

Exploration of Innovative Nurturing Practices in Industrial College of Vocational Institutions

Tianjun Li

Taishan University, Shandong Tai'an 271000

Abstract: In recent years, along with the increasing trend of integration of industry and education and school-enterprise cooperation, vocational colleges and universities have responded to the requirements of the State Council and the Ministry of Education for the construction of industrial colleges, and have begun to try to build industrial colleges to create a new model of innovative parenting, which can provide vocational college student groups with a better platform for learning and development. This paper will be based on vocational colleges and universities, and conduct in-depth analyses and research on the relevant contents of the innovative parenting work of industrial schools.

Keywords: vocational colleges, industrial colleges, innovation and education

Introduction

Under the penetration and guidance of the concept of industry-teaching integration, industrial colleges have become a representative form of organizational practice in the education and training of students in vocational colleges. In other words, industrial colleges should be regarded as the inevitable product of the further development and evolution of the integration of industry and education. Throughout the creation and development of industrial colleges in vocational colleges and universities, it is easy to see that vocational colleges and universities have paid great attention to and fully supported this new mode of industry-teaching integration, and the practice has proved that industrial colleges and universities have played an irreplaceable and important role in promoting the practice of innovation and education in vocational colleges and universities.

1. Explanation of the connotation of industrial colleges

Analyzed from the theoretical level, vocational education academics have carried out in-depth discussion and research on the definition of industrial colleges, and more and more vocational colleges, social enterprises and so on have joined in. From the viewpoint of participating subjects, industrial colleges are essentially practical teaching bases constructed by vocational colleges and cooperating enterprises based on further deepening needs. From the perspective of the cooperation mode, vocational colleges belong to the leading party of industrial colleges, which occupies the professional resource advantage, and establishes a cooperative relationship between vocational colleges and the government, industry, enterprises and other multi-party subjects, to achieve the sharing of talents, technologies, platforms, equipment and other elements, and at the same time, to promote the in-depth integration of the industrial chain, the industrial group, the education chain and the professional group^[1]. Regarding the connotation of industrial colleges, it can be reflected in the following aspects:

1.1 Matching industrial technology innovation needs

Under the background of rapid development of market economy, all industries in society are facing the situation of

transformation and upgrading, i.e. industrial transformation, technological upgrading and product iteration. Vocational colleges, as the important main body of cultivating and conveying high-quality professional and skilled talents for the country and society, must actively meet this market development demand, and gradually get rid of the limitations and constraints of the original talent cultivation mode, and realize the realistic demand for professional talents in the field of real social production^[2]. Industrial colleges need to closely around a series of technological innovation needs, give full play to and make good use of their own advantages, and further close to the technological frontiers of industry and enterprise, as a guide to reorganize the training objectives and specifications of vocational colleges and universities, and consolidate the scientific and technological knowledge reserves, enhance the comprehensive quality.

1.2 Achieving cross-fertilization and synergies

Vocational colleges and universities need to build on the basic principles of innovation and inheritance, integration and cross-fertilization, synergy and sharing to make every effort to break the contradiction between the supply of innovative talents training and the demand of industrial development in vocational colleges and universities, further integrate, analyse and efficiently make use of all the available resources, and then gradually promote the fusion of the values of pluralistic subjects to achieve the real meaning of resource sharing, Functional complementarity, cross-fertilization and synergistic sharing.

1.3 Integration of industry, education and research

The industrial colleges created by vocational colleges will introduce advanced technical equipment, standards and personnel training systems from various industries and fields into the teaching system of the colleges, which is of vital significance in promoting the integration of industry, education and research into the overall development of the colleges. The industrial college provides a different learning experience for students of vocational colleges and universities. Students can carry out interdisciplinary and inter-organizational learning, and teachers of the colleges and universities can fully communicate and interact with excellent talents in the cooperative subjects, such as carrying out joint R&D and research on a certain technical problem, and carrying out technical training or technical research by means of innovative platforms in the cooperative subjects, and the scientific and educational platforms of the industrial colleges can also undertake technical R&D, technical research, and technological development. The science and education platform of industrial colleges can also undertake the integrated functions of technology research and development, technical personnel training and social services, thus promoting the close connection of the industrial chain and talent training chain^[3].

2. Vocational colleges and universities industry colleges to explore embodied forms of innovative parenting practices

2.1 Introduction of new and emerging specialized courses

In the vocational colleges and universities, many vocational colleges and universities have chosen to open new professional courses, which are closely related to big data, artificial intelligence and other cutting-edge disciplines. Through the teaching of professional courses to cultivate and improve the practical application ability of students, and at the same time to further strengthen the cooperative relationship with enterprises, to cultivate more high-quality professionals for enterprises, and in the process can also mobilize the students' interest in understanding modern technology^[4]. In addition, in the opening of new professional courses at the same time, industrial colleges and universities are also in the continuous updating of the concept of curriculum construction, the mode of implementation of the curriculum and the optimization of the curriculum evaluation, intended to stimulate teachers and students to participate in the teaching of the enthusiasm of the teaching of the more innovative and effective teaching and evaluation system of the professional courses, some of the vocational colleges and universities industrial colleges and universities are also in the opening of new professional courses as a channel for the establishment of the digital resources covering the core curriculum areas. Some of the vocational colleges and industrial colleges are also building a digital resource platform

covering the core curriculum areas of the profession to create high-quality courses.

