

Exploration on the Project of School-Enterprise Co-built Training Base and British Model Apprenticeship Practice Base for Modern Manufacturing Professional Groups

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Abstract: This paper takes the school-enterprise co-built training base and the British model apprenticeship internship base project for modern manufacturing professional groups as the research object, and deeply analyzes the importance and significant advantages of modern apprenticeship in vocational education. It elaborates in detail the expected goals and construction contents of the project, including the selection criteria for enterprises to carry out modern apprenticeship, the specific practical measures for carrying out modern apprenticeship, and the scientific construction of the assessment and evaluation system. It emphasizes the key role of multi-party cooperation among the government, schools, and enterprises in promoting modern apprenticeship, aiming to provide practical and beneficial references for improving the quality of talent cultivation in vocational education.

Keywords: School-enterprise Cooperation; Modern Apprenticeship; Vocational Education; Multi-Party Cooperation; Talent Cultivation; Training Base; Assessment and Evaluation.

1. Introduction

In recent years, the state has attached great importance to the reform of modern vocational education. This is not accidental. With the rapid economic development and the continuous adjustment of industrial structure, the demand for high-quality technical and skilled talents is becoming increasingly urgent. [1] Proposing to deepen industry-education integration, school-enterprise cooperation, and carry out pilot work on modern apprenticeship system is an inevitable choice to conform to the development of the times. [2] In order to meet the needs of domestic industrial development and economic transformation and upgrading, it is crucial to increase the intensity of vocational education reform and improve the grade and quality of talent cultivation. As a vocational education model with a long history, the modern apprenticeship system injects new content on the basis of the traditional apprenticeship system and becomes an important bridge connecting vocational education and the labor market, providing a new way to cultivate talents that meet market demands. [3]

2. Connotation and Advantages of Modern Apprenticeship System

2.1. Connotation of Modern Apprenticeship System.

The modern apprenticeship system is based on the traditional apprenticeship system of teaching by word and example and introduces modern school-running and education management mechanisms, with a stronger concept of modern vocational education. It breaks the drawback of the disconnection between theory and practice in the traditional education model and closely combines learning and work. In the modern apprenticeship system, students spend about one-third to one-half of their time learning theoretical knowledge

at school, and the rest of the time in enterprise or on-campus practical learning and simulation practice learning. By personally participating in actual work, they can master professional skills and work experience. This alternating learning and training model enables students to better understand theoretical knowledge and improve practical ability in the learning process, laying a solid foundation for their future career development. [4]

2.2. Advantages of Modern Apprenticeship System.

The modern apprenticeship system organically enhances the connection between school education and vocational training, making vocational education more social, professional, practical, and operational. First, in terms of sociality, the modern apprenticeship system places students in a real working environment and allows them to work with enterprise employees, understand social needs and industry trends, and enhance their social adaptability. Second, in terms of professionalism, enterprise masters and school teachers jointly guide students and impart professional knowledge and skills, enabling students to systematically learn professional content and improve professional quality. Third, in terms of practicality, students apply theoretical knowledge to practice through actual work tasks, accumulate practical experience, and improve their ability to solve practical problems. Finally, in terms of operability, the modern apprenticeship system focuses on cultivating students' practical operation ability, so that students can quickly adapt to work positions after graduation and create value for enterprises. The modern apprenticeship system can effectively solve the contradiction between education and employment and promote the development of vocational education. On the one hand, schools can adjust teaching content and methods according to enterprise needs and cultivate talents that meet enterprise requirements. On the other hand, enterprises can select

outstanding talents in advance through participating in apprenticeship training, reducing recruitment costs and training costs. [5]

2.3. Select an Appropriate School-Enterprise Cooperation Training Base.

School-enterprise cooperation is the most typical school-running characteristic of vocational education and also the key model and path for the high-quality development of vocational education. According to the needs of professional construction and regional economic development, selecting multiple enterprises with large scales to carry out the construction of school-enterprise cooperation training bases has strong significance for talent cultivation and serving the local area. Professional construction must be closely connected to the needs of local industries and enterprises. Cultivating highly skilled talents necessary for the industry is the key to talent cultivation in vocational education. Only in this way can high-level and highly skilled talents that meet local industry needs be better cultivated.

