

The Significance and Path Analysis of Developing New Three-dimensional Teaching Materials in Vocational Education

Qingyun Sun¹, Zhiqiang Zhao¹, Wei Jiang² and Chao Liu²

¹Binzhou Polytechnic, Binzhou 256603, China

²Binzhou Aviation Secondary Vocational School, Binzhou 256603, China

Abstract

With the development of modern vocational education, it is necessary for schools and enterprises to deeply cooperate to design and develop new three-dimensional teaching materials, and innovate the concept of teaching material construction, so as to improve the teaching effect of vocational education. At the same time, we should expand the construction channels of teaching materials to meet the needs of learning in the new era, and lay a foundation for cultivating high-quality workers and technical personnel with all-round development of morality, intelligence, physique, beauty and labor. This paper analyzes in detail the main significance and specific realization path of jointly developing new three-dimensional textbooks in vocational education, which has certain significance to improve the level and quality of modern vocational education.

Keywords

Vocational education; Development; Three-dimensional teaching materials; Path.

1. Introduction

With the development of China's economy, the demand for specialized professional and technical personnel is also constantly improving, and it is necessary to strengthen vocational education and training, in order to provide more professional and technical personnel for the society. To this end, the university and enterprises can deeply cooperate, to design and develop new three-dimensional teaching materials, so as to effectively improve the quality of talent training in vocational colleges. This paper first analyzes the significance of developing new three-dimensional teaching materials for vocational education, including strengthening the school-enterprise cooperation, deepening the integration of industry and education, improving the post competency ability, improving the quality of talent training, promoting the professional construction, curriculum construction, and promoting the teaching reform[1]. Later, the background of the development of new three-dimensional teaching materials in vocational education is expounded, including the problems existing in the current construction of vocational education teaching materials, the direction of the construction of vocational education teaching materials, and the relevant policies and theories of the construction of vocational education teaching materials, etc. Finally introduces the vocational education development of new three-dimensional teaching material path, including the goal of "dual" cooperation teaching materials construction, "dual" cooperation construction development mechanism of teaching materials, "dual" cooperation design development standards and "dual" cooperation the key content of the construction of teaching materials, the following specific analysis and introduction.

2. Organization of the Text

2.1. Significance of Developing New Three-dimensional Teaching Materials in Vocational Education

2.1.1. It Is Conducive to Strengthening School-Enterprise Cooperation and Deepening the Integration of Industry and Education

It is of great significance to develop new three-dimensional textbooks in the vocational education system. For example, the school-enterprise cooperation further strengthens the communication between schools and enterprises, promotes the integration, and provides theoretical basis for the talent training plan, the teaching content more fits the production practice, and can realize the organic connection between employment demand and talent training.

2.1.2. It Is Conducive to Improving the Job Competency Ability and Improving the Quality of Talent Training

University-enterprise "dual" cooperation to develop new three-dimensional teaching materials based on industry, on the basis of full analysis of the job ability and typical task, fully consider the nature of students engaged in typical work task and positioning, based on the working process reasonable teaching material content, more conducive to the cultivation of students' professional ability, cultivate more conform to the needs of talents, realize employment demand and talent training, improve the quality of college talent training.

2.1.3. It Is Conducive to Professional Construction and Curriculum Construction, And Promote Teaching Reform

Through the development of teaching materials, the professional practice ability and information teaching ability of vocational college teachers can be greatly improved. The personnel of both the university and the enterprise analyze the typical work tasks of the job positions, jointly revise the professional talent training program, revise the level of professional construction and curriculum construction, and improve the level of professional construction and curriculum construction. The development of new three-dimensional teaching materials based on information technology has promoted the improvement of the information teaching level of college teachers and helped the teaching reform. The above points are all the important significance of developing new three-dimensional teaching materials in the vocational education system. The following will introduce in detail the path and realization mode of developing new three-dimensional teaching materials in the vocational education system.

