsmanship is a kind of corporate culture of sticking to the speciality, making high quality products, creating technology, building standards, persevering, being more competent and pioneering. To the society, it is a social culture of cooperation, contract observance, creditworthiness, promotion of coordination, division of labour, win-win cooperation and perfect improvement. Advanced vocational colleges focus on cultivating students' vocational skills, and end with training students to eventually find employment in the industry. At this time, it is necessary to integrate craftsmanship into teaching, so that students can have a correct and affluent mindset, learn theoretical knowledge on the premise of having a good quality of professionalism, and take the initiative to learn and develop their skills and specialties, in order to cultivate excellent technical talents in all aspects.

1.1. Love and respect for work

The cultivation of artisan spirit in higher vocational colleges is an urgent demand for high-quality economic and social development and people's better life, as well as the internal pursuit of building a high-quality higher vocational education system in the new era. [1] To love one's job is to respect and love one's profession, as well as to be committed to and pursue one's work. The talents trained by modern vocational education are not only working machines, but also people with dreams, ideals and beliefs. They may not be able to become the strong elite of the society, but they will surely become the pillar of social progress. They are dedicated to their work, highly love the work they are engaged in, have a sense of responsibility for their work, not only to take responsibility for their work seriously, but also to strive for excellence, not a hair out of place. The root of craftsmanship is love and dedication to work, and the ultimate goal to be achieved by vocational education to cultivate craftsmanship is also love and dedication to work. Therefore, in vocational education, we should strengthen the concepts of "people-oriented", "student-centred", "job competence-based" and "quality improvement as the core", and take love and respect for work as the goal of training talents in modern vocational education. Vocational education personnel training objectives. [2]
1.2. Striving for excellence

Vocational education students should have the quality of excellence. Craftsmanship requires students to be very responsible for their professional work, to pay attention to all details, to pursue perfection and to be rigorous and meticulous. Craftsmen create things with their craftsmanship expertise, and in the continuous improvement and breakthrough of their profession, they perform the exquisite skills of "being able to do what others can't" by virtue of the pursuit of excellence. [3]

Respect and promote the spirit of craftsmanship is a fine tradition in China since ancient times. Since the founding of New China, the Communist Party of China has always insisted on promoting the spirit of craftsmanship in the process of leading the people to carry out the construction of socialist modernisation, creating a large number of craftsmen in pursuit of the ultimate, the pursuit of excellence. As students of the new era, we should abandon impatience, quiet mind, not on the surface of things, and do not just ask for a pass, but to do better, especially in vocational education and training, we always have to instil this ideology of striving for excellence.

1.3. Innovative breakthroughs

Under the pressure of free market competition and market transformation and upgrading, "Craftsmanship" is given a new connotation oriented to innovation. To cultivate a large number of big country high skill new era craftsmen talents, modern vocational education needs and students of higher vocational colleges and universities need to have innovative consciousness and innovative ability, the formation process of craftsmanship is the process of forming innovative consciousness and innovative ability of students in higher vocational colleges and universities, so higher vocational colleges and universities need to focus on cultivating the innovative ability of students, but cultivating the innovative consciousness and ability of students is not a one-off, it needs the colleges and universities. However, the cultivation of students' innovative consciousness and ability cannot be achieved overnight, which requires institutions to have a long-term vision and planning, and focus on cultivating students' innovative ability. Higher vocational colleges and universities should also strengthen practical teaching and the construction of practical training bases, so that students can continuously improve their problem-solving ability in practice, thus enabling students to gradually develop innovative and creative abilities. Finally, vocational schools should provide students with more opportunities and platforms for social contact, so that students can get in touch with the society, understand the society, and cultivate outstanding talents with innovative consciousness and skills.