According to the size of enterprises and the number of classes in vocational schools, developing order-based classes in the apprenticeship model is also one of the key models for high-quality cultivation of skilled talents. Generally, the number of students in an apprenticeship order-based class should not be too large. It is mainly necessary to combine the number of positions and the number of training equipment. Usually, 20 to 40 people is the best. Internship teaching is an important link in the modern apprenticeship system. By allowing students to work on actual enterprise posts, they can better understand the production process and management mode of enterprises and improve their practical ability and professional quality.

3. Project Construction Contents

3.1. Selection of Enterprises for Implementing Modern Apprenticeship System.

1. Whether there are suitable large-scale enterprises in the region

Higher vocational schools are usually local institutions. When cultivating talents and setting up majors, they often first investigate the advantageous industries in the region, including the talent demand, job structure, salary and benefits of advantageous industries and industries, and set up professional courses that match them. Majors opened in this way can often cultivate highly skilled talents that meet the needs of regional economies. Secondly, through cooperation with local enterprises, especially local leading enterprises, a good cooperative relationship is established. Order-based cultivation is carried out around the talent needs of relevant enterprises. A good school-enterprise cooperation relationship is established and an off-campus internship and training base is jointly built through key cooperation models to realize school-enterprise co-construction and combination of work and study, so as to cultivate highly skilled talents required by enterprises.

2. Local governments should actively participate in the construction of educational enterprises

The construction and talent cultivation of modern vocational education are often jointly built by multiple parties. Only in this way can school-enterprise cooperation be carried out vividly and the cultivated skilled talents have better market adaptability. In the process of talent cultivation, the

current mainstream way is the four-in-one model of government, school, industry, and enterprise. In the entire talent cultivation process, the government, as the initiator, can promote the active participation of other aspects and provide certain policy support and assistance. Under the promotion of the government, enterprises can pay more attention to the cultivation of highly skilled talents and be more willing to participate, provide more internship and training resources, and be willing to join multiple links such as the co-construction of dual-qualified instructors. With overall support, schools are also more willing to invest, strengthen management and construction, and cultivate highly skilled talents that are more needed by the regional economy.

3. Whether the school has designed a perfect apprenticeship management system and incentive mechanism

As a talent provider, the school must establish a perfect implementation and management mechanism, including manpower guarantee, financial support and clear and detailed management system. In terms of manpower guarantee, the school needs to be equipped with sufficient teachers and management personnel to be responsible for the teaching and management of the modern apprenticeship system. Teachers should have solid professional knowledge and rich practical experience and be able to provide professional guidance and help to students. Management personnel should have strong organizational and coordination abilities and service consciousness and be able to provide good guarantees for the implementation of the modern apprenticeship system. In terms of financial support, the school needs to invest sufficient funds in aspects such as teaching reform, practice base construction, and teacher team training of the modern apprenticeship system. For example, give certain rewards and recognitions to outstanding teachers and enterprise masters to improve their work enthusiasm and initiative.

3.2. Implementation of Modern Apprenticeship System.

1. Design of talent cultivation program and corresponding teaching management

The design of the talent cultivation program should fully consider the curriculum system and teaching time arrangement of the apprenticeship system, set up centralized internship training or comprehensive practical teaching content, construct learning content and goals in combination with the equipment configuration of the internship place and the enterprise product processing flow, establish a teaching operation and quality monitoring system, and strengthen process management. The talent cultivation program is an important basis for the implementation of the modern apprenticeship system and must fully consider the characteristics and requirements of the apprenticeship system. In terms of curriculum system design, theoretical teaching and practical teaching should be organically combined, and curriculum content that meets enterprise needs should be set up. For example, corresponding professional courses and practical courses can be set up according to the production process and job requirements of enterprises. The teaching operation and quality monitoring system includes aspects such as teaching plan formulation, teaching process management, and teaching quality evaluation. By establishing a scientific and reasonable teaching operation and quality monitoring system, problems and deficiencies in teaching can be found in time, and effective measures can be taken to improve teaching quality and effectiveness.