2.2. Background of Developing New Three-dimensional Teaching Materials in Vocational Education

2.2.1. Problems Existing in the Construction of Current Vocational Education Teaching Materials

Before the analysis of the path of vocational education development, the first need to understand the vocational education development of new three-dimensional textbooks of relevant background, and study and analyze the problems existing in vocational education textbooks construction in China and improvement direction, so you can for the "dual" cooperative development of teaching materials to provide theoretical basis. At present, there are also some problems in the construction of vocational education teaching materials, which need to be solved, so as to improve the training quality of vocational education[2]. The main problems include the following points: first, vocational education teaching materials are not updated in time with the development of society. At present, new technologies emerge in an endless stream. If the content in the textbook is still old, it is difficult for students to master the latest technology, and there will be a certain disconnection with the society. Second, the

emphasis on theoretical knowledge, the practice and operational content is relatively little, which makes it difficult for vocational college students to master the skilled practical ability. Third, the form of teaching materials is relatively single. With the development of Internet technology, many online teaching materials can be developed by using the Internet to meet the learning needs of different students.

2.2.2. Direction of the Construction of Vocational Education Teaching Materials

The Ministry of Education in the "notice on the organization of the" 13th Five-Year "vocational education national planning teaching materials construction work" pointed out that adhere to the integration of industry and education, the dual development of school-enterprise. Strengthen industry guidance and enterprise participation, extensively mobilize social forces to participate in the construction of teaching materials, encourage the "dual" cooperative development of teaching materials, pay attention to the absorption of industry enterprise technical personnel, skilled craftsmen and other deeply participate in the compilation of teaching materials. At the same time, we should keep up with the industrial development trend and the demand of industrial talents, timely incorporate the new technologies, new processes and new norms of industrial development into the teaching materials, and reflect the professional ability requirements of typical positions (groups), which has an important guiding role in the design and development of school-enterprise "dual" cooperative textbooks.

For the direction of the construction of vocational education teaching materials, the social advanced technology should be integrated into the teaching materials, and the information resources of the teaching materials should be fully developed together. At the same time, the Internet technology can be used to develop an Internet teaching platform to facilitate the students from vocational colleges to learn online, so that the learning scene and learning time can be extended to meet the diversified learning needs of the students. At the same time, for teaching, it is also a change of teaching mode, which can enable teachers to carry out mixed teaching management. In the mixed teaching management mode, online education and offline education can be combined, and the two education methods can complement each other. In the mixed teaching mode, teachers can use the teaching software to design the teaching space, create a good teaching atmosphere, and mobilize the enthusiasm of students. In the teaching software, the discussion area, operation area and division area can be designed to meet the various needs in the teaching process. At the same time, teaching videos are embedded in the teaching software to encourage students to watch videos to learn independently and improve students' independent learning ability.

2.2.3. Relevant Policies and Theories on the Construction of Vocational Education Teaching Materials

In the process of vocational education teaching materials construction, we should fully analyze and learn from the relevant theoretical research results of industry and education integration, school-enterprise collaborative education and teaching materials construction at home and abroad, especially in the theoretical results of school-enterprise cooperative design and development of teaching materials. Set up university-enterprise cooperation development teaching material committee, in order to improve the quality of talent training as the goal, to deepen the integration, university-enterprise cooperation as the main line, realize industry enterprise technical personnel, skilled craftsman and school teaching experts and teaching depth to participate in teaching material development, form "build, responsibility sharing, benefit sharing" teaching material construction development concept.

The relevant policies and theories on the construction of vocational education teaching materials include the important documents issued by the state, such as the Implementation Plan for the Reform of National Vocational Education and the Notice on Organizing the Construction of Teaching materials for the National Plan of Vocational Education during the

13th Five-Year Plan period. According to the spirit of these documents, the relevant policy and theoretical research on the construction of vocational education teaching materials should be strengthened, so as to develop higher quality vocational education materials. At the same time, in the framework of vocational college training, the training should be conducted in different stages. First of all, we should build a good students' ideological and moral character, including correct good students' political attitude, actively participate in political activities, and should also actively encourage students to participate in social practice, so as to further improve the students' ideological and moral character[3]. Secondly, students should be encouraged to carry out volunteer services, and set up the statistical function modules of service duration in the education platform. Thirdly, we should highlight the cultivation of students' innovation ability and encourage students to explore some unknown fields. Finally, we should improve the students' social ability, improve their ability to adapt to the society, and better meet the social demand for talents.

