

Project-Based Learning as an Enhancement to Footwear Design Course in Wenzhou Polytechnic

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Abstract

Project-based Learning is a teaching activity carried out by teachers and students through the joint implementation of a complete project, which is a kind of "behavior-oriented" teaching method. It has a fixed start time and end time. In principle, there should be relatively complete work after the end of the project. In this study, students majoring in footwear design and technology at Wenzhou polytechnic. The project Learning method is adopted. Relying on Wenzhou's strong footwear industry foundation and teacher-enterprise cooperation resources, teachers' school-enterprise cooperation projects are used as the carrier to guide students to participate in teachers' real projects through project-based teaching. The realization of hardware resource sharing and teacher strength strengthening between the university and the enterprise can significantly improve the training effect of skilled talents in higher vocational colleges (Liao Hongfei, Liang Qifeng, 2014). By carrying out project-based teaching, students are allowed to enter into the development and operation of actual projects and become project-based teaching project personnel, who can fully apply their learning theories in the operation of project practice and have an intuitive understanding of the actual projects of enterprises. Encourage students to directly participate in and experience, improve the ability to practice, innovate, independent problem solving, and so on, to improve their professional quality. The author takes the project-based teaching of footwear design and technology major under school-enterprise cooperation at Wenzhou polytechnic as a case study. From the current situation of curriculum setting, teacher team construction, students' practical training conditions, employment status, relevant policies, and regulations, the author conducts an analysis based on a market survey and school questionnaire. It is found that there are some problems in project-based teaching in vocational colleges, such as unreasonable curriculum setting, outdated knowledge structure of teachers, lack of training facilities, the low employment rate of high-quality counterparts, and deviation of talent training objectives. Through a questionnaire survey, the reasons are analyzed, and in actual cases, the construction of a project-based teaching resource base, project-based teaching faculty team, school-enterprise research platform, and training base, and the introduction of government agencies are explored, so as to realize the three-party interaction between the government and the government, and jointly promote student training and high-quality employment.

Keywords

Footwear design and technology; Project-based teaching; Project-based learning; Talent training.

1. INTRODUCTION

In today's increasingly fierce workplace competition environment, how, cultivating the enterprise's practical need for talent is the direction of vocational colleges' efforts. Enterprises need to introduce talents to improve competitiveness in the industry, in order to ensure the healthy development of enterprises; Vocational colleges need to train and transport outstanding talents, so as to achieve sustainable development based on vocational education. Therefore, using the project-based teaching mode based on school-enterprise cooperation is of great significance. Project-based teaching is a new direction of teaching reform under the background of school-enterprise cooperation. The Footwear Design and Technology Major of Wenzhou polytechnic, where the author works, has carried out project-based teaching for many years, but there are still some problems. Therefore, taking Footwear Design and Technology Major as an example, the author explores the project-based teaching method based on school-enterprise cooperation, hoping to summarize the implementation experience of project-based teaching, promote the application and bring the effectiveness of project-based teaching into full play. It provides a reference for the implementation of project-based teaching in our school and other vocational colleges.

At present, from the perspective of the implementation effect of project-based teaching of footwear design and technology major in Wenzhou Polytechnic, there are mainly the following problems: The content of computer-aided design with digital design as the core is relatively shallow, and each item is basic knowledge and skills. Teachers only teach the digital design of footwear as basic theories and skills, which falls short of the actual requirements of enterprises for digital design skills. The knowledge structure and skill level of footwear design and technology teachers are traditional and backward. In the teaching process, they teach by rote and seldom consider students' understanding and experience. Teachers only teach for the purpose of completing teaching tasks, without considering that students are the subjects of learning, so they should fully mobilize the initiative of students. The hardware facilities of the school just stay in the limited resource condition of the school layout, the equipment update lags behind, and each student has limited opportunities to operate the equipment during the limited class hours. From the current situation, footwear design and technology professional computer hardware facilities are not perfect. With the rapid development of footwear design and technology majors in vocational colleges, the requirement for students' practical ability is higher and higher. Under the condition of a market economy, the specialty construction of vocational schools must meet the market demand, meet the needs of the regional economy and development, and have special characteristics. Otherwise, it will inevitably lead to employment difficulties and vocational dislocation of graduates, but also lead to enrollment difficulties, school education and management, and a series of problems in the vicious circle.

