

Research on Vocational Education In Germany

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Keywords: dual system; cross enterprise training institutions; curriculum structure

Abstract: This paper introduces the current development mode of Vocational Education in Germany, introduces the teaching of cross enterprise training mode, and then, combined with the current higher vocational education in China, researches should be done on the connection of professional curriculum content and vocational standards, teaching process and production process to ensure the smooth development of higher vocational education.

In August 2014, I was honored to participate in the "industrial machinist numerical control technology" teacher certification training of ABB Berlin cross enterprise training center, Berlin vocational education group, Germany, for 30 days. I will give a brief introduction to ABB training center, which is a service provider providing training to vocational and technical education schools or small and medium-sized enterprises in Germany. It is the largest cross enterprise training institution in Brandenburg, Berlin, providing training services to more than 500 business partners. In 2013, ABB won the best training institution award in Europe and the world's best employer in the industrial sector. At present, ABB provides more than 30 kinds of vocational training in the industrial field. In September every year, Chancellor Angela Merkel will visit ABB Training Center Berlin. Mr. Antmann, the general director of the center, is also the main member of the Berlin enterprise and Economic Association and the president of the Berlin Brandenburg state enterprise training Association. At the same time, it is also one of the members to promote the reform and development of Dual Vocational Education in Brandenburg, Berlin.

1. Understand the dual system and triple system education mode.

German "dual system" vocational education is well known, which is the characteristic theme mode of German vocational education. Dual system was born from the apprenticeship training mode of manual workshop. It has nearly 160 years of development history. It flourished in the 50th generation of the last century during the great industrial revolution in Germany. After the first vocational education law was promulgated in 1968, Germany has been standardized and strengthened. At present, it has become the main form of Vocational Education in Germany, and also the main reference mode of Vocational Education in various countries.

For a long time, we have made a large number of introductions to this kind of education mode, and carried out experiments in this respect in many places of our country. Through one month's professional study in Germany, the author has a close experience of this kind of German vocational education. The place where we study is ABB training institution, not German Vocational and technical school. Why is there such a training institution? "Dual system" should not be the close relationship and cooperation between two learning places - enterprises and schools? It can also be said that "dual" summarizes two decisive factors of this education model: enterprise and school. In Germany, there is a training institution like abb. This kind of education mode is the "ternary system" put forward by some educators.

70% of the dual system education and training time in Germany is allocated to enterprises, and 30% of the time is spent in the professional theoretical study in national vocational schools. Generally, two weeks of business and one week of vocational school are alternately conducted between the two learning places. Companies often fail to teach everything in national standards.

The reason is that the specialization of industry can not cover the broad learning and work content required by vocational education. In addition, the equipment in some enterprises is not enough to meet the training requirements and the technical conditions of jobs.

The gap is filled by the cross enterprise vocational training institutions. The establishment of the cross enterprise training center is the symbol of German vocational education showing the nature of group education. The cross enterprise training center is a non-profit joint organization run by the people with the government, social intermediary organizations or enterprises as the main body, which is usually funded by the government. The third place to implement vocational education is the joint establishment of the training center by the federal government, state government, civil organizations of social intermediary organizations and small and medium-sized enterprises through legal contracts. This kind of training center still follows the German law and is a cross enterprise, cross industry and cross regional vocational training alliance. The biggest advantage is to integrate multiple resources to solve the problems such as insufficient training ability and limited training location of enterprises, which supports the vocational training of small and medium-sized enterprises and special industries and promotes the healthy and rapid development of vocational education. This kind of training method is also the ternary system put forward by some scholars later. In conclusion, the ternary system has several advantages over enterprise training: 1. Systematic teaching idea; 2. Progressive modular learning; 3. Neutral teaching content; 4. Action oriented learning method.

The successful implementation of dual vocational education is guaranteed by the German legal system, which is a rigid constraint on the effective operation of dual vocational education. Without the guidance of German vocational education policies and the normative role of laws and regulations, dual vocational education cannot be effectively implemented within the framework of national system. In such a sound vocational education law, the federal Vocational Education Law of 1969 plays the most important role in the dual system. The federal Vocational Education Law stipulates that the training objective of vocational education is "Vocational action ability". Enterprises must cultivate apprentices according to the regulations of vocational education, and standardize the relationship of Vocational Education in the form of contracts. It also stipulates the qualifications of educational institutions and educators, as well as the role that guilds should play in vocational education, and defines the basic system of examinations.

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2. An analysis of the training course structure of cross enterprise training center

Here is a brief introduction of ABB training. My training content in abb is the "NC machinist" professional module embedded in the teaching plan of metal processing technology of China Vocational Education Center. The professional module is based on the German standard of cross enterprise vocational training under the framework of dual system vocational training and cutting machinist vocational training. Students should reflect the acquired ability in a performance assessment conducted according to the professional requirements of numerical control technology in the German cutting machinist's vocational graduation examination.

As a teacher training, we need to learn professional knowledge, professional skills, training organization, quality management, professional teaching method ability, and (vocational) pedagogical ability. Each required field has designed different professional module contents.

3. Conclusion and Enlightenment

Combined with my training process in Germany, I feel the deepest two points: 1. Professional curriculum content and professional standards docking. 2. Teaching process and production process

docking.

Compared with the fact that our vocational schools are not closely linked with enterprises, the enterprises are most sensitive to the needs and trends of the industry. Therefore, every year, the formulation of training syllabus will introduce new technologies and new standards, aiming at strengthening, updating and timely, and ensuring that vocational education has the foresight and advancement from the source and synchronize with the market. For vocational schools, the training module is the same as the corresponding post, so the trained students will go through full work and social training during this period. The graduates have achieved the recognition of the corresponding enterprises in their industry cognition, skill operation and professional knowledge. It is also a virtuous circle for vocational schools.

References

- [1] Xie Lihua, Miao Yaohua, Yu Xiaojuan. A comparative study of occupations between China and Germany [J]. Vocational Education Forum, 2017, (1): 70-79
- [2] Xu Ting. The process of enterprise participation in Dual Vocational Education in Germany and Its Enlightenment [J]. Journal of Inner Mongolia Normal University (EDUCATION SCIENCE EDITION), 10.3969/j.issn.1671-0916.2018.06.006
- [3] Liu Fangwu. Enlightenment of German dual system vocational education model on China's Vocational Education Reform [J]. Continuing education research, 2016, (1): 121-122.doi: 10.3969/j.issn.1009-4156.2016.01.039