

Study of Establishing and Perfecting Modern Apprenticeship System with Chinese Characteristics

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Abstract. Modern apprenticeship is an important measure to substantially promote school-enterprise collaborative education under the condition of imperfect laws related to school-enterprise cooperation in China. Based on the basic model of apprenticeship in developed countries, this paper makes a detailed analysis of the path of realizing Chinese characteristics from five aspects: school-enterprise cooperation in educating people, teaching standard parts, the construction of Double-teacher team, and the formulation of an integrated system of recruiting students and recruiting workers. From the perspective of how to implement the dual-subject system of schools and enterprises, it puts forward some thoughts on the development of modern apprenticeship system.

Keywords: Modern Apprenticeship; work-integrated learning; Post success.

1. Introduction

The modern apprenticeship system of Vocational education, which was initiated by the Ministry of Education in 2011 to learn from international experience, conforms to the trend of development of International Vocational education, takes root in China and embodies Chinese characteristics. It is conducive to substantially shortening the distance between schools and enterprises, and implementing joint training between schools and enterprises. The system design of improving the applicability of vocational students' training. Over the past three years, a long-term cooperative education mechanism with clear division of labor and clear responsibilities between schools and enterprises has been initially formed, and the main framework of talent cultivation has been initially formed, which is "work-study alternation and post success". In promoting the integration of industry and education, school-enterprise cooperation, Work-study Integration and the integration of knowledge and practice, students' sense of social responsibility, innovative spirit and practical ability have been cultivated.

2. The History and Development of Apprenticeship

2.1 The Training Ways of Modern Apprenticeship in Foreign Countries

Modern apprenticeship is a dominant mode of modern vocational education. Since the 20th century, western developed countries have attached great importance to the development of modern apprenticeship, formulated national laws and policies, mobilized enterprises to actively participate in the whole process of vocational education personnel training, and formed a variety of characteristics, which are based on the cultivation of students' post ability, the dual education of schools and enterprises as the main body, and the dual identity of "student apprenticeship". Modern apprenticeship training form. According to different national systems and backgrounds, various countries have formed their own training modes with their own characteristics, resulting in such typical modern apprenticeship training modes as the "new apprenticeship" mode in the United States, the "dual system" mode in Germany, the "sandwich" mode in Britain and the "new apprenticeship" mode in Australia.

The "new apprenticeship" in the United States strengthens the leadership of the government, with the government increasing its investment to ensure the basic funds for apprenticeship implementation, and fully mobilizing the active investment of employers, professional training institutions and social organizations. Its training target is mainly for young people aged 16-24 years, who directly enter the apprenticeship system after graduation from higher vocational education, and the training time is usually 6 months to 2 years. The design, implementation and evaluation of apprenticeship programs

are dominated by industries. At the same time, cooperation among governments, employers' organizations and employees should be expanded, cooperation between governments and various social institutions should be expanded, and cooperation between governments, international organizations and governments and multinational enterprises should be expanded. Germany's "dual system" developed rapidly after World War II and became the dominant mode of Vocational education, showing typical new characteristics, such as system management at the national strategic level, multi-stake holder mechanism of participation, talent training mode with enterprise as the main work-study combination, dual identity with students as the main body, unified and standardized standards of education and training and national vocational qualification system. And so on. On the basis of the old apprenticeship system, the sandwich mode in Britain inherits and innovates, and forms the school-enterprise cooperative vocational education mode of "learning-practice-learning" alternating work and study. Australia's new apprenticeship system is carried out under a nationwide unified training framework, based on training packages to complete training. Vocational training standards and competency standards are highly unified. National competency standards have a common expression format to ensure their consistency and comprehensiveness. Funding for training institutions is mainly determined by the employment rate and income of trainees after graduation. At the same time, the state gives preferential tax treatment to enterprises that recruit apprentices.

