Explore and Practice of Personnel Training Path of Vocational Education from the Perspective of Production Combine Teaching
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ABSTRACT
From the perspective of production combine teaching, this paper designed a path for school and business to carry out the reform of personnel training mode, solved various problems in the process of education and productive labor integration. Proposals for vocational education talent training were put forward. The cultivation plan for talented people accords with the demands of the enterprise, the curriculum system based on the working process and stereoscopic teaching mode are rebuilt, and exerting the function of groups is to launch the second classroom activity curriculum, that and the other. In such a way, not only production and education integration is really realized, but also college and enterprise cooperation has been deepened.

Keywords: Integration of Production-Teaching, Industry College, Personnel Training Path

1. INTRODUCTION
The integration of production combine teaching is an institutional mechanism for enterprises to deeply participate in vocational education and higher education, school enterprise cooperative education and collaborative innovation, and promote the better integration of industrial requirement into the talent training process

². This system has formed a development pattern of overall integration and positive interaction of education and industry, solved the major structural contradiction between need and support of the talent people, and significantly enhanced the contribution of education to economic development and industrial upgrading.

2. INDUSTRY COLLEGE IS THE TOP-LEVEL DESIGN OF PRODUCTION COMBINE TEACHING
Production in the integration of production-teaching labor refers to the production and operation activities carried out by the enterprise, and teaching refers to the educational activities in vocational education. The production and operation activities of enterprises in the industry are integrated into vocational education activities to cultivate high-quality technical and skilled talents who meet the job demands of the enterprise. Industry College is an organizational form that formed by the cooperation between enterprises and vocational colleges participating in the whole process of vocational talent training

³. Therefore, Industry College is the top-Level design of the integration of production-teaching. Under this design, it carries out the practice of vocational talent training, closely cooperates in talent training mode, talent training scheme, curriculum system and practical projects, and improves students’ professional skills and professional quality, and trains excellent talents for enterprises in the industry.

2.1. Construction of new talent training mode in Industry College from the perspective of the integration of production-teaching
The establishment of Industry College solves many problems existing in the cooperation between school and business, fully stimulates the enthusiasm of both, makes full use of various resources, and promotes the integration of production-teaching labor and the development of vocational education

⁴. Through the efforts of school and business to build the constitution of the industry college, clarify the talent training mode of "integration of production-teaching, dual education and alternation between learning and doing"⁵, deeply integrate school...
and enterprise. It integrates the production and operation process of the enterprise into the whole life cycle of vocational teaching. On the basis of the evaluation system for employees in the enterprise, the evaluation system for students enables students to integrate into the positions of the enterprise industry and helps students to realize good employment after graduation.

“Double Subjects” means that school and business are the main bodies of running schools. Students have dual identities, that is, students and apprentices, and are subject to dual management including school management and enterprise management. “Alternation of learning and doing” refers to “five in one” of enabling students to learn by doing, grow up in learning and realize talent training, that is, the integration of studios and classrooms, students and apprentices, teachers and masters, learning and work, education and income generation. Schools and enterprises jointly build an industrial college integrating education, teaching, innovation and entrepreneurship. Enterprises are responsible for the production and R & D of products in the teaching process. At the same time, various activities in line with the teaching law of vocational education are carried out in the industrial college, which can fundamentally solve the problem of “uncoordinated time and space” in the process of talent training, so as to realize the integration of production-teaching.

2.2. Enterprises participate in the revision of talent training programs to integrate job requirements

According to the guidance of OBE theory, the College of Industry organized enterprise experts and vocational education experts to conduct careful research and analysis on the talent training program, and finally formed a talent training program on OBE.

The enterprise experts of the Industrial College represent the latest technological frontiers and the needs of social talents of the enterprise, and the vocational education experts are well versed in the theory and laws of vocational education. The Industrial College has established a professional teaching steering committee for both schools and enterprises, which is truly student-centered, committed to the demonstration of students' achievements after learning, and spared no effort to study and promote the integration of production-teaching, and reform and improve the original talent training program, and realize the social value of vocational education.

Firstly, clarify the needs of social talents, and analyze the talent training goals from the needs of social talents. Secondly, according to the talent training goals, follow the OBE theory to determine the final learning outcomes of students, that is, the graduation requirements. Thirdly, analyze research and refine the graduation requirements, and implement them into the professional curriculum system. Finally, achieve the training goals through learning evaluation based on OBE.

In the process of implementing the talent training program, we should also follow the guidance of OBE, reform the traditional teaching mode, strengthen engineering practice teaching and pay attention to the cultivation of skills. At the same time, we reform the method of learning evaluation, introduce the enterprise management mode, take the learning process and academic achievements as the basis for assessment, and let students adapt to the needs of the posts.

