

Research on the Talent Training Model of Mechatronics Major under the Modern Apprenticeship

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Abstract: With the continuous improvement and progress of China's economic capacity and scientific and technological level, the manufacturing industry has been vigorously developed, and there is a lack of professional talents in various enterprises. The cultivation of technical talents in vocational education has become an urgent problem. We learn from advanced foreign experience and gradually adopt the modern apprenticeship talent training method, which promotes the quality of higher vocational students' graduation, because in ordinary teaching, they can get started and experience what they have learned. The problem is more prominent in the major of mechatronics. Students must rely on a lot of practical work before they can make a great improvement. Taking the mechatronics major as an example, this article discusses the talent training model under the modern apprenticeship system.

1. Introduction

The talent training model under the modern apprenticeship system is a newly emerging talent training model in recent years. He borrowed from foreign talent training models, but there is one problem that has to be raised, and that is the issue of adaptability. It is not necessary for us to adopt a rigid model of this foreign model. We must carry out a series of reforms and innovations according to our national conditions, so that this talent training model can be carried forward in our country. The so-called apprenticeship is to carry out a series of real practical activities under the guidance of professionals. Through continuous observation, you can use your own hands to apply the knowledge you have learned to the work you have done. The understanding of the contents of the books in the class has learned the basic skills. When they graduate, it is equivalent to one or two years of social work experience, and they will be more welcome. If there is no good practical experience in the mechatronics specialty, it will be difficult for the work unit to be optimistic at first. When the talent training model of the apprenticeship system is combined with the mechatronics specialty, it is possible to inspire better results.

2. Characteristics of a Vocational Education Model in a Modern Apprenticeship

Modern apprenticeship is a vocational education in which the traditional apprenticeship system integrates school education. Post-employment and order training in modern vocational education and modern apprenticeship are a progressive relationship. In today's education, modern apprenticeship is already a widely used method. In Germany, a powerful country with a modern apprenticeship system, the Vocational Education Law was promulgated. This regulates the lifelong education attributes of vocational education from the legal level. This has formed a model of training, employment, retraining, and reemployment.

The Australian method is to dominate the market, and the government uses the allocation method for operation. The allocation is based on the number and quality of apprentices accepted by the enterprise and the amount of courses. Through comparison, we can find that Germany's qualifications and Australian government funding, these are planned and guaranteed from the perspective of the government. We can see that the modern apprenticeship system is a professional and systematic way. At the same time, it changes with the changes in the economy, and constantly adjusts the apprenticeship system to improve and upgrade. This system emphasizes the learning and development of hands-on ability, which is usually only available at work, and it is also the best way to combine learning and work. Students learn the work flow in the school, and carry out practical operation learning in the work. Such training is obtained through real training and

learning, which is also a reflection of the quality of dual teachers and project guidance.

3. The Importance of Apprenticeship to Mechatronics

In recent years, some industrially developed western countries have begun to implement a talent training model combining apprenticeship teaching and practice to improve the comprehensive quality of apprenticeships. In recent years, our country has promoted this activity in some industrial vocational schools, so that more students benefit from it. In order to study and practice this new talent training method well, taking mechatronics as an example, we must recognize the following points:

The apprenticeship allows students to better understand what they have learned from books. Most students nowadays mainly study at school, and there is very little time to actually practice the contents of books. This situation is very bad for higher vocational students, because they will face the problem of entering the job, and it is the kind of job that requires skilled skills. It only understands the content of the books and is not practical. The operation is just a failed talent training program. It is precisely that the apprenticeship system can solve this problem very well. Under this training program, students can have a lot of practical opportunities to comprehend what is on the books, and master what they must first learn. Skills, in the major of mechatronics, especially in the field of maintenance engineering in the future, students must have a lot of practical opportunities to make a difference in the jobs they enter.

Moving practical tasks into the classroom, realizing the integration of teaching and practice, mechatronics is a discipline that requires a lot of practice, especially for higher vocational students, who have a stronger willingness to practice learning than ordinary students. To the knowledge. The apprenticeship gives them a good opportunity to use them as their usual classroom when they practice, and they really move the factory into the classroom. Their precious internship experience, whether it is the understanding of the knowledge at the stage of study or the Learning basic skills is a good learning process. This kind of talent training method is unmatched by traditional methods. A large amount of practice allows students to truly grasp what they have learned. Therefore, apprenticeship is a talent training method with cross-age significance.

Apprenticeship allows more students to adapt to their positions faster. In the traditional teaching and training program, students just passively accept what the teacher teaches, and there is no sufficient interaction between the two roles. Students can only get the bits and pieces of information they want to go to the post in the teacher's mouth, without really understanding the true meaning of going to the post in the future. The apprenticeship gives students specific information on where to go. Under the school-enterprise cooperation model, students can truly go to their future jobs in the school, adapt to their roles and skills in advance, and for the future be prepared for the work place.

