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Exploration and Thinking on the Integration of Enterprise with Vocational Schools in Mechanical Specialty

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Abstract: *Integration of enterprise and vocational schools is one of the basic school running systems of vocational schools. In recent years, the mechanical specialty of vocational schools has been exploring the new mode of combination of enterprises and schools, and has conducted in-depth exploration and thinking. Therefore, this paper starts with the current situation of the integration of enterprise and vocational schools in the machinery major of technical schools and puts forward some thoughts from the aspects of improving the system guarantee, combining the characteristics of the major, and doing a good job in improvement and evaluation.*

Keywords: *Mechanical major; Integration of enterprise and vocational schools; Exploration and thinking*

1. Introduction

As a new teaching mode carried out by vocational schools, the integration of enterprise and vocational schools can help students master more knowledge, enhance their vocational skills and make them better understand relevant mechanical knowledge. Students can achieve all-around development in a variety of teaching situations. Therefore, teachers should guide students with scientific methods when implementing a variety of management models. The teaching form of integration of enterprise and vocational schools is an important measure of educational management in the new era. In the appropriate teaching guidance, teachers need to strengthen practical training to enhance students' practical skills. In the teaching of machinery majors in various colleges, the method of "integration of enterprise and vocational schools" is adopted to promote the all-around development of students. The school has carried out a series of cooperations with various colleges, providing a good teaching method for students' vocational education, enabling them to embark on a more professional road and improve students' comprehensive vocational skills.

2. Mode of Integration of Enterprise and Vocational Schools in Mechanical Specialty

2.1. Investigate enterprises suitable for schools

The integration of enterprise and vocational schools needs to consider the actual teaching direction of vocational schools, so as to find a suitable company to do business with. Starting from the vocational requirements of the mechanical profession, we should think about how to give reasonable guidance. It is formed to adapt to the development of the market and is based on scientific practice. At the same time, we should comprehensively consider the size of enterprises and the strength of schools to provide scientific guidance to students in different educational situations. Therefore, we should make full use of the existing teaching methods to comprehensively cultivate students' abilities. When cooperating with enterprises, we should pay full attention to the theoretical training and practical management of students, so as to improve their professional level. According to the requirements of teaching materials and the market, a set of scientific teaching plans should be formulated to effectively train students' professional skills. The company should select competent talents to prepare students for their posts so that they can flexibly use the knowledge they have learned to better carry out their work.

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2.2. Establish a long-term cooperative relationship

Integration of enterprise and vocational schools is a long-term development of management. In the process of educating students, teachers can unite with enterprises to guide students scientifically, strengthen students' professional skills, and enable them to apply relevant theoretical knowledge according to the actual situation of enterprises. From the perspective of professional development, colleges and universities must have a complete education system. And enterprises also need to give play to their own advantages to create suitable education and training conditions for students [1]. Therefore, vocational schools should maintain long-term contact with enterprises, formulate a set of management plans for students, and carry out professional education for them. In the process of curriculum implementation, schools should provide professional guidance to students, and strengthen the training of students' professional quality, so that students can continue to improve their professional skills in the operation of machines to adapt to the jobs of enterprises.

2.3. High executive ability

The integration of enterprise and vocational schools requires the full cooperation of the school and the business sector to turn theoretical ideas into practical work. Establish a sound education and management system to enable students to study and research in appropriate courses. By means of the integration of enterprise and vocational schools, strengthening the career planning and guidance for students can enhance their executive ability. By investigating the courses of some majors, we can deepen students' understanding of their majors. Teachers should pay attention to scientific guidance in teaching so that they can play their due role in teaching.