2.2 Apprenticeship in China

Compared with modern apprenticeship in the West, apprenticeship in our country appeared earlier, which can be traced back to the primitive handicraft industry period, and the apprenticeship appeared mainly through the training and imparting of various handicraft skills, such as pottery, stone tools and housing construction. In the early days of the founding of New China, a relatively complete apprenticeship education system with enterprises as the main body was formed. However, with the transition from planned economy to market economy, apprenticeship gradually developed into a "method of training apprentices by combining schools with enterprises".

With the continuous adjustment and upgrading of China's economic structure, the demand for technical and skilled personnel is constantly increasing. The training mode of combining work with study, such as on-the-job practice and order training, can no longer meet the requirements of enterprises for high-end technical and skilled personnel. Modern apprenticeship system is a new mode of deepening the integration of production and education, and the training of school-enterprise cooperation talents. In recent years, the practice of modern apprenticeship has been explored and studied all over the country, and some achievements have been achieved. Guangdong Construction Vocational and Technical College cooperates with enterprises in depth, establishes a system of selecting, training, evaluating and encouraging double tutors, and forms a common management mechanism of mutual employment between schools and enterprises. Binzhou Vocational and Technical College has implemented the training mode of "school-enterprise integration, teacher-teacher integration, student-apprentice integration, classroom post integration" with the characteristics of modern apprenticeship.

3. Modern Apprenticeship with Chinese Characteristics

Apprenticeship has a long history in China. The way of inheritance of craftsmen's skills with apprentices has always been the main way of training skilled personnel in China. With the change of China's economic transformation and upgrading, the problem of insufficient total number of skilled personnel and low level of skills has become increasingly prominent. Exploring the formation of modern apprenticeship with Chinese characteristics is an important part of accelerating the development of modern vocational education and providing talent support for the realization of the Chinese dream. In recent years, the State Council has made special arrangements for the development of apprenticeship. According to the general requirements of the State Council, the Ministry of Education has taken the lead in exploring the pilot work of "modern apprenticeship". The Ministry of Human Resources and Social Security and the Ministry of Finance have jointly launched the pilot

work of "new apprenticeship". These two modes are explorations and innovations for different objects and subjects under the same institutional framework. Their core aims are to improve the quality and pertinence of personnel training, improve the level of workers' technical skills and professional quality. The two modes promote, learn from and complement each other, and jointly create a modern apprenticeship system with Chinese characteristics.

3.1 Modern Apprenticeship Model

The "modern apprenticeship" model is an important part of the modern vocational education system, which deepens the cooperation between schools and enterprises and integrates production and education. It is a dual-subject education model of government guidance, industry participation, social support and enterprises and vocational colleges. The training process is based on the integration of enrollment and recruitment of students and enterprises, which is called "enrollment is enrollment, enrollment is factory enrollment, and joint training between schools and enterprises". The training objects are mainly higher vocational education and secondary vocational education, supplemented by non-academic education such as social training. In the process of training, vocational colleges and cooperative enterprises should be guided to jointly develop talent training programs, develop courses and textbooks, design and implement teaching, organize assessment, and carry out teaching research, in accordance with the growth law of technical and skilled personnel and the actual needs of their jobs, so as to innovate the new mode of talent training. Explore the establishment of teachers' mobile establishment or part-time teachers' posts, increase the strength of personnel mutual employment and sharing between schools and enterprises, two-way on-duty training, horizontal joint technology research and development and professional construction, and establish and improve the "dual-mentor" system of full-time and part-time integration. At the same time, the management system should be innovated to form a long-term mechanism of division of labor and cooperation between schools and enterprises, cost sharing and achievement sharing. The modern apprenticeship system with Chinese characteristics will be formed through pilot, summary, improvement and promotion.