In the current project-based teaching based on school-enterprise cooperation, enterprises only treat students as interns, rather than employees of the company or participants in the project, and do not regard cooperation as a way to develop vocational education. The specific performance is unreasonable curriculum, uneven teacher team, imperfect hardware facilities, students' employment difficulties and the introduction of the project is not smooth, and so on. Starting from the background of school-enterprise cooperation, the author explores the project-based teaching talent training model based on school-enterprise cooperation. Taking Therefore, using the project-based teaching mode based on school-enterprise cooperation is of great significance. The footwear design and technology major of Wenzhou polytechnic is an example, this paper analyzes the shortcomings of vocational colleges in school environment construction, student quality, and teaching staff, points out that the training of skilled talents is the main direction of vocational colleges, and carrying out project-based teaching based on school-enterprise cooperation can significantly improve students' ability to solve practical problems.

The learning theory can be fully applied in the operation of project practice, which is conducive to students' understanding of the actual project of the enterprise, enhance the project experience of students, cultivate the ability of practice, innovation, independent problem solving, etc., so as to improve their own professional quality, which is in line with the needs of the industry for talents, in line with the law of vocational education talent training, and has certain practical significance.

2. PROJECT TEACHING STATUS AND PROBLEMS OF FOOTWEAR DESIGN AND TECHNOLOGY MAJOR

2.1. Problems with the existing course and student mastery level

2.1.1 Problems existing course

The Footwear industry is the pillar industry of Wenzhou, with decades of an industrial base, with a complete industrial chain. Over the years, based on the school-enterprise cooperation model, it has accumulated a large number of high-quality enterprise resources, which is very conducive to carrying out project-based teaching based on school-enterprise cooperation. The real school-enterprise cooperation projects are taken as professional teaching materials, the teaching activities are integrated with the project development, the project implementation cycle is synchronized with the teaching cycle, and the course content is specified according to the project progress. In order to understand the curriculum of the footwear design and technology majors, the author analyzes the training program for 2021 talents of Wenzhou Polytechnic of Footwear Design and Technology. The results are as follows:

Table 1. Footwear Design and Craft curriculum club set up for Grades 1-2

curriculum type	course	Credits and hours		Class arrangements for each semester			
		Credits	hours	One	two	three	four
required curriculum	design drawings	3	64	16	16	16	16
	material application	3	64	16	16	16	16
	intelligent manufacturing	2	36	0	0	18	18
	graphic design	3	64	16	16	16	16
	specialized English	3	64	16	16	16	16
	effect picture	3	64	16	16	16	16
	intellectual property	2	36	0	0	18	18
	Footwear technology	3	64	16	16	16	16
	Footwear styling	3	64	16	16	16	16
	specialized curriculum	Last technique	4	72	18	18	18
Footwear construction		8	144	36	36	36	36
Footwear production		8	144	36	36	36	36
original design		4	72	18	18	18	18
computer aided design		4	72	18	18	18	18
Footwear 1+X		4	72	18	18	18	18
	Footwear accessories	4	72	18	18	18	18

As can be seen from the above table of footwear design and technology courses, basic courses of public basic courses include design drawings, material application, intelligent manufacturing, graphic design, specialized English, effect picture, intellectual property, Footwear technology, and Footwear styling. In terms of professional courses, there are about 7 major categories, including Last technique, Footwear construction, Footwear production, original design, computer-aided design, Footwear 1+X, and Footwear accessories. Through the questionnaire survey of students, it is found that students generally think that the public curriculum is reasonable, but the difficulty of professional courses is quite different. Among them, they think that the courses of shoe last technology, original design, and computer-aided design are more difficult, which is challenging for the students of footwear design and technology in higher vocational colleges. Students believe that some courses in the major are not closely related to the employment of future students. For example, they believe that few students will be employed in the production line in the future, and students who change courses show little interest in learning this course.

