Research on the Development and Countermeasures of Higher Vocational Education Management under the Background of the Integration of Production and Education

Zhi-xuan Li\textsuperscript{1,a}, Yang Liu\textsuperscript{1,b,*} and Jian-fu Ma\textsuperscript{2,c}

\textsuperscript{1} College of Educational Science and Technology, Northwest Minzu University, Lanzhou, Gansu, China
\textsuperscript{2} College of Education, Jiangsu University of Technology, Changzhou, Jiangsu, China

\textsuperscript{a} 18361480853@163.com, \textsuperscript{b} ly@xbmu.edu.cn, \textsuperscript{c} majianfu@jsut.edu.cn

*Corresponding author

Keywords: Integration of Production and Education, Higher Vocational Education, Education Management.

Abstract. Vocational education is the education that is most closely related to social and economic development, and education management needs constant innovation and reform. Aiming at the problems of vague educational target positioning, single curriculum content, insufficient practical teaching ability of teachers, uncoordinated school-enterprise cooperation, and one-sided teaching evaluation in higher vocational education colleges and universities, the paper puts forward higher vocational education teaching management in the context of industry-education integration. The corresponding countermeasures include clear goals, rich and diversified content, perfect security system, harmonious school-enterprise cooperation, and attention to multiple teaching evaluations.

1. Introduction

The type of education that is most closely related to social and economic development is vocational education. For this reason, the relationship between the school and the environment should be highlighted. Vocational education management needs continuous reform and innovation, especially the reform of colleges and universities. The reform of vocational education curriculum and teaching design can start from three levels of macro, meso, and micro, from policy construction to internal connotation construction of colleges and universities to the construction of teachers' personal practice, so as to integrate theory and practice. In the 2019 "Government Work Report", it is necessary to reform and improve the examination and enrollment methods of higher vocational colleges and expand the enrollment of one million people on a large scale. This means that my country's higher vocational education reform and development has entered a new stage.

2. Connotation of the Integration of Production and Education and the Management of Higher Vocational Education

In the integration of industry and education, industry is the foundation and education is the support. The integration of production and education is reflected in specific professional groups, curriculum groups, scientific research teams, education teams, and talent training programs. The integration of action and knowledge refers to the connection between the cognitive process and the professional action process. The combination of work and learning refers to the connection between the teaching process and the production process. The school-enterprise cooperation refers to the connection between the curriculum content and the professional standards. Corresponding to industrial development, vocational education must use hands and brains. Learning by doing, integration of learning and teaching, unity of action and knowledge.
The stakeholders of vocational education management and running schools are nothing more than the national and school levels. At present, the development at the national level is weak, and the development at the school level is relatively good, so the current development is mainly at the national level and top-level design. It can be focused but must take into account the interests and demands of the government, enterprises, industries, schools, teachers, and students. Such research results are distinctive and unbiased.\[2\] Have systematic thinking and holistic thinking. Insufficient and unbalanced demand and supply contradict. The main body of vocational education management, "who will manage", is managed by the central state, local governments, and schools; the means of vocational education management, that is, "how to manage", is managed through policies, regulations, programs, and methods; vocational education management The content, that is, "what to manage", refers to the management including teachers (human resources), students, teaching, training, evaluation, scientific research, management services, ideological and political and other aspects.

2.1. Shortcomings in the Current Situation of Higher Vocational Education Management

2.1.1. The Positioning of Educational Goals is Fuzzy

Our country's higher vocational colleges still have some problems in the construction of practical training bases and practical teaching. The main manifestations are: the traditional talent training methods and management methods are still in use, the development positioning is not clear enough, and there is no distinctive school-running characteristic. There are three reasons: the guiding ideology of running the school is not clear. In the process of talent training, only the transfer of theoretical knowledge is emphasized, and practical teaching is ignored; there is no practical teaching for the needs of regional industrial development and the needs of industrial enterprises for talents; lack of sufficient School funding and sound investment mechanism, no large-scale training.\[3\]

2.1.2. The Content of the Course is Single

The function of general education is to establish a common civic quality foundation, so its curriculum development should be in a controllable state, while vocational education is a service production and service front-line, and its curriculum should be adjusted in time according to changes in demand, so it is not rigid Standardize the unified curriculum requirements of higher vocational colleges and the country.\[4\] The professional setting of higher vocational colleges should be closely integrated with industrial development. The textbooks generally adopted by higher vocational colleges are the same as those of ordinary colleges and universities, which leads to a deviation between the teaching content and the production process. For this reason, teaching materials should be jointly compiled by higher vocational colleges and enterprises.