3.2 New Apprenticeship Model

The State Council has issued documents such as the Circular of the General Office of the State Council on Transmitting the Opinions of the SASASAC of the Ministry of Finance of the Ministry of Human Resources and Social Security on Strengthening the Construction of Skilled Talents in Enterprises (No. 34 issued by the State Administration [2012]) and Opinions on Further Improving Employment and Entrepreneurship under the New Situation (No. 23 issued by the State Development [2015]) to clarify the "Exploration and Establishment of a New Apprenticeship System for Enterprises" and "Support". Enterprises focus on recruiting new young workers and new transferees to carry out new apprenticeship training. In order to further promote the training of enterprise employees and innovate the training mode of skilled personnel, the Ministry of Human Resources and Social Security jointly issued the Notice on the Pilot Work of New Apprenticeship System in Enterprises (No. 127 issued by the Department of Human Resources and Social Security), and decided to carry out the pilot work of "New Apprenticeship System" in 12 provinces (districts and municipalities) such as Beijing.

"New Apprenticeship System" is based on promoting employment and entrepreneurship and strengthening the ranks of skilled personnel in enterprises. For the non-academic training of new recruits and new transferees in enterprises, the object of training is determined by enterprises unilaterally adopting the mode of "recruitment is enrollment, entrance is enrollment, and joint training of both teachers in enterprises and schools". The training process is determined by enterprises and technical colleges, vocational training institutions and enterprises. Training centers and other educational and training institutions adopt such methods as Double-teacher training with apprenticeship, alternate work-study training, off-or semi-off-production training and so on to train new apprentices. Enterprises play a leading role in the whole training process. Human resources and social security departments, together with the financial departments, will subsidize the enterprises that carry out apprenticeship training with special funds according to regulations. When the training

period expires, they will be qualified, and they can obtain corresponding vocational qualification certificates or training qualification certificates according to regulations.

4. Contents and Requirements of Modern Apprenticeship Pilot

4.1 Establishment of School-Enterprise Cooperative Education Mechanism

Establishing a scientific and reasonable operation mechanism of the modern apprenticeship system is an important guarantee for the pilot work of the modern apprenticeship system. It is necessary to revise and improve the relevant system of modern apprenticeship, further clarify the responsibilities and division of labor of both sides in the process of deep cooperation between schools and enterprises, straighten out the relationship between teaching organization and management within schools, and explore a long-term mechanism for the promotion and implementation of modern apprenticeship. The pilot areas and industries give full play to their own advantages, make overall use of teaching resources such as colleges and enterprises' training places, public training centers and enterprises' internship posts in the pilot areas or industries, and focus on exploring the dual-subject mechanism of jointly enrolling students, educating students by stages and participating in evaluation with schools; the pilot enterprises focus on exploring the mode of operation of participating in the modern apprenticeship system. Establish a Cost-Sharing Mechanism for personnel training; pilot colleges should give full play to the leading role of pilot work, timely summarize pilot work experience, actively communicate with the existing problems in the pilot process, explore effective ways to achieve modern apprenticeship, and practically explore the operation and management system of secondary colleges with modern apprenticeship characteristics.

4.2 Carry out the Reform of Talent Model and Professional Standard

Pilot units should explore the reform of talent training mode of integration of production and education and integration of school and enterprise according to the growth law of technical and skilled personnel and the actual needs of the job. According to the characteristics of modern apprenticeship, such as the alternation of work and study and the cultivation of post talents, schools and enterprises jointly develop curriculum and teaching materials, design and implement teaching, organize assessment and so on, promote the docking of curriculum content and professional standards, and explore the curriculum system suitable for modern apprenticeship training mode. Based on the principles of job tasks, integration of vocational qualification standards and consideration of the future development needs of apprentices, we jointly formulate professional teaching standards, curriculum standards, job standards, quality control standards, etc., to promote the docking of graduation certificates and vocational qualification certificates. At the same time, we should increase the introduction of international standards, and build a technical and skilled personnel training approach that integrates industry with education and integrates double certificates. We should give full play to the natural advantages of deep integration between schools and enterprises, pay attention to the cultivation of enterprise culture, improve vocational skills and cultivate a high degree of integration of professional spirit.