2. Selection of cooperative enterprises or construction of comprehensive training places

School training places or enterprises that plan to adopt the apprenticeship system must be carefully selected to ensure that core technical indicators such as hardware equipment configuration, instructor configuration, and learning post selection meet the requirements, so as to implement and implement the apprenticeship system and complete teaching goals. The selection of cooperative enterprises is one of the key links in the implementation of the modern apprenticeship system. When selecting cooperative enterprises, factors such as enterprise scale, technical level, management level, and social reputation should be fully considered. Selecting enterprises with large scales, high technical levels, advanced management levels, and good social reputations as cooperation objects can provide students with better internship environments and development spaces.

3. Selection of dual-qualified teachers or selection of instructors

The co-construction of teacher teams by schools and enterprises is an important task of the pilot work of the modern apprenticeship system. The teaching tasks of the modern apprenticeship system are jointly undertaken by school teachers and enterprise masters, forming a dual-mentor system. All regions should promote close cooperation between schools and enterprises, break the shackles of the existing teacher staffing and employment systems, explore the establishment of teacher mobile staffing or the establishment of part-time teacher positions, and increase the intensity of personnel mutual employment and sharing, two-way off-the-job training, horizontal joint technology research and development and professional construction between schools and enterprises. Cooperative enterprises should select outstanding high-skilled talents as masters, clarify the responsibilities and treatment of masters, incorporate the teaching tasks undertaken by masters into the assessment, and enjoy apprenticeship allowances. Pilot institutions should incorporate the enterprise practice and technical services of instructors into the teacher assessment and take it as an important basis for promotion to professional and technical positions. Dual-qualified teachers are an important guarantee for the implementation of the modern apprenticeship system. At the same time, enterprises should also provide corresponding treatment and guarantees for masters to stimulate their work enthusiasm and initiative.

3.3. Construction of Assessment and Evaluation System for Modern Apprenticeship System.

Design corresponding evaluation and assessment mechanisms to ensure that the implementation process of the apprenticeship system proceeds according to the predetermined plan, confirm and summarize the learning effects, so as to understand the effects of the implementation process. The construction of the assessment and evaluation system for the modern apprenticeship system is an important guarantee for the implementation of the modern apprenticeship system. The assessment and evaluation system should include two aspects: student assessment and teacher assessment. Student assessment should focus on the combination of process assessment and result assessment. The assessment content should include aspects such as students' learning attitudes, mastery of professional knowledge, practical operation ability, and professional

quality. Teacher assessment should focus on the combination of teaching effect assessment and teaching process assessment. The assessment content should include aspects such as teachers' teaching attitudes, teaching methods, and teaching effects. By establishing a scientific and reasonable assessment and evaluation system, problems and deficiencies in teaching can be found in time, and effective measures can be taken to improve teaching quality and effectiveness.

4. Conclusion

The project of school-enterprise co-construction of training bases and modern manufacturing professional group British model apprenticeship internship bases is an important measure to improve the quality of talent cultivation in vocational education. Through measures such as selecting suitable enterprises, carrying out modern apprenticeship teaching, and constructing assessment and evaluation systems, a win-win situation for schools, enterprises, and students can be achieved. In the project implementation process, the government, schools, and enterprises should cooperate in multiple ways to jointly promote the development of the modern apprenticeship system and contribute to cultivating high-quality technical and skilled talents that meet the needs of economic and social development. The government should strengthen policy support and guidance for the modern apprenticeship system and provide a good policy environment for the implementation of the modern apprenticeship system. Schools should strengthen cooperation with enterprises, jointly formulate talent cultivation programs, teaching plans, and assessment standards to ensure that the implementation of the modern apprenticeship system is regulated. Enterprises should actively participate in the implementation of the modern apprenticeship system, provide internship positions and practical opportunities for students, and jointly cultivate high-quality technical and skilled talents. Only through the joint efforts of the government, schools, and enterprises can the healthy development of the modern apprenticeship system be promoted and more high-quality technical and skilled talents be cultivated for China's economic and social development.

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