2.1.2 Problems existing in the course setting

According to the book Educational Reform of Vocational Education Curriculum, the educational design of vocational education curriculum should conform to the principle of "6+2", and so should the educational design of the project. "6" is an engineering portfolio, a direction of work activities that emphasizes competency objectives, project careers, competency demonstrations, and the integration of students and knowledge theories. 2 "refers to the educational content of some courses (such as "ideology and morality", "foreign language"), and more importantly, it should be "infiltrated" into all courses of the school, rather than instilled in classes. For the "core competence in the industry" in vocational education, the "infiltration" of the system is more important.

At present, the course arrangement of footwear design and technology major in our college is almost centered on class hours, which only achieves the basic course information and teaching objectives mentioned in the above table. The course arrangement is made based on class and class hours. The basic course information does not reflect the refinement of the footwear design and technology major, let alone pay attention to practical teaching. As a result, it is difficult to solve the problems of middle school students in project operations in the future. Meanwhile, considering the particularity of talent training for footwear design and technology, the types of teaching materials for footwear design and technology in the industry are not targeted enough. There are almost no diversified teaching materials fully suitable for footwear design and technology, and professional courses have no stability and professional characteristics, so they can only be referred to as reference books. Teaching materials are carriers for teachers to impart knowledge, which should be skilled and practical. The selection of teaching materials should be written by teachers with practical experience according to their own project practical experience and professional training objectives. The talent training program should consider whether the content of the textbook conforms to the actual needs of the industry and whether it is conducive to the employment of students. With the development of the regional economy and project changes, the teaching materials are constantly adjusted and modified to make them conducive to the sustainable development of footwear industry talent training.

In short, combined with the characteristics of students and industry, teachers and enterprises jointly write textbooks and update them regularly to ensure real-time knowledge and timely update of the latest knowledge and skills along with the development of the industry. Only in this way can students in vocational colleges be stimulated to think and innovate. Create more valuable works for the footwear industry.

2.2. The educational content is outdated and lacks the contemporary character

2.2.1 The structure of teachers is unreasonable

The quality of teaching is closely linked with the team of teachers, teachers in the aspect of talent training has very important significance. The teachers of footwear design and craft are usually college graduates, fine arts colleges, or fine arts majors, and a few of them are from production enterprises. The main problems include lack of practical experience, especially project practical operation experience, lack of basic professional knowledge, unable to keep up with the development trend of the footwear industry, lack of operational technology theory, lack of professional knowledge but no operational skills, shortage of teachers who are really good at footwear design and technology project research and development, backward skills of teachers, unable to impart skills and knowledge applicable to enterprises. Many teachers stay at the knowledge level and have a higher view of theories, but the skills that can be linked to enterprises are still weak, which cannot meet the needs of students to learn the practical skills of enterprises, resulting in graduates being unable to quickly adapt to the needs of enterprises.

