

The Enlightenment of German “Dual System” to China's Vocational Education Reform

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Abstract: This article analyzes the enlightenment of studying the German "dual system" under the new situation for our country's promotion of enterprises to participate in vocational education and elaborates on the nature of German "dual system" of skills training, the core role of enterprises and the motivation of economic subsidies. Based on expounding the current situation of our vocational education, this article focuses on the analysis of key issues affecting the quality of vocational education in our country and the reasons why Chinese enterprises lack motivation to participate in vocational education. Finally, based on the enlightenment of Germany's "dual system", it is pointed out that our country's vocational education reform should adopt effective measures of economic subsidies to strengthen the motivation of enterprises to participate in vocational education.

Keywords: German "dual system"; Vocational education; Enterprise participation; Lack of motivation; Economic subsidies

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1 Introduction

At the present stage, China has developed into a major manufacturing country. The sustained and stable development of the manufacturing industry in recent

years has not only strongly supported the significant improvement of China's comprehensive strength and international competitiveness, but also promoted the substantial improvement of people's living standards. However, China is still not a strong manufacturing country. The lack of technical and skilled personnel has become a serious constraint to the transformation and upgrading of the manufacturing industry.

As the world's largest manufacturing country, Germany's vocational education has provided high-quality skilled workers for its manufacturing, which guarantees the high quality of products and promotes the economic and social development of Germany after World War II. Especially in the face of the financial crisis and the European debt crisis in 2008, high-level vocational education successfully helped Germany to emerge from the shadow of the crisis. According to the German "Federal Vocational Education Act" and "Vocational Education Regulations", Germany has established a basic system of vocational education, the most distinctive of which is the vocational education model called "dual system". This model ensures the high-level skills, knowledge and professional qualifications of vocational school graduates through training and practices and provides a good example for the world. In the 1980s, we made great efforts to introduce the German vocational education model "dual system". Many pilot projects of this model have been established throughout the country. In the light of practical experience, although we have achieved

certain achievements in some regions and opened up a certain training market and job market, we have not been able to form a radiation effect from point to point, especially in the aspects of "participation of enterprises in vocational education and its social prestige" (Chen, 2012: 7). Thus, the localization of German "dual system" is not simply a rigid method, but requires us to clarify its essence, core and motivation. Only by referring to this model based on the current situation and key issues of our vocational education can we achieve good results.

In 2019, Chinese government proposed the "Implementation Measures for the Construction of Industry-Education-Integrated Enterprises (Trial)" and the "National Vocational Education Reform Implementation Plan", placing vocational education in a more prominent position in education reform and innovation. Under the new situation, in-depth study of the German "dual system" model of vocational education, analysis of the bottleneck hindering its development, and drawing on the German experience to propose targeted measures for improvement, have certain theoretical and practical significance for the development of vocational education in China.

2 The essence, core and motivation of German "dual system" model

2.1 The essence of German "dual system" model

The "dual system" refers to the vocational education system in which the enterprise acts as one element and the vocational school acts as the other, and the two cooperate to cultivate technical talents with both skills and knowledge. According to the "dual system", vocational school students will spend one-half to two-thirds of the time during their studies for training in the enterprise, to complete the production practice of each step, until they can produce qualified products. The rest of the time will be used to study professional theoretical knowledge in the vocational school. As a result, the students become high-quality skilled talents with both theoretical knowledge and practical experience when they graduate.

The essence of the German "dual system" is to make up for the lack of skills training in vocational schools through corporate training and production practices, so that students can achieve the ability and qualifications for employment with both theoretical knowledge and production skills. In addition, the

participation of enterprises in vocational education enables vocational education to be closely connected with the market, which helps to solve problems such as exclusive training goals, incomplete training specifications, inflexible subject settings and obsolete teaching content. The participation of enterprises can also give full play to its human resource advantages to solve the problems in vocational education like inappropriate teacher structure, low professional skills and insufficient teachers. Furthermore, it can make full use of the production facilities and equipment of the enterprises to improve the shortage of teaching equipment and insufficient training bases (Huang and Huang, 2005: 75).

2.2 The core of German "dual system" model

The German "dual system" model is a complete operating system, including training companies, vocational schools, legal guarantees (such as the "German Federal Vocational Education Act"), government policies and incentive mechanisms, guild coordination and supervision, etc. Among them, training enterprises and vocational schools are the main body of the "dual system", and the others provide a good environment for the main operating system.

In the two main bodies, the enterprise is the core of the "dual system" model of vocational education. First, enterprises bear most of the vocational education expenses, accounting for about 2/3 of the total expenses, and the national and state governments bear the remaining vocational education expenses (for education expenses of vocational schools), accounting for about 1/3 of the total expenses (Jiang, 2013: 6). Secondly, the enterprise is responsible for enrolling students and signing a vocational education contract with the recruited students, so that the students formally become apprentices in the enterprise. Thirdly, the enterprise is responsible for most of the training tasks, skills assessment and qualification certification.

2.3 The motivation of German "dual system" model

The secret of the long-lasting "dual system" lies in the active participation of enterprises. More than 20% of German enterprises participate in the apprenticeship training. The larger the company, the higher the participation rate. More than 80% of large companies (with more than 250 employees) participate in the training (Xiang, 2019: 90). A good corporate culture

atmosphere, complete legislative support and social security, and a strong sense of social responsibility have laid a good foundation for enterprises to participate in vocational education. More importantly, funding subsidies, relevant preferential policies and the satisfaction of interests provide motivation for enterprises to continue participating in vocational education.