2.1.3. Insufficient Teachers' Practical Teaching Ability

We always adhere to the development path from the macro to the micro level. This is the development path of "conditional preparation". In other words, only enough teachers, equipment, venues and other conditions can carry out vocational education curriculum reform. In fact, we cannot reserve excellent teachers for curriculum reform. Although my country’s higher vocational colleges attach great importance to the construction of "dual-qualified" teachers, there are still problems such as insufficient time for teachers to enter the enterprise training and insufficient investment in teacher training.\[5\] Domestic vocational education teachers lack clear laws and regulations, there is no clear and standardized identification of whether educators have the ability to engage in vocational education, and the supervision of existing vocational education teachers is relatively small. Teachers are inspected regularly or irregularly. It is not uncommon for people to still not learn professional skills afterwards.
2.2. Countermeasures to Improve the Management of Higher Vocational Education under the Background of Integration of Production and Education

2.2.1. Clear and Clear Goals

The "Several Opinions of the General Office of the State Council on Deepening the Integration of Industry and Education" pointed out: "The main goal of deepening the integration of industry and education is to gradually increase the participation of industry enterprises in running schools, improve the diversified education system, and fully implement the collaborative education of schools and enterprises. In time, the overall development pattern of education and industry integration and benign interaction has been formed. The demand-oriented talent training model is sound and perfect. The major structural contradiction between the supply of talent education and industrial demand is basically resolved. Vocational education and higher education contribute to economic development and industrial upgrading." Therefore, schools and enterprises should participate in the development of talent training plans and jointly carry out talent education and management. Higher vocational colleges should formulate practical teaching goals according to students' knowledge and ability levels. In terms of vocational core competence training, teachers combine professional competence training and social competence training in the teaching process, allowing students to integrate the knowledge they have learned in practice, integrate theory with practice, and improve students' vocational core competence; Vocational colleges deepen the integration of production and education, adhere to the fundamental task of cultivating people with morality, and take the employment of students as the orientation, vigorously cultivate and promote the spirit of craftsmanship, and promote the all-round development of students.

2.2.2. Rich and Diverse Content

In the selection of teaching materials, theoretical knowledge must be selected and work knowledge described systematically. Higher vocational colleges should develop teaching materials based on the production characteristics of the enterprise, combined with the characteristics of the school and the direction of talent training. On the basis of the principles of learning technical knowledge, organically integrate a variety of learning methods, practical operations, reflecting problems and self-evaluation as a whole textbook. Teachers and business experts jointly compile teaching materials and introduce vivid cases in the workplace to improve the practicality of teaching materials. The compilation of teaching materials should be student-centered, result-oriented, promote autonomous learning, strengthen the learning information function, and use corporate standards, work processes or products as the content of the teaching materials to achieve the integration of teaching materials, learning materials, and work manuals. If high-quality textbooks are developed, teachers will be forced to compile the textbooks' comprehensive ability and the ability to integrate knowledge between production and teaching.

In terms of practical teaching content, the characteristics of higher vocational colleges are to train talents according to the needs of industry enterprises, continuously reform the teaching system, update teaching content, and avoid the decline of students' competitiveness due to backward teaching content, which will affect the long-term development of the college. First of all, it is necessary to help students realize the important role of practical teaching. By allowing students to visit the production process of enterprises or listen to lectures by industry experts, after they have a general understanding of the training content, they can conduct specific practical teaching. Secondly, it is necessary to set up training goals, so that students can carry out training operations according to the training project list, and improve students' basic practical skills. Once again, a simulation training room should be established to let students understand the advanced technology of the industry and enterprises and complete the typical tasks of the enterprise. Finally, internships should be implemented to enable students to participate in the production links of the enterprise, exercise and learn in real working conditions, and comprehensively test their own practical capabilities.
2.2.3. Perfect Guarantee System

First of all, higher vocational colleges should strengthen the construction of the teaching staff and build a "double-qualified" teaching staff. "Dual-teacher" teachers must not only understand professional production operations and production processes, but also have the ability to guide students in practical operations. By sending teachers to enterprises for training, or inviting enterprise experts to guide schools, ensure that teachers keep up with the development direction of the industry and the application of new technologies. Secondly, the construction of practical teaching facilities in higher vocational colleges should start from two aspects: inside and outside the school. In the construction of campus, higher vocational colleges integrate the educational resources of the school with various resources of the enterprise, continuously improve the practical teaching conditions in the school, and establish an advanced practical teaching base. Higher vocational colleges set up off-campus practice teaching bases such as internships and training centers to provide students with the guarantee of practical teaching.

The quality of vocational education teachers is a key factor to ensure the quality of vocational education. When evaluating vocational education qualification requirements for professional education in colleges or through teacher qualification examination theories, companies and factories have few requirements for work experience in technical positions, and even some teachers I have only completed a bachelor's degree and have never engaged in vocational and technical positions. Therefore, it is necessary to establish and improve the assessment standards and continuing education systems for vocational education teachers, strictly check vocational education qualifications, set up vocational education teacher training institutions, and provide teachers with more opportunities for corporate internships and participation in training.

3. Conclusion

In summary, innovating and reforming the vocational education management system plays an important role in promoting the modernization of vocational education. In this process, it is necessary to establish a macro vocational education management institution to promote the vocational education management system to present Chinese characteristics. On the basis of increasing the ratio of financial investment in vocational education and stimulating the motivation of social enterprises to invest in education, establish a unified education quality standard and vocational skill evaluation standard, and innovate and reform the vocational qualification examination system, so as to promote good vocational education management. Achievements.

Acknowledgement

Fund Project: Northwest Minzu University basic scientific research operation fee special fund funded postgraduate project "Research on the Path of Cultivating New Professional Farmers under the Background of Targeted Poverty Alleviation"; Project Number: Yxm2020043.

References


[8] Sun Shuaishuai, Qi Zhanyong, “Review of the changes in the status of my country's vocational education since the founding of New China 70 years ago—Based on the perspective of policy text analysis”, Vocational and Technical Education. 2019, 40(10).