2.2.2 Backward concept of teacher education

The level of teaching staff plays an important role in project-based teaching, which is manifested in professional construction, personnel training, and improving teaching quality. Project-based teaching requires the teacher to have overall control over the course. When the project is introduced into the teaching process, the teacher can control every link of the project. The teacher is not only the knowledge imparts but also the person in charge of the project. The footwear design and technology major of our college is still immature in terms of teacher team construction, curriculum setting, and especially educational concepts. There are arbitrary teaching and research organizations and no rules to follow, resulting in the core courses of footwear major stagnated in the basic level of the plane, plain surface, technology, etc., while the teaching content and difficulty of computer-aided design, which has been widely popular in the industry, are generally not high. The level of teaching staff plays an important role in project-based teaching, which is manifested in professional construction, personnel training, and improving teaching quality. Project-based teaching requires the teacher to have overall control over the course. When the project is introduced into the teaching process, the teacher can control every link of the project. The teacher is not only the knowledge imparts but also the person in charge of the project. The footwear design and technology major of our college is still immature in terms of teacher team construction, curriculum setting, and especially educational concepts. There are arbitrary teaching and research organizations and no rules to follow, resulting in the core courses of footwear major stagnated in the basic level of the plane, plain surface, technology, etc., while the teaching content and difficulty of computer-aided design, which has been widely popular in the industry, are generally not high. From the perspective of the training results, if students only possess the basic knowledge and skills of footwear design, they will face great obstacles in their future employment and career development, and cannot reach the goals of the project tasks. As a result, their ability to master knowledge will decline, and it is difficult for them to adapt to the development needs of the footwear industry. From the perspective of the training results, if students only possess the basic knowledge and skills of footwear design, they will face great obstacles in their future employment and career development, and cannot reach the goals of the project tasks. As a result, their ability to master knowledge will decline, and it is difficult for them to adapt to the development needs of the footwear industry.

2.3. Training room equipment status

2.3.1 Training room resources are scarce

The Outline of the National Medium - and Long-Term Plan for Educational Reform and Development (2010-2020) calls for building practical, high-quality educational equipment. Equipment selection should be based on professional practical training needs (Wang Pei, 2017). The function of equipment lags behind, the types of equipment are short, the number of some equipment is limited, the period of the equipment scrapping system is too long, and the updating cycle of industrial equipment is not synchronized, so it is difficult to meet the needs of all students to carry out practical training at the same time. It seriously restricts the practical teaching activities of footwear design and technology majors in our college.

2.3.2 The influence of training room equipment on students' practice activities

Practical training equipment of vocational colleges is a key link in the teaching system. Problems such as fewer hardware facilities, low functional level, and delayed equipment updating in teaching applications have seriously affected the teaching quality of schools and students' practical operation ability, which cannot meet the needs of footwear design and technology majors to cultivate talents. Restricted by the teaching fund plan of the college, the footwear design, and technology major has a wide range of industrial applications in Wenzhou, so it is necessary to constantly improve the equipment resources of practical training and practice, focusing on the introduction and application of new technology and new functional technology equipment of footwear design and technology, and carrying out project cooperation with minor enterprises in the industry, so as to realize the sharing of technical equipment resources between the school and enterprises. To make up for the shortage of students in the field of footwear design and technology using new equipment to carry out the practice, to meet the technical level of footwear design and technology professional talent training needs.

2.4. School-enterprise cooperation is disconnected from project-based teaching

2.4.1 Employment survey of footwear design and technology major

With the development of society, vocational colleges continue to expand enrollment, more college graduates, and the requirements of enterprises are also increasing, facing the shortage of vocational college graduates, in terms of academic qualifications, vocational college students lack competitiveness. In the aspect of social talent introduction, the focus is on the high degree of bachelor's, master's, and doctor's degrees, which leads to the employment pressure of vocational colleges. On the other hand, in projection-based teaching, vocational colleges cannot realize the real-time update of teaching mode and curriculum setting, which is not synchronized with industrial development, resulting in no clear career planning for students. According to the survey, 40% of the students majoring in footwear design and technology at Wenzhou polytechnic said that their major in the school is inconsistent with their job position, and the school is not prepared to grasp the market demand. After graduation, students realize the gap between their abilities and job requirements. In order to understand the employment situation of footwear design and technology majors, the author conducted a questionnaire survey among graduates of Wenzhou Polytechnic of Footwear Design and Technology. 102 questionnaires were distributed and 95 were recovered. The evaluation criteria of the graduate satisfaction survey are divided into the following three dimensions, and the results show that 80% of the graduates believe that the curriculum of footwear design works well after taking the job. Most of the students think that the enterprise practice during school is an important way to understand the job requirements, and 50% of the employed students expressed the idea of changing their jobs within three years.