3. Development Status of Integration of Enterprise and Vocational Schools in Mechanical Specialty

3.1. Stay at the theoretical level

In recent years, the integration of enterprise and vocational shcools has mostly stayed in the fields of seminars, visits, teaching by enterprise personnel, students post internship, and the construction of some disciplines, which cannot really achieve the perfect integration of industry and education. Under the guidance of teachers, the company carried out scientific research and other in-depth cooperation with schools. There are three main reasons for this phenomenon. Firstly, the lack of an effective system makes it difficult to exchange equipment, and use the funds, especially in public schools [2]. Secondly, enterprises are mainly profit-making, especially small and medium-sized companies. They do not participate in cooperation plans with unclear interests. Thirdly, due to the difference between the operation and education of enterprises, it is quite difficult to truly realize the integration of enterprise and vocational schools [1].

3.2. The integration of theory and practice has replaced the integration of production and education

With the promotion of integrated teaching, at present, many colleges and universities have basically realized the organic combination of theoretical teaching and students' practical training, but the key to the integration of enterprise and vocational schools is to apply what students have learned in theory to practice. Although "ordinary practice" can provide targeted training plans for students, it does not conform to the actual production level. Therefore, we cannot simply equate the integration of theory and practice with the integration of production and education. The biggest problem in integrating teaching with production is that teaching facilities and teaching environments cannot be brought into campus due to the limitation of funds and teaching places.

4. Reflection on the Integration of Enterprise and Vocational Schools

4.1. Looking for suitable Enterprises

The integration of production and education needs sufficient enterprise support. Therefore, to realize the integration of production and education, we must first find a suitable company. Starting from the need of cooperation, the following conditions are proposed: (1) enterprises have a strong and long-term willingness to cooperate in the integration of industry and education. (2) Pay attention to the training of technical personnel, and be able to bear the financial losses and management changes caused by the

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training. In addition, we also need to make full use of the advantages of cooperation between universities and enterprises and establish innovative cooperation mechanisms such as provincial science and technology innovation centers, incubation bases, and practice bases. By building a teaching platform and constantly deepening the integration of production and education, the following objectives can be achieved. Firstly, to cultivate and improve the teaching and research capabilities of teachers in primary and secondary schools. Secondly, it can improve the company's product competitiveness by applying the research results to the company. Thirdly, new technologies, new processes, new standards, etc. are compatible with the knowledge learned by students, which is of great significance to improving the comprehensive quality of talents [2].

4.2. Develop a long-term cooperation plan

In order to build a long-term mechanism of integration of production and education, schools and enterprises should formulate long-term talent training plans according to the characteristics of enterprises, school environment and talent demand. (1) Based on experts from schools and enterprises, according to the post capacity of enterprises and combined with the development of the industry, jointly develop a school enterprise integrated talent training program. (2) Build a platform for industry education integration and school-enterprise cooperation. My school cooperates with the industry service association to borrow equipment and technicians to the school. This method can not only solve the current shortage of equipment for practical teaching, but also create a real workplace for students, improve their self-confidence, improve their professional ability, and enable colleges and enterprises to formulate long-term cooperation plans under the condition of tight funds.

4.3. Improve the system guarantee

At present, the integration of industry and education lacks strong and effective system support. The government should promote reform through the law. The rights and responsibilities (including funds, equipment and responsibilities) of all partners should be defined (including rewards, punishments, etc.). The behavior of the partners should be regulated; Seek reasonable rights and interests for partners (including welfare, treatment, priority, etc.); Carry out collaborative supervision and evaluation. Establishing an implementable and scientific administrative management system from these four levels can not only effectively restrict the normal cooperation between schools and enterprises, but also provide the basis and guarantee for the cooperation between schools and enterprises [3].