1.4. Working together

In today's society, the wave of globalisation is constantly flashing, and countries are paying more attention to win-win cooperation with each other, no matter in economic, political, cultural and social aspects. Therefore, the team spirit of collaboration is indispensable in the new era of vocational education and training. The youth of the new era should not only have a strong ability, but also understand the meaning of cooperation, and recognise the importance of win-win situation, and work together in the process of mutual cooperation to complement each other's strengths and weaknesses, in order to achieve the effect of one plus one is greater than two. As one of the aspects of craftsmanship, the team spirit of collaboration and co-progress requires us to focus on competition and innovation in the cultivation process, while at the same time inculcating the team spirit all the time, so that the majority of young people will have the team spirit and become a trustworthy reserve army.

2 Strategies for vocational education to accelerate the breeding of craftsmen for the new era

With the development of society, the status of education is getting higher and higher, but it is not difficult to find out that the development of vocational education is slow through Fig.1, but the development of vocational education is the basis for cultivating craftsmen in the new era, so the following strategies are proposed.

![Changes in the number of general and higher education institutions 2017-2021](image1.png)

**Fig. 1. Changes in the number of general and higher education institutions 2017-2021**

2.1. Increasing innovation in the vocational education system

craftsmanship spirit and professional skills have a high degree of internal correlation, so it can not achieve the corresponding effect if they are cultivated separately. [4]

The development of modern vocational education requires theoretical innovation and the integration of craftsmanship and talent training. From the perspective of school philosophy, modern vocational education must take moral education as a fundamental task, focus on cultivating students' innovative spirit and practical ability,
and integrate the cultivation of craftsmanship into the whole talent cultivation process with the fundamental goal of students' comprehensive development. From the concept of theoretical teaching, modern vocational education must change the traditional concept of theoretical education, to cultivate "craftsmanship" as an important guarantee to achieve the goal of talent cultivation in schools; from the concept of practical teaching, modern vocational education, the traditional teaching concept of the curriculum "knowledge-based", "ability-based" and so on. From the perspective of practical teaching concept, modern vocational education traditional curriculum teaching concept of "knowledge-based" "ability-based" concept needs to be changed, to the student as the main body, practice-oriented, guide students to participate in the whole process of curriculum teaching. From the viewpoint of talent cultivation objectives, modern vocational education should integrate the cultivation of craftsmanship into the whole process of talent cultivation, and take the cultivation of students, social demand, recruitment demand and school professional construction objectives as the talent cultivation objectives.

2.2. Increase the supply of vocational education policies

The development of vocational education has become an important strategic choice for all countries in the world to meet the challenges of economy, society, population, environment and employment and to achieve sustainable development. [5] In the new era, we should attach great importance to vocational education and place vocational education in a more prominent position in economic and social development and educational reform and innovation. There are many policies related to vocational education in recent years, so increase the policy support for vocational education, turn vocational education and ordinary education into the same type of education, award vocational education degree certificates with the same value as ordinary university degree certificates, improve the Chinese model for the development of modern vocational education, continue to increase the supply of policies, accelerate the improvement of the modern vocational education system, and construct a diversified pattern of schooling as well as modern governance system, injecting a strong force into the path of Chinese-style modernised vocational education.

2.3. Improvement of the social status of skilled personnel

Improve the political treatment of skilled workers in many forms. In the view of many people, even if the income of skilled workers is high, they still do not enjoy the full respect of society. Only by improving the political treatment and social status of skilled workers can we encourage more people to join the skilled labour force. To advocate the "craftsman spirit", we must actually improve the status and income of skilled workers. The development of enterprises cannot be separated from scientific and technological innovation talents. Only by helping scientific and technological talents to solve their concerns, their hearts can focus on the development of the enterprise. Higher wages will enable employees with excellent skills to enter their positions and give them a strong sense of acquisition, happiness and achievement. The wages of highly skilled workers should be higher than the national average. The wages of skilled workers in some special precision manufacturing industries are those of ordinary civil servants and even higher than those of university professors. In formulating talent policies, the status of skilled workers should be fully respected, and skilled workers should be encouraged institutionally, so that there will be an endless stream of such practical workers, and the outstanding craftsmanship of skilled workers will be used to create the world-renowned "Made in China".