2.4.2 The employment pressure of vocational college students increases

Opinions on Further Deepening Education Reform and Promoting Employment of College Graduates issued by the Ministry of Education of China in 2016 pointed out that: Local governments and colleges and universities should take the employment situation of graduates

as an important basis for determining the scale of development of higher education, further optimize and adjust the establishment of colleges and universities and the structure of disciplines and specialties, speed up the reform of personnel training modes, incorporate the employment situation of graduates into the evaluation index system of colleges and universities, so that the evaluation results can more fully reflect the actual situation of colleges and universities, and properly link degree work with the employment rate of graduates. The primary task of vocational schools is to train professional and technical personnel for society. At present, there are some problems in the education of vocational colleges, such as backward teaching materials, employment shortage of graduates, and unequal distribution of majors after graduation. With the rapid development of footwear design and technology majors in vocational colleges, the employment situation of students is becoming more and more serious. In view of the changing demand for talent in the footwear design and technology industry, the competitive pressure of graduating from a footwear design and technology major will be further intensified in the future. Therefore, under the background of a market economy, the specialty construction of vocational colleges must base on the market demand, meet the needs of the regional economy and development, and give play to the specialty characteristics. Otherwise, it will inevitably lead to a series of problems such as employment difficulties and vocational dislocation of graduates, enrollment difficulties, and the lack of school education management.

2.5. Problems existing in school-enterprise cooperation

2.5.1 School-enterprise cooperation survey

Project-based teaching must be based on school-enterprise cooperation, and school-enterprise cooperation must have clear goals and rules. Through the investigation, it is found that the current school-enterprise cooperation in footwear design and technology is only on the surface. The research and development of new products, cooperation in scientific and technological projects, the transformation of technological achievements, etc., does not start from the perspective of the actual needs of enterprises, play the theoretical advantages of colleges and universities, and solve the actual technical problems of enterprises. The author's investigation of a well-known shoe enterprise in Wenzhou City shows that: In school-enterprise cooperation, enterprises only put forward technical requirements, research and development sites, and financial support, but rarely participate in project-based teaching activities, which is unfavorable to project-based teaching activities and the cultivation of enterprise talent needs. In addition, the participation of students lacking project experience in school-enterprise cooperation will inevitably lead to excess energy and investment in enterprises. Therefore, it will reduce the enthusiasm of enterprises and even exclude students from participating in projects, making it difficult to carry out more cooperation in project-based teaching.

2.5.2 The willingness of students to participate is not high

Due to the practical ability of students, the investment of enterprises, financial resources, and other reasons, in the actual project-based teaching, enterprises, and universities only regard school-enterprise cooperation as a training link, but do not regard cooperation as a measure of vocational education. As a result, there is a deviation between students' participating positions and their actual interests, which greatly reduces students' interest in participating in project learning. Students only go to enterprises to seek internship sites and complete internship tasks. The enterprise provides students with short-term project practice forms. At the same time, the high expectation of current vocational college graduates on work is also the main reason for reducing students' participation in project-based teaching. Many students think that their future work has nothing to do with the actual content of the project, and it is difficult to understand the significance of project-based teaching.