In accordance with the German Labor Promotion Act (1970), the German government established a central fund as the financial support for enterprises to provide training. Generally speaking, the subsidy received by the enterprise is about 50%~80% of its net training cost (Lu, 2019: 31). Since the summer of 2008, German Federal Labor Agency has decided to use funding subsidies to enable more young people to receive vocational education and encourage enterprises to participate in vocational education. This means that all enterprises that increase their learning positions can receive government subsidies. Every time an enterprise adds a vocational education study position, will get a subsidy of 4000 to 6000 euros from the government (Jiang, 2010: 5). Moreover, the German government has also adopted preferential training loans and tax policies.

In addition to the direct economic benefits mentioned above, enterprises can also obtain other indirect benefits from participating in vocational education. The enterprise cultivates and hires a large number of qualified skilled personnel, which saves the cost of human resources, advertising and training. It obtains professional employees who agree with its spirit and increases the efficiency and quality. In particular, the use of students' production work during the enterprise training period of "dual system" has greatly reduced labor costs. Therefore, although enterprises need to invest a large amount of cost to participate in vocational education, they can basically accept it. This is confirmed by the relevant survey results. The German Federal Institute of Vocational Education conducted a survey of 3000 companies about "Costs and Benefits of Vocational Education" in April 2009, showing that most of the companies are "particularly satisfied" and "satisfied" with costs and benefits, and only 10% of the companies expressed "dissatisfaction" (ibid.: 7-8). According to the results of a survey conducted in 2014, the average net cost per apprentice is 5398 Euros, about 28% of training companies will have net training benefits (Lu, 2019:

31).

3 Problems of Chinese enterprises participating in vocational education

3.1 The current situation and key issues of vocational education in China

As far as our vocational education is concerned, there is a great contrast between expectations and reality. On the one hand, the government and scholars call for major efforts to develop vocational education and deep participation of enterprises, but in fact the public regards the choice of vocational education as a helpless move and enterprises lack the motivation to participate in vocational education. On the other hand, there is a shortage of skilled talents on the front line of production, vocational school graduates however are faced with employment difficulties and poor wages.

The participation of Chinese enterprises in vocational education can be divided into two types: training schools run by enterprises and internships. The former is relatively rare (mostly large state-owned enterprises). Internship is the main way for enterprises to participate in vocational education. At present, most enterprises lack the motivation to participate in vocational education, and simply do not pay attention to the internships of vocational school students. Enterprises often lack training standards, teaching materials, qualified teachers and teaching equipment and facilities. They even use students as cheap labor, which leads to the low quality of vocational education.

Vocational school graduates have low professional skills, so many companies are unwilling to hire them, resulting in employment difficulties and low social recognition. Moreover, due to the influence of traditional educational values, vocational education in China has not received enough attention, which further reduces social recognition of vocational education and vocational school graduates. Thus, if there are other options, they will not choose vocational education. In other words, vocational school students are mostly students who are forced to study in vocational schools because of their poor grades, which negatively affects the quality of vocational education and the cultivation of qualified talents from the source of students.

In short, the status quo of vocational education in

China can be summarized as follows: great attention of the government, lack of motivation of enterprises, low quality of vocational education, low social recognition and difficulties for vocational school graduates to find jobs. It can be seen that the lack of motivation of enterprises to participate in vocational education directly leads to the low quality of vocational education, which is a key issue affecting the development of vocational education in my country.

3.2 Reasons for lack of motivation for Chinese enterprises to participate in vocational education

The cost of Chinese enterprises participating in vocational education involves student allowances, training teachers' salaries, equipment and materials usage and wastage costs. In terms of direct economic benefits, Chinese enterprises cannot obtain government subsidies like German enterprises. In terms of indirect economic benefits, first of all, due to the lack of skills, vocational school students cannot be hired after their internships in enterprises. Therefore, it is difficult for Chinese enterprises to save costs of recruitment, advertising and training by using intern students for human resource reserves. Comparing cost expenditures and economic benefits, we can see that Chinese enterprises participate in vocational education with high costs and low economic benefits, and the net costs are much larger.

From the survey of 88 companies from 2016 to 2020, the main dilemmas of Chinese enterprises participating in vocational education are: the lack of comprehensive promotion mechanisms for the participation in vocational education, the unclear implementation of incentive policies, lack of operability and direct returns in the short term (Jiang and Feng, 2020: 17).

It can be seen that the Chinese enterprises participating in vocational education have large net costs and heavy burdens, which are contrary to the purpose of enterprises to pursue economic interests. Therefore, enterprises lack motivation to participate in vocational education.

4 Enlightenment of German "dual system" model to vocational education reform in China

From the above analysis, compared with the German "dual system" model, our vocational education still has many shortcomings in terms of enterprise

participation, legal protection, policy incentives, conceptual support and guild supervision. The reform of our vocational education can get good enlightenment from the German model. The key problem of the vocational education in China is the lack of motivation for enterprises to participate in vocational education. The fundamental cause is the large net cost expenditure. This mainly because the enterprises fail to obtain subsidies. Only when they receive subsidies and gain benefits will they take the initiative to participate in vocational education and train qualified skilled personnel, which helps them to obtain more indirect benefits, thereby further enhancing their participation in vocational education. In summary, based on the enlightenment of German "dual system" model, we should focus on increasing the motivation of enterprises to participate in vocational education, adopt economic incentive policies such as government subsidies and fund subsidies, and give full play to the leading role of enterprises in vocational education., so as to promote the effective operation of our vocational education system.

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