4. Main Practices of Modern Apprenticeship

After absorbing the central ideas of Germany's dual system and modern apprenticeship system, we have carefully researched and analyzed the market and explored the mechatronics integration that is in line with our own development through actively contacting interested companies and the ideas that meet the needs of both parties. Vocational education.

Establish a platform for school-enterprise cooperation, and fully improve this system to achieve the full development of long-term cooperation. Regrouping the traditional apprenticeship system is also an important requirement of the modern apprenticeship system. The identity of the student is constantly transformed from student to apprentice. The school shoulders the important responsibility of cultivating students. The enterprise and the school jointly formulate training plans and then give play to their own strengths. Division of labor and cooperation will do a good job of training students.

We can build a dual leader system and form a reasonable team of teachers. Under the modern

apprenticeship system, we need to build a professional and part-time teacher team. Today's school teachers generally enter teachers directly after graduating from school, and lack practical factory work experience, so they cannot meet the needs of current students. Workers with many years of work experience in enterprises usually also learn by self-study or other methods, which also causes their professional knowledge to be insufficient and systematic. At the same time, many of them have no work experience as a teacher, which also causes them to be inferior to the teacher position. Through professional training and the introduction of a combination of methods, let existing teachers carry out corporate training and domestic training methods to improve the overall level of teachers.

Reconstruct the curriculum system. The training of students under the modern apprenticeship system is a senior compound talent. Therefore, in the arrangement of courses, it is necessary to let the teaching courses enter the school's training base and be borne by the teachers of the enterprise. This problem is difficult for many schools to achieve. The important reason is that the traditional subject system and the new learning system are completely inconsistent. The specific positions of the enterprise cannot be fully integrated into the curriculum. When the school designs the curriculum, the system still uses the system's knowledge content as an important teaching task. Does not integrate well with specific practices. In the course selection, if the post requirements are used as the course arrangement, there will be insufficient knowledge and the system cannot take into account the ability training used. Therefore, in order to achieve high-skilled personnel training, it is necessary to combine market surveys in the modern apprenticeship model to re-determine the training plan and goals of talents, and form a training plan with its own characteristics. The main on-campus training should be three different levels of teaching practice: on-campus training, off-campus training, and post placement.

Schools and enterprises jointly organize talent training programs, and through the mechatronics professional construction team to determine talent training monitoring and evaluation, so as to ensure the realization of talent training programs and training goals. Our province is currently at the start of the modern apprenticeship reform. Scale development is an important task for us. At the same time, quality cannot be ignored. Only good training quality can build a good reputation for the modern apprenticeship, and it is also the primary focus of innovation in the modern apprenticeship training mode of our department. At the same time, there must be good supervision of the entire teaching process, and random checks and supervision of teachers can be established to establish a teacher scoring mechanism to allow teachers to do their best in teaching. Appropriate training assessment and theoretical assessment are the only way to provide guarantee for the entire teaching process. There is also a scoring mechanism for students' practical skills, and only in this way can they improve their enthusiasm for learning.

Must implement the implementation policy of school-enterprise cooperation in the apprenticeship talent training program system, school-enterprise cooperation is the most important part. Without the vigorous development of school-enterprise cooperation, the successful implementation of apprenticeship talent training programs would not be possible. Because in the school-enterprise cooperation, the enterprise is an important implementation link. Only with the strong support of the enterprise can there be a large number of internship opportunities for students and the quality of student practice can be guaranteed. Without the full support of all aspects of the enterprise, the apprenticeship will not develop very healthy. In the apprenticeship talent training program, the company is the leading force. During the internship, they will have high enthusiasm before they can provide high-quality internship positions to higher vocational students. Among mechatronics majors, such as mechatronics majors, many companies have a good foundation of strength, but they don't want to show their best things to colleges and universities. This is the trust of school-enterprise cooperation that we mentioned problem. Only by formulating practicable regulations to make enterprises truly trust and trust is the key. Another key point is the requirement for integrity. This is a concept that schools need to strengthen in peacetime. In the apprenticeship talent training program, the company will definitely invest a lot of manpower and material resources, and it will need a variety of professional talents to specifically train higher vocational students, but if the students do not follow some

basic rules, the company will eventually suffer Loss, this is a situation not far from both sides. The main purpose of the company is to make a profit, and when his interests are lost, he will definitely resolutely no longer cooperate. Whether the school is a teacher or a leader, students should cultivate a sense of integrity, and in particular, the integrity of the company can only strengthen the apprenticeship training method, and make school-enterprise cooperation the strongest backing for apprenticeship teaching.