2.3. Realization path of Developing New Three-dimensional Teaching Materials in Vocational Education

2.3.1. Goal of The School-enterprise Cooperation in Developing Teaching Material

Before analyzing the realization path of the development of new three-dimensional teaching materials in vocational education, it is necessary to make clear the goal of the construction of "dual" cooperative teaching materials between schools and enterprises, so that the development of new three-dimensional teaching materials in vocational education can be gradually carried out according to the set goals set. The vocational characteristics of vocational education require that the teaching process be as consistent as the working process of the corresponding position as possible. Therefore, we have made the following exploration and attempt in the development of teaching materials through school-enterprise cooperation. The main goal of the school-enterprise "dual" cooperative teaching materials construction is to develop quality education, implement the cultivation by virtue, and improve the quality of vocational colleges, which is an important goal of the development of contemporary vocational colleges, but also the goal of the school-enterprise "dual" cooperative teaching materials construction. In the formulation of the school-enterprise "dual" cooperative textbook construction plan, we should innovate the student evaluation mechanism, take the information platform construction for the gripper, focusing on the evaluation standard construction, the comprehensive reform of the student evaluation method, guide the education teaching reform to improve the quality of talent training, to provide support for cultivating qualified technical and skilled talents. At the same time, in the school-enterprise "dual" cooperative textbook construction plan, optimize the building system, improve the building standard, improve the building standard, build the building platform, and improve the building mechanism.

To this end, we should do a good job in the following aspects, first, the establishment of the school-enterprise cooperative development teaching material committee, to build the school-enterprise "dual" cooperative teaching material construction and development platform. In order to ensure the smooth progress of school-enterprise cooperative development of vocational education teaching materials, coordination and communication between schools and enterprises, and ensure the quality and progress of professional teaching materials, the college leaders led the establishment of the committee, composed of college leaders, enterprise industry personnel and other universities. The committee has formulated a series of management measures, defined the responsibilities and powers of all parties, and formulated a series of documents such as the composition of textbook developers, textbook development process, and textbook quality standards. The second is to create a "ability standard, standard integration" of the school-enterprise "dual" cooperative teaching material construction and development mechanism.

The school-enterprise cooperative development teaching materials Committee develops a series of system documents, establish a long-term mechanism, clarify the main rights and responsibilities of enterprises and schools, construct and develop three-dimensional textbooks according to the quality standard of "dual dimension" cooperative teaching materials, and stimulate the incentive and restraint mechanism to ensure the quality of teaching materials. The third is to develop the three-dimensional teaching materials based on the "continuous update, dynamic multi-dimensional" of the post ability standard. Ability standard, refers to the cultivation of students' professional ability; "continuous update" is mainly reflected in the dynamic information of teaching materials and regular update of supporting electronic resources, namely "stability + supplement", stability mainly refers to the school-enterprise "dual" teaching materials and professional qualification certificate, relatively stable, supplement new technology, new technology, new specifications, and research results into teaching resources, teaching material content is often new and updated in time. The construction of "three-dimensional" teaching revolves around the classroom teaching, including the main teaching materials, the supporting electronic teaching plan, electronic practice and training guidance, electronic multimedia resource database, electronic case database, electronic exercise answer library and online test system.

2.3.2. Construction and Development Mechanism of School-enterprise Cooperation in Developing Teaching Material

In the construction and development of school-enterprise "dual" cooperative teaching materials, a continuous updating mechanism of the content of vocational education teaching materials should be established, so that the students in vocational education colleges can closely follow the pace of the current social development, update the knowledge learned in time, and ensure the quality of talent training in vocational colleges.