3. CAUSES AND COUNTERMEASURES OF PROJECT-BASED TEACHING PROBLEMS

3.1. Causes of project-based teaching problems

3.1.1 The curriculum does not take into account the actual needs of enterprises

The major of Footwear Design and Technology is based on the development needs of the Wenzhou footwear industry. In terms of curriculum setting, including materials, design, technology, testing, intellectual property, application of new technology, and innovation and creativity, it has rich content on the surface. Courses are arranged for the parts related to the major. The courses offered are too "standardized", the courses are decoupled from the needs of enterprises, and cannot reach the purpose of enterprises requiring students to master professional skills. Therefore, students are aimless in learning, the learning results are not obvious, and they are easy to get tired and bored with the major. In the long run, the enthusiasm of students to learn and the development of the footwear design and technology industry is extremely unfavorable. In the future, vocational colleges should teach students according to their aptitude in curriculum setting, aim at cultivating technical talents, strengthen interest education for students, and strengthen the connection with enterprises, so that students can grow up in practice and cultivate their innovation ability (Wang Jing, 2016).

3.2. Teaching team lacks corporate practice experience

Wei Huanxin (2014) said that most teachers in vocational colleges come from professional colleges, and few teachers have practical experience in enterprises. Although schools advocate for teachers to practice in enterprises in recent years, the practical effect is low. As a result, teachers in vocational colleges lack the correct understanding of project-based teaching. Sometimes, students are only included in the project team members and assigned some simple tasks. Students do not really participate in the actual operation of the enterprise and do not effectively play the practical value of project-based teaching. Restricted by the practical experience of teachers in enterprises, teachers in vocational colleges cannot organize project-based teaching activities well. For example, the utilization rate of equipment is low, the theoretical content is more than practical activities, which seriously wastes teaching resources and makes it difficult to play the teaching effect.

4. COUNTERMEASURES OF PROJECT-BASED TEACHING PROBLEMS

4.1. Optimize the curriculum system

4.1.1 Specialty features of footwear design and technology

Wenzhou polytechnic has a lot of majors, which mainly rely on the local industrial distribution in Wenzhou, such as pump valves, automobile and motorcycle parts, e-commerce, big data, and so on. Wenzhou, known as the "shoe capital of China", has a very developed shoe industry. Therefore, Wenzhou polytechnic has set up a shoe design and technology major to meet the development needs of the Wenzhou shoe industry. In recent years, the development of the industry is locked in, and many new technologies are applied to the industry. Therefore, the content of footwear design and technology majors is increasing year by year. However, the students of footwear design and technology majors have a poor foundation and relatively limited acceptance ability. From simple to difficult, step by step, the types of specialized courses should also be controlled, mainly in practical and easy to accept. The cultivation of ability lies in long-term accumulation, the curriculum should be set up continuously, and students should be able to learn.

At the same time, the curriculum should be based on the needs of society, the needs of students, and their own development and career prospects. In the basic education module, no

matter what major you study, the basic education should focus on social people who can be responsible for life and work alone, and strengthen the teaching of moral and legal content (Xu Yafeng, 2015). In the major learning operation module, mainly to stimulate students' curiosity and thirst for knowledge, class is not to complete the content of the syllabus, clear learning objectives, and understand the value and significance of footwear design and technology major. In the process of learning, let students take the leading position, let students think, practice and innovation. In the module on expansion and innovation, the development of the industry cannot be separated from innovation, especially the major of footwear design and technology, which encourages students to question, expand their thinking, encourage students to think more, try to find problems, and solve problems.

4.1.2 Establishment of footwear design and technology teaching resource base

Wenzhou polytechnic Footwear Design and Technology Teaching Resource Library project was officially approved by the Ministry of Education of China in June 2014. In August 2014, the launch conference was held, and officially entered the construction stage. The project is hosted by Wenzhou polytechnic and Shoes and Apparel Professional Steering Committee of the National Textile and Apparel Vocational Education and Teaching Steering Committee, and co-built by 58 units. After more than two years of construction, the project has gone through six stages of the project application, project initiation, resource construction, review and release, optimization and rectification, application and promotion, and has completed the task of resource library construction.