2.3. Reconstruction of course content based on work process, and implement three-dimensional and blended teaching mode

Based on the law of students’ professional growth, “Double Subjects” of the industry college is guided by post ability, the learning process is guided by OBE, integrated into the post needs of enterprises, and constructed a modular curriculum system “zero distance” from the post requirements. The typical work tasks, work requirements and work processes of the post as the main line, and professional curriculum systems such as professional quality courses, vocational skills courses, and comprehensive application ability courses (project practice) have been formed.

Take the school as the main body to lead the learning of vocational skill courses, focusing on the basic theory and application of technology, technology integration and skill training; taking the enterprise as the main body to lead the training of professional quality courses and comprehensive application ability courses (project practice), etc., focusing on production application and technology implementation, so as to realize dual teaching materials, dual classroom and dual base teaching.

The industry college revises the curriculum standards according to the job requirements, cultivates professional ethics such as love and dedication and teamwork, the training process meets the real production requirements of the enterprise, such as industrial production and workflow, and highlights skill training and improvement goals. Focusing on the needs of the industry and the direction of technological development, taking the typical work tasks, work contents and workflow of professional positions as the main line, integrate the cutting-edge technologies and processes of the enterprise industry into the curriculum, and introduce enterprise projects into the classroom.

Through various means and methods such as the construction of teaching resource base, the construction of high-quality online courses, and the construction of new forms of textbooks, three-dimensional and multi-dimensional educational and teaching resources are constructed, and a teaching environment for real working situations of enterprises is created, integrated into
corporate culture and school culture, and the results are achieved. Guided by the real project of the enterprise as the carrier, the "online + offline" hybrid teaching reform is implemented, and the theoretical knowledge is deeply integrated with practical training projects, enterprise practice projects, vocational skills competitions, etc., to improve students' professional quality and skills, comprehensive practical ability, innovation and entrepreneurship ability.

3. CONSTRUCTION OF SCHOOL-ENTERPRISE "DOUBLE SUBJECTS" TEACHING TEAM FROM THE PERSPECTIVE OF THE PRODUCTION-TEACHING INTEGRATION

Build a school-enterprise “Double Subjects” teaching team, implement two-way employee employment and two-way flow of school enterprise personnel, to achieve “full-time and part-time pairing, jointly build a course; full-time and part-time cooperation, co-manage a college; full-time and part-time interaction, and jointly cultivate one person”, in order to professionalize full-time teachers and normalize part-time teachers, establish a first-class “full-time and part-time” teaching team with “combination of full-time and part-time, exchange between schools and enterprises, noble teachers’ ethics and exquisite business”. In the industry college “double-post double-salary” employment system, the employed teachers not only participate in the daily teaching, professional construction and training base construction of the school, but also participate in the production, operation and management of the enterprise, which greatly enriches the actual work experience and experience of the school teachers and improves the teaching level and ability of the enterprise teachers.

4. INNOVATIVE PRACTICAL TEACHING MODE TO IMPROVE STUDENTS’ PROFESSIONAL SKILLS

The College of Industry establishes professional student associations to carry out second classroom learning activities, mainly including professional learning, project practice training, technology salons and other learning and exchange activities. On this basis, it carries out vocational skill competitions, undertaking enterprise projects and innovation and entrepreneurship activities [6].

The students who are new to the club mainly focus on the learning and exchange activities of basic knowledge. Regular technical salons are held every week to exchange learning experience and lay a foundation for professional skills; members who have mastered basic skills begin to contact skills competitions and enterprise project research and development with the help of mature students, etc., to accumulate professional practical ability and innovation ability; mature members undertake enterprise projects of social practice or carry out innovation and entrepreneurship, and at the same time lead lower-level members to carry out learning and special research, and constantly improve their comprehensive quality of organization, management, communication and cooperation. Enhanced team awareness and collaborative communication skills in professional student associations lay the foundation for adapting to the workplace environment as soon as possible.

5. CONCLUSIONS

During the operation of the Industry College, it adheres to the integration of production-teaching, strengthens the close integration of vocational education and teaching with the enterprise, carries out the education work of school and enterprise “Double Subjects”, formulates talent training plans according to the job requirements of the enterprise, reforms the teaching mode, integrates enterprise projects into daily teaching, and carries out practical teaching in the form of masters and apprentices, relying on professional student associations, undertake enterprise projects, participate in innovation and entrepreneurship competitions and vocational skills competitions, etc., to improve students’ subjective initiative and vocational skills, and comprehensively improve students’ employment, entrepreneurial ability and comprehensive professional quality.

AUTHORS’ CONTRIBUTIONS

Xiaonuo Zhang: contributed to the conception and the practice of the study
Ancui Yuan: performed the data analyses and wrote the manuscript
Yanfei Zheng: helped perform the analysis with constructive discussions

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