At the same time, the Implementation Plan of the National Vocational Education Reform clearly points out that the textbooks will be revised once every three years, in which the professional textbooks will be updated timely and dynamically along with the development of information technology and industrial upgrading. Secondly, to ensure that the content of the teaching materials can be continuously and new, and to ensure the quality of the teaching materials, it is necessary to establish a strict and strict monitoring mechanism and measures to ensure it. Thirdly, we should study and build the teaching material resource database. Consumers can choose high-quality teaching materials through the resource database, and force editors to improve the quality of teaching materials through the market. Explore the school-enterprise "double chief editor" system, enterprises, schools together to ensure the quality of teaching materials. Enterprises will be new technology, new technology, new norms and other external resources into the teaching materials in time. At the same time, the school should also timely transform the scientific research results and teaching and research results into teaching resources, so that the content of the teaching materials is often used and updated in real time. In terms of education methods, there should be some flexibility and diversity, so that students can learn targeted according to their own interests. Interest is the best teacher, and students will still maintain their interest. Students should be encouraged to develop personalized training programs according to their own situation. To promote Internet online education in higher vocational colleges, it is necessary to improve students' participation in the process of Internet education and create a good educational environment, which needs to give full play to the advantages of Internet network data sharing.

2.3.3. Design and Development Standards of School-enterprise Cooperation in Developing Teaching Material

In the process of development and design of school-enterprise "dual" cooperation textbooks, we should grasp the relevant standards. Specific development standards include the following

points: first, the deep integration of school-enterprise, and the establishment of a school-enterprise "dual" writing team. Implement the "dual master compilation" of vocational colleges and industrial enterprises, implement the main responsibility of both sides, and effectively ensure the quality of textbook compilation. Second, in-depth discussion and analysis of job responsibilities and professional qualification requirements, based on the professional ability standard design of the teaching material content. At the same time, it follows the growth law of technical and skilled personnel, attaches equal importance to knowledge transmission and technical skills training, strengthens the cultivation of students' professional quality and professional technology accumulation, and integrates professional spirit, professional spirit and craftsman spirit into the content of the teaching materials. Third, according to the vocational job task and cognitive law, the project teaching situation creation. Fourth, to compile the first draft, supporting the development of teaching materials information resources. Fifth, the application of teaching practice, students, internship enterprises, teachers feedback, to revise the final draft.

2.3.4. Key of School-enterprise Cooperation in Developing Teaching Material

In order to improve the quality and effect of the construction of school-enterprise "dual" cooperative teaching materials, we should grasp the following key points to ensure that the construction of school-enterprise "dual yuan" cooperative teaching materials can be implemented in place. Main "dual" cooperation textbook construction key points include the following points: one is set up university-enterprise cooperation development textbook committee, set up "dual" cooperation textbook construction development platform, solve the enterprise role positioning fuzzy, lack of motivation, can not give full play to the role and the two sides personnel information exchange is not smooth. Through the development of teaching materials, enterprises can fully participate in the most basic level of talent training, stimulate the enthusiasm of enterprises to participate in running schools, so that enterprises and colleges can form a joint force in education, and improve the quality of talent training.

The second is to create a "ability standard, standard fusion" teaching material construction development mechanism, through the integration of enterprise standards, industry standards and college curriculum standards to jointly develop the development of new teaching material standards, effectively solve the teaching material content and professional standards docking not closely, vocational education characteristics are not distinct and school-enterprise cooperation teaching standards and the absence of system construction. The third is to develop the three-dimensional teaching materials based on the "continuous update, dynamic multi-dimensional" of the post ability standard. To solve the problems of low teaching efficiency, such as single form, outdated content, heavy theory, light practical operation and poor teaching resources. These are the key problems in the construction of the school-enterprise "dual" cooperative teaching materials. By solving these key problems, the construction of the "dual" cooperative teaching materials can be well implemented in place.

3. Conclusion

At present, China's vocational education is developing rapidly. It is of great significance to strengthen the development of new three-dimensional textbooks for the development of vocational education and overcome the problems existing in the traditional textbooks in vocational colleges. The significance and path of developing new three-dimensional vocational education teaching materials analyzed in this paper are of positive significance for promoting the development of vocational education in China.

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