4.4. Integrating enterprise and vocational schools in combination with the characteristics of mechanical specialty

The integration mode of production and education in vocational schools should adopt different ways in combination with the characteristics of the machinery specialty. For example, the mold major can choose the form of "introducing enterprises to schools", adopt the existing factory equipment of the school, and introduce the design and manufacturing of small-scale shoe-making molds into the school classroom, so that students can experience the working atmosphere and connect with the company's culture. Since there are many kinds of expensive and large manufacturing equipment, and the funds and places in the school cannot be fully equipped, it is the most intuitive and efficient way of education to establish a "factory-school" and organize employees to the factory for production. Three-dimensional printing is a new type of material processing technology. According to the personalized product characteristics of users, it can undertake the project of enterprises in schools and adopt the project teaching method for teaching. After the products are delivered to the company, the enterprise will evaluate them. We should organically combine it with the characteristics of the mechanical specialty and maximize its value.

4.5. Mobilize the enthusiasm of enterprises

If you want enterprises to actively participate in the projects of industry education integration, the first thing to do is to mobilize the enthusiasm of enterprises to participate. From the perspective of economic benefits, whether students visit the front-line departments of enterprises or choose to practice in factories, they should give full play to the advantages of integration of production and education, and achieve a win-win situation between the improvement of students' skills and the introduction of enterprise talents. For example, while students are practicing in enterprises, they should go deep into the company to carry out project changes or product research and development, so as to truly provide

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solutions to the problems of the company. In the field of human resources management, companies engaged in the integration of industry and education can have the right of priority in the process of employment selection. If conditions permit, sign work contracts with students for a certain period of time to stimulate employees' enthusiasm for work. The most important thing is to get appropriate remuneration, which is also the guarantee for the long-term development of the integration of industry and education [4].

4.6. Ensure effective implementation

A shoe mold enterprise negotiated school-enterprise cooperation with a vocational school, hoping to promote the development and manufacturing of shoe mold with the help of the school's equipment and the strength of teachers. The chairman of the company has visited vocational schools several times but has never signed a cooperation agreement with the school. The reasons are as follows. Firstly, it is reasonable to combine production and teaching by using the facilities of school buildings and workshops, but the training hall in the school must meet the functions of competition, teaching, training and so on. Secondly, the school-enterprise dual-teacher system needs to be implemented. The combination of production and learning is not empty talk, but an implementable teaching method. In the process of connecting schools and enterprises, although some schools and enterprises have creative ways of thinking, they lack executive power, resulting in the cooperation between the two sides eventually becoming superficial forms. After the consultation and formulation of the implementation plan by schools and enterprises, the project is often delayed due to the influence of external factors. How to implement the project scientifically, effectively and stably and achieve the goal within the specified time is the basis for ensuring the effective implementation of the project. Only after the smooth implementation of the plan can we see the effect, and the smooth implementation of the plan needs to be guaranteed by a measure.

4.7. Evaluation and improvement

The long-term and effective implementation of the integration of industry and education needs reasonable supervision and evaluation. Government evaluation, industry evaluation, cooperation subject evaluation and public opinion evaluation are the four main types of evaluation. Among these evaluations, both the national evaluation and the industrial evaluation are relatively reliable, and both schools and enterprises mainly rely on the evaluation of the cooperation subject and the evaluation of public opinion. The so-called "supervision and evaluation" is the supervision and evaluation of cooperative implementation between schools and enterprises. The "supervision and evaluation" of schools and enterprises are for improvement. To ensure the sustainable development of education and teaching reform, it is necessary to listen to the views of all parties, objectively analyze the implementation effect of production education integration, effectively supervise and evaluate the implementation effect, and appropriately improve the evaluation results

5. Conclusions

In a word, the integration of production and education of machinery major in vocational schools is a kind of teaching innovation, which can quickly improve the teaching effect for students. Under the education mode of "integration of production and education", a benign interactive relationship has been formed between schools, enterprises and students, thus reflecting the effect of education orientation, giving play to the teaching advantages of integration of production and education, strengthening the training of students' vocational skills, and promoting the effect of integration of production and education. In the process of implementation, we should pay attention to the use of scientific teaching methods and guide students to implement step by step. It can enhance students' subjective initiative, enable them to learn more comprehensive professional courses in schools and enterprises, and meet the needs of their posts.

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