Under the background of resource library construction, the school carries out school-enterprise cooperative project-based teaching. The school actively introduces the latest shoe-making technology, process, and product from enterprises as the teaching content, and establishes an effective resource management mode. At present, a resource library conducive to teaching implementation, teaching inspection, and material management has been initially formed. Under the support of university-enterprise cooperation and the principle of co-construction and sharing of resources, professional teacher-assisted teaching, students' independent learning, vocational qualification certification, and professional skills training have been realized. Adhere to practice teaching as the focus, with footwear industry post technology as the core, develop professional course resources to meet the development needs of enterprises and industries, and support the development of online courses, standardized courseware, test questions, teachers teaching PPT electronic teaching plans and other documents.

4.1.3 Implementation of project-based teaching content

In the process of project teaching implementation, we always adhere to the student-oriented, pay attention to students' innovation ability, and let students give full play to their imagination. The course content is divided into three parts: basic theory, practical operation, and off-campus training. After the basic theory education, the real project of footwear enterprise is introduced to conduct practical education for students. Through the evaluation, students are divided into different project roles to undertake their own tasks. To simulate the enterprise environment, students in the project can complete the phased tasks independently or jointly. At the same time, students are required to according to the standards of employees of the enterprise, so that students can also understand the corporate culture and industrial development trend in the practical training. Enterprises can also give practical training students tasks according to the requirements of employers. Enable students to understand the enterprise, understand the market, and finally realize the rapid transition from school to enterprise role upon graduation.

4.1.4 Deepening school-enterprise cooperation to promote student employment

Zhao Z (2018) maintained that Project-based teaching is an important way to cultivate students' vocational skills and abilities. We should strengthen the construction of off-campus

training bases, strive to explore the new mode of school running with the alternation of work and study, integrate into the industrial chain of enterprises, and make teaching and production, students, and enterprises "close" contact. Enable students to apply the knowledge and skills they have learned in practical work, and at the same time connect the knowledge and skills they have learned in practical work with those they have learned in school. Based on school-enterprise resource sharing and mutual benefit and win-win situation, promote the integration of knowledge learning, skill training, work practice, and vocational skill appraisal, promote the unity of teaching, learning, and do, and promote students' active and all-round development. First of all, through school-enterprise cooperation, students can experience the enterprise environment and culture while learning skills, and enhancing their self-confidence in graduate recruitment. Secondly, project-based teaching can improve the comprehensive quality of students in vocational colleges and universities. In the process of internship in enterprises, students can personally practice and feel the corporate culture early, enhance the awareness of love and dedication through teamwork, test their learning results in school in practice, and improve the ability to discover, analyze and solve problems. School-enterprise cooperation is not only the training of skills but also the mode of cultivating socially useful talents. It is a good training and exercise for students in terms of spirit and comprehensive quality. Thirdly, the school-enterprise cooperation can always control the latest market recruitment information. Students can find the gap between themselves and the talents needed by enterprises according to the comparison between their own situation at school and the current employment information, so as to shorten the gap as far as possible, greatly reduce the confusion of employment after graduation, so that students can find suitable jobs as soon as possible.

Through such school-enterprise cooperation projects, schools are introduced to reform the training of teachers, starting from professional standards and guided by the cultivation characteristics of footwear design and technology professionals. Teachers are strict with themselves in accordance with enterprise skills, so as to realize the complementary resources between schools and enterprises.

4.1.5 Strengthen the construction of teaching staff

Strengthen the construction of teaching staff, especially the training of double-qualified teachers. Training "double-qualified" teachers is another way to solve the disconnection between teaching theory and practice in vocational schools (You Weirong,2021). Strengthen the practical training of professional teachers, understand the enterprise process, and better implement practical teaching, so that the teacher team from a single teaching type, and scientific research type into a production and practice type of multi-functional team.