The reform of teaching methods and the establishment of teaching training venues should be explored. The reform of teaching methods is the theme of the development of this activity. He intends to let us break the traditional teaching method based on teaching and bring teaching activities to Come in the classroom, let the apprenticeship approach to the actions of each teacher's school. Let the new reform approach be thoroughly implemented in the students of higher vocational schools. In the teaching process, the teaching plan and the production plan must be closely linked, and the corresponding production parks must be established with the enterprise to promote the production enthusiasm of the enterprise, so that the talent training method of the apprenticeship will continue. For example, the mechatronics major needs maintenance personnel. At this time, the school can actively carry out school-enterprise cooperation, establish teaching and training factories, and allow students in this major to enter the teaching reform method of half production and half teaching. Such a teaching and training factory can be a small processing point of the enterprise, but it is only a semi-apprentice nature. It can also sign a corresponding agreement to work in the enterprise after the teaching work is completed, creating better value for the enterprise. . This is what both companies and schools want to see. The reform of teaching methods should be a thorough reform from the beginning, so that students can learn real technology from the beginning, and continue to carry out practical activities in teaching. Being able to become a qualified, independent player in his own position, this is the most comforting result for everyone. The significance of the teaching practice factory is not only to greatly improve the teaching practice of students, but also to find a new breakthrough in the modern apprenticeship teaching method.

The construction of school management system and apprenticeship system should be followed up. The modern apprenticeship system requires follow-up of college system construction in credit management, daily management, curriculum assessment, etc., to meet the student's schedule, and strengthen the training room management according to the requirements of the enterprise. Injecting corporate culture and business management while studying requires the cooperation of teachers, class teachers and other parties. Students who have a grasp of students' minds at any time, are unwilling to produce, and have negative thoughts should do more ideological work, pay attention to safety education, and strengthen safety awareness, discipline awareness, and health awareness. At the same time, strengthen the communication between the enterprise and the school, adjust the student's homework time and plan according to the needs of the product, summarize and evaluate the processing of the product, and actively summarize the experience. The research and practice of the talent training model under the modern apprenticeship system requires a long-term process. Accumulating experience in practice requires a more comprehensive systematic summary. The talent training model of modern apprenticeship is an emerging food, and we must face it with caution. In the process of reform, we must conscientiously implement the obligations and spirit of school-enterprise cooperation and allow more enterprises to participate. The enterprise is the most fundamental basis for the talent training model of the apprenticeship system. Without the strong cooperation of these enterprises, there is no apprenticeship system. It is also necessary for schools to formulate talent training programs in line with reforms and explore ways to meet their own student development.

5. The Effect of the Implementation of the Modern Apprenticeship Training Model

Improved the overall quality of students and the professional level of teachers. After investigation, after implementing the modern apprenticeship system, 70% of students have increased their interest in learning, 75% of their students have increased their awareness of teamwork, 90% of their students have improved their professional abilities, and 70% Of students have improved their communication skills, 85% of students

think that it is very helpful or more helpful for employment, and the teaching effect has been significantly improved. Through the implementation of the modern apprenticeship system, the school and enterprise are deeply integrated, and the teachers' vision is expanded. In the process of being familiar with cutting-edge technology and technology, the professional level is improved, the course teaching is more vivid and specific, the teaching content is targeted, and the teaching effect is significantly improved.

Realized the deep integration of production and education. The deep integration of production and education and the close cooperation between schools and enterprises are important areas for the modernization of vocational education. The school-enterprise cooperation council was established by both the school and the enterprise to recruit skilled artisans from the enterprise to the school to participate in the teaching of numerical control processing, and the school also moved the quality testing and skills training teaching to the enterprise site, which not only expanded the teaching space for training, but also It saves consumables, lowers the cost of running a school, and realizes seamless docking with enterprises.

Expanded the school's social influence. Through the implementation of the modern apprenticeship system, the school's school level has been recognized by the enterprise. Through the introduction of cooperative enterprises, the school has signed employment agreements with more than 20 large enterprises in the province, and student employment has been in short supply. At the same time as the employment opportunities for students have widened, the school's social influence has expanded, its popularity and recognition have increased, and its professional construction and talent training have embarked on a track of healthy development. Attaching importance to and promoting the modern apprenticeship system and implementing the mechatronics professional talent training model under the modern apprenticeship system can make professional construction and development less detours, have a strong exploration and breakthrough, and is an effective method and way to train technical skills talents.

6. Conclusion

The modern apprenticeship system requires the country's vigorous promotion and standardization. It must play its role under unified leadership. It must establish a bridge between government and enterprises as soon as possible. Some apprenticeship trials can be established in accordance with the level of local economic development. Modern mentoring system for schools and businesses. The state must also continuously improve the law on internships to ensure the safety of students during the apprenticeship process.

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