2.2 Creation of practical teaching bases

In the process of innovating and educating people, most industrial colleges choose to build practical teaching bases that are consistent with their teaching objectives and talent cultivation goals. At present, the practice teaching bases created in the industrial colleges of vocational colleges and universities are mostly based on the platform resources of the cooperating enterprises, such as the production and research and development centres and training centres of the enterprises. There are also borrowed social public service places, such as government departments, hospitals, fire units, etc. In such practice teaching base, students will be more active in practical learning, attitude is more correct, and practical ability will be improved more quickly. Industrial colleges and universities created practice teaching base, whether in the platform strength or in the integration of resources and other aspects of the traditional practice teaching base compared with the previous have been greatly improved, and the establishment of a matching management and incentive mechanism, greatly improving the quality of practice teaching base. At present, the number of vocational colleges and universities declaring innovation, entrepreneurship and employment bases and demonstrative education and practice bases in industrial colleges and universities continues to increase, and in the future, these bases will become an important position for vocational colleges and universities to cultivate innovative talents.

2.3 Organization of "open-ended" employment training

The Institute of Vocational Education and Industry provides graduates with "open-ended" employment training, i.e., targeted training in career development planning, vocational skills training and business practice, with a view to improving the employability of graduates, enabling students to receive professional employment guidance both in school and during the employment period, and accumulating more practical experience to enhance their employability and competitiveness in all aspects. The aim is to improve the employability of graduates in a comprehensive manner, so that students can receive professional career guidance and accumulate more practical experience both in school and during the employment period, thus improving their employability and competitiveness.

2.4 Establishment of strategic cooperation with enterprises

Vocational colleges and industrial colleges will take the initiative to reach strategic cooperation with local core enterprises to share resources and complement each other's strengths. On the one hand, it will assist the cooperative enterprises to complete the cultivation, selection and promotion of talents, and on the other hand, it will give full play to its own strengths, analyse and integrate the new concepts and experiences, and set up a complete system to promote them in the industry, so as to assist in the transformation and upgrading of the enterprises.

2.5 Improvement of management mechanism and system

Vocational colleges and universities industrial colleges in the process of innovative training practice tasks are also in the process of synchronous optimization and improvement of the management mechanism and system, such as part of the vocational colleges and universities industrial colleges have set up a separate industrial colleges council, the integration of industry and education service management institutions, specifically responsible for industrial colleges and colleges management assessment mechanism as well as a series of supporting the development and improvement of the system. This management mechanism as a guide, vocational colleges and industrial colleges and the division of powers and responsibilities of the main body of cooperation will be more clear and detailed, so that it will further improve the vocational colleges and universities to cultivate talents will have a great deal of help.

2.6 Formation of a high-quality and high-level teaching staff

In vocational colleges and universities, teachers play a crucial role in the innovative education work of industrial colleges, and the overall level of teachers will directly affect the quality of teaching and the fate of industrial colleges. Therefore, industrial colleges must strengthen the assessment of teachers' qualifications, deepen the reform of teachers'

management mechanism by combining the actual needs, further activate the enthusiasm and initiative of the majority of teachers' groups to participate in teaching, and provide teachers with more opportunities to participate in training, learning and upgrading, so that teachers can grow up faster and more comprehensively, and improve the teachers' professional qualities and comprehensive ability in an all-round way.

3. Concluding remarks

To sum up, the mainstream development trend of vocational colleges and universities is to develop industry through education and promote education through industry, and the construction of industrial colleges is one of the effective paths for vocational colleges and universities to continuously explore the iterative upgrade of school-enterprise community. Through the industrial college to further deepen the school-enterprise cooperation, for students to get more opportunities to participate in practical learning, and then cultivate more high-quality, comprehensive talents who can quickly adapt to and lead the development of modern industry, for the country and the society to deliver more abundant and powerful human resources and intellectual drive.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Wang Jianjun, Wen Mantong, Wang Shuai, et al. Research and Practice on Construction and Operation Mode of Industrial College of Vocational Institutes--Taking Industrial College of Shaanxi Industrial Vocational and Technical College as an Example[J]. *Innovation and Entrepreneurship Theory Research and Practice*. 2023; (19): 146-149.
- [2] Liu Hong, Fu Zhi. Innovation and Practice of School-Enterprise Collaborative Education Mode in Higher Vocational Colleges and Universities--Taking E-commerce Professional Group of Fushun Vocational and Technical College as an Example[J]. *Liaoning Journal of Higher Vocational*. 2022; 24(3): 5-8.
- [3] Li Juanjuan, Wu Yuchen. Innovation and Practice of Higher Vocational Big Data Technology Professional Training Mode under the Integration of "Post Course Competition Certificate" - Taking Big Data Technology Professional of Shaanxi International Business College as an Example[J]. *Journal of Jiyuan Institute of Vocational Technology*. 2023; 22(3): 32-37.
- [4] Yang Yang, Wang Haiwen. Research on the innovation of collaborative education mechanism for industry-teaching integration in logistics industry colleges[J]. *Journal of Jilin Engineering Technology Normal College*. 2023; 39(6): 50-54.