Through school-enterprise cooperation to participate in practice, to become a double-qualified team of teachers who are familiar with enterprise management and production technology. Enterprise technical personnel are responsible for the practical education of cooperative vocational colleges, the curriculum content of practical education is developed jointly with teachers, and the teachers of vocational schools participate in the technological innovation and project research and development of enterprises. Zhang Feng (2016) said that Let the school learn content with the latest market system, vocational college teachers and students participate in the practice, teachers have the dual identity of teaching and enterprise technical guidance. Liu B (2016) stressed that The double-qualified team not only improves the project completion of enterprises but also improves the teaching quality of vocational colleges. A "double-qualified" team is built between schools and enterprises through the bridge of school-enterprise cooperation.

At the same time, a system of a regular rotation of young teachers to practice in enterprises shall be established. Part-time teachers in enterprises are regularly trained in educational technology and teaching practices to improve their educational and teaching abilities. The

perfect teaching staff is the basis of professional development, the school has a reasonable age structure, professional structure, and education structure of professional (part-time) teachers (Fogleman J, Fishman B, Krajcik J, 2016).

4.1.6 Production training base jointly built by school and enterprise

The training base is the carrier of school-enterprise cooperation and project-oriented education, which requires the joint efforts of both the school and the enterprise. When choosing hardware equipment, the school should refer to the current equipment situation of the enterprise, ensure that it is in line with the market, and minimize the gap between the practical training equipment and the actual latest market equipment, so as to ensure the consistency of teaching and practical work. In order to effectively ensure the benefits of talent demand of cooperative enterprises, colleges and universities need to do a good job in the future planning of corporate interests, put forward requirements on students in advance, and strive to deliver high-quality talents to enterprises. Students should strictly abide by the rules and regulations of the company, actively participate in discussions, attach importance to teamwork in the project, have good professional quality, fully mobilize learning interest in the practice, and play the main role of innovation, so as to promote the healthy development of school-enterprise cooperation.

4.1.7 Improve policies or regulations related to school-enterprise cooperation

In the project-based teaching process of school-enterprise cooperation, more and more enterprises can cooperate. In future practice, more off-campus training bases can be created on the original basis. In terms of school-enterprise cooperation in establishing training bases, the government should actively encourage vocational colleges to cooperate with enterprises in various ways. When vocational colleges seek partners, the government can play a guiding role in policies. In the projects jointly participated by enterprises, schools, and society, special funds can be set up to some extent to provide financial subsidies to enterprises. In addition, enterprises actively participate in school-enterprise cooperation, so enterprises become strong participants in school-enterprise cooperation, but also the beneficiaries. In addition to subsidies, the government can implement preferential policies to stimulate the enthusiasm of both.

The government should also establish a guarantee mechanism between schools and enterprises to clarify the responsibilities of enterprises in training students, and the school should also ensure that the students sent for practical training have a certain knowledge of corporate codes of conduct and do not do anything harmful to the interests of enterprises. For enterprises that have achieved successful results in cooperation, the government can not only grant certain tax relief on school-enterprise cooperation projects but also improve the visibility of the enterprises through non-material ways such as media news and public commendation. In short, the government gives fair and just treatment to enterprises in terms of material and reputation and attracts more enterprises to join in the benign field of school-enterprise cooperation, so as to achieve real sustainable development.

5. CONCLUSION

Under the background of education quality reform in colleges and universities, this paper analyzes the problems existing in the project teaching of footwear design and technology major of Wenzhou Vocational and Technical College, analyzes the existing problems, and puts forward specific countermeasures. Aiming at the talent training of footwear design and technology majors in vocational colleges, the project curriculum system of individualized teaching and collaborative innovation is put forward, and the basic norms and common ways of talent training are put forward. The basis of implementing the teaching system of "combination of industry and learning", further deepening the specialty characteristics and collaborative

innovation. The course design of project-based teaching mainly starts from the actual needs of the market, takes the market as guidance, and provides solutions for classroom teaching according to the design requirements of the current market. In project-based teaching, professional teaching is completed by professional designers and teachers. Through school-enterprise cooperation to improve students' practical ability, solve the contradiction between teaching structure and teaching quality, so as to effectively meet the needs of footwear design industry talent training.

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