2.4. Enhancing the capacity of the vocational education teaching force

In school practice, there is a tension between the ideal educational policy goals of student self-management and autonomy and the lack of teacher time and attention to students. [6] Vocational education is a complex educational activity, containing the unity of opposites between teachers and students, schools and enterprises, education and industry and other elements. [7] Gradually raise the level of academic knowledge for teacher training. In the examination of degree qualifications and the management of student enrolment programmes, universities in the field of vocational and technical education, especially those engaged in vocational and technical teacher education for a long period of time, will be supported. Support in-service teachers to upgrade their academic qualifications and make appropriate policy support. Explore diversified paths for educating people. Improve the vocational education teacher training system and create high-quality teacher training bases, while strengthening the construction of existing teacher training centres. Promote the construction of digital learning platforms for vocational teachers. Start a teacher learning and training version of the National Vocational Education Intelligent Education Platform, and share it with all teachers. Promote the construction of national vocational university teacher innovation groups. Map survey and research, strengthen process management, and at the end of the year, test the first team and systematically organise the construction results. The most important thing is to create a good atmosphere of respect for vocational teachers in the whole society. On the basis of strengthening the cultivation of "dual-teacher" teachers in higher vocational colleges and universities, we will further improve the operation mechanism of school-enterprise co-operation in building "dual-teacher" teacher training bases, so that "dual-teacher" teacher training bases will become the base for the formation of students' technical skills and the formation of students' technical skills and the formation of students' technical skills. On the basis of "dual-teacher" teacher training efforts, further improve the operation mechanism of
school-enterprise cooperation to build "dual-teacher" teacher training bases, so that "dual-teacher" teacher training bases become an important base for the formation of students' technical skills and professionalism.\[8\]

### 2.5. Carry out in-depth school-enterprise co-operation

Change and innovate the idea and mode of school-enterprise cooperation, carry out joint school running, take into account and balance the interests of higher vocational colleges and universities, enterprises and students, mobilise the enthusiasm of enterprises to participate in the education and training of enterprises into the education and training of enterprises as a role in the process of vocational education, play the cultivation advantages of the enterprise and according to the different attributes of the enterprise, the positioning of the terminal students, the formation of a healthy production line, so that different attributes of the students to learn and apply to the enterprise to get deeper progress after entering the enterprise. The students with different attributes can learn to use what they have learnt and make deeper progress after entering the enterprises. We should supervise and regulate the cooperation between the two sides in the system, learn from the vocational education models of developed countries, increase the government's financial and policy support for school-enterprise cooperation, and endeavour to build a set of reasonable and healthy education models and management systems for the joint progress of vocational colleges and enterprises, which will not only make contributions to the progress of the society, but also contribute to the strengthening of the bilateral construction.

Colleges can build practical training bases according to actual needs and carry out practical training teaching for students by introducing talents from enterprises. Practical training teaching integrates and intersperses theory and practice, and adjusts the teaching method and class time according to actual needs. In understanding the interests of students, according to the characteristics of each student to guide students to independent learning, stimulate students to explore the professional field of interest. You can continue the "old with new" mode in the enterprise, using the apprenticeship system for teaching, selecting experienced technicians in the enterprise to lead the class for practical operation, so that students can deeply feel the spirit of craftsmanship in practice, and this spirit is passed on, and gradually bring the spirit of craftsmanship into the industrial sector, the line of influence, and eventually Promote the formulation of industry standards and norms, and set up spiritual benchmarks.

### 3 Conclusion

Craftsmen are an important force for industrial development, and craftsmanship is an important spiritual source for innovation and entrepreneurship. We should endeavour to cultivate more high-quality technical and technological talents, heavenly craftsmen and craftsmen of the times, and provide strong personnel guarantee for the comprehensive construction of a modern socialist country. System innovation, policy supply, to increase investment, improve the spirit of craftsmanship, improve the social status of technical and functional talents, for the comprehensive construction of socialist modernisation of the country, for the realization of the Chinese dream of the great rejuvenation of the Chinese nation to provide a strong pillar of human resources and functions. The cultivation of craftsmanship in modern vocational education is analysed, and specific cultivation paths are proposed, aiming to provide theoretical reference for the reform and development of vocational education.

### References