4.3 Promoting the Integration of Enrollment and Recruitment

We will further improve the recruitment system of Vocational Colleges and enterprises, strengthen the joint development and implementation of recruitment programs by schools and enterprises, expand the scope of recruitment, and explore various forms of integration of recruitment and employment. To clarify the dual identity of students and apprentices, ensure that apprentices have the right to know, insurance, work allowances and other protection rights and interests; to clarify the responsibilities and division of labor of the two main bodies of schools and enterprises; to sign labor contracts between students and enterprises of pilot colleges; to sign joint school-running contracts between schools and enterprises; to sign tripartite agreements between apprentices, schools and enterprises; and to ensure that apprentices who have reached the age of 16 years but not reached the

age of 18 years are guardians and apprentices. Schools and enterprises signed a quadripartite agreement.

4.4 Constructing the Teachers Team of Mutual Employment and Sharing between Schools and Enterprises

Pilot units should closely cooperate with schools and enterprises, explore and improve the selection, training and incentive system of double tutors, and form a management mechanism of mutual employment and sharing between schools and enterprises. Cooperative enterprises should select excellent and high-skilled talents as teachers, clarify their responsibilities, treatment and assessment requirements, and set up special funds by the government, enterprises or schools to pay their apprenticeship allowances. Pilot colleges and universities should incorporate the enterprise practice and technical services of instructors into the assessment of teachers and serve as an important basis for promoting professional and technical positions. Pilot enterprises should make key breakthroughs in two-way job-holding exercise, horizontal joint technology development, incentive system for professional construction and evaluation, reward and punishment system.

4.5 Improving the Incentive and Guarantee Mechanism

The pilot areas should strengthen the leadership of the pilot work, set up cross-sectoral working groups, establish modern apprenticeship coordinating organizations or institutions, implement special responsibility, establish a joint meeting system, regularly consult and solve the problems in the pilot work. We should make a good overall planning of the modern apprenticeship system, issue local policy documents and provide basic policy support for the pilot project of the modern apprenticeship system, focusing on solving such problems as the identification of apprenticeship, the evaluation and confirmation of double tutors, the reduction and exemption of enterprise expenses and the support of special funds. The pilot industry should formulate supporting policies to support the pilot work, mobilize the resources of Vocational Colleges and enterprises in the industry, and support and guarantee the smooth progress of the pilot work. Pilot enterprises formulate support policies and give preferential support to pilot specialties in terms of venues, equipment and personnel, so as to ensure that apprentices get job skills, certificates and reasonable remuneration, and have advantages in career growth and promotion. At the same time, we should actively raise funds to invest in pilot projects, work out special fund management measures for pilot projects with schools, and clarify the responsibilities and rights of enterprises, schools and other participants in the use of funds. Pilot colleges and universities should formulate assessment criteria for practical training aiming at educating students, establish assessment and evaluation mechanism with multi-participation, and establish monitoring mechanism for teaching quality in the form of regular inspection and feedback. Establish assessment criteria for practical training aiming at educating students, establish assessment and evaluation mechanism of multi-participation, and establish monitoring mechanism of teaching quality in the form of regular inspection and feedback. To formulate apprenticeship management measures, scientifically arrange apprenticeship posts and assign work tasks according to teaching needs, and ensure apprenticeship's reasonable remuneration. Implementing apprenticeship liability insurance and industrial injury insurance to ensure personal safety.

5. Conclusion

Exploring the pilot work of modern apprenticeship system is the best way to speed up the development of modern vocational education and an effective measure to improve the quality and pertinence of training skilled personnel. The pilot work of the modern apprenticeship system focuses on exploring boldly the mechanism of educating people, the mode of training talents, the integration of recruiting students and recruiting workers, and the safeguard measures, making breakthroughs in key points, summing up experience, and forming a modern apprenticeship personnel training mode that can be popularized. At the same time, it absorbs the experience of the pilot work of the "new apprenticeship system", and forms a modern apprenticeship system with Chinese characteristics, so

as to build up a strong human resource China, realizing the goal of "two hundred years" and the Chinese dream of the great rejuvenation of the Chinese nation, provides a solid talent guarantee.

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