

## Research on Practical Training Teaching Reform of Electrical Automation Professional Skill Course from the Perspective of Craftsman Spirit

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**Abstract:** Spirit of horizon, electrical automation professional skill training curriculum teaching reform, analyzes the spirit of craftsman in electrical automation, the importance of the talent training so that the students in the mastery of professional knowledge at the same time can have spirit, better able to plunge into work, optimize the process technology and equipment innovation. there are too many basic theories, traditional teaching mode and lack of practical links, which are the problems existing in the course teaching of electrical automation professional skills. more basic theory courses will affect students' ability to master basic knowledge, and the teaching time is relatively short, which makes the practice teaching seriously lag behind and the teaching effect cannot be guaranteed. in the teaching process of electrical automation professional skills in vocational colleges, many of them directly follow the teaching mode of ordinary colleges and universities, but such teaching mode is not applicable in vocational colleges. some colleges and universities still have the problem of lack of practice links. simple theoretical knowledge explanation can not meet the practical needs of course teaching and talent training. we should reform the traditional teaching concept and develop a new curriculum department, the construction of enterprise practice platform, repositioning the teaching objectives, in the teaching vigorously promote the spirit of craftsman, to improve the teaching effect.

### 1. Introduction

The adjustment of industrial structure makes the society put forward new requirements for high-end skills and applied talents. As the training base for applied talents, vocational colleges also get good development opportunities. However, with the expansion of the school scale, many vocational colleges have made some deviations in the implementation of the school policy, leading to the failure of graduates to meet the needs of enterprises in terms of ability and quality, resulting in the contradiction of talent shortage in enterprises and difficult employment of graduates. Vocational colleges should do a good job in teaching reform from the perspective of craftsman spirit, improve teaching effect and cultivate more professional talents who can meet the needs of social development.

### 2. Craftsmanship Spirit

Craftsman's spirit is a special professional spirit, and also a direct reflection of professional ability, professional ethics and professional quality. It is the professional orientation and behavior of employees themselves. The connotation of artisan spirit is embodied in the following aspects: first, dedication. Professional dedication is a spiritual quality that all practitioners must adhere to. It mainly means that practitioners devote themselves to their work based on their love and awe for their profession. Since ancient times, China has had a fine tradition of being devoted to duty and being devoted to work, which is not only a traditional virtue, but also a basic requirement of the core socialist values. A lack of professionalism and a desire to muddle through can not only fail to guarantee product quality, but can also lead to safety accidents. The second is lean. Lean is

specifically about excellence, where practitioners take every product and every process seriously and strive for perfection by putting their heart and soul into it. As Lao Tzu once said, "Great things in the world must be done in detail." To achieve long-term development, we must strive for perfection. Third, focus. The focus on emphasizing the persistence and patience of the immediate details is also a spiritual quality that an excellent craftsman must possess. The craftsman's spirit can be regarded as a special kind of persistence. After decades of consistent persistence, an excellent craftsman may even reach the point of "paranoia", just as what is said, "a craftsman's skill will be good". Fourth, innovation. The spirit of craftsman not only emphasizes professionalism, lean and concentration, but also constantly pursues breakthrough and innovation. The progress of science and technology is achieved through continuous innovation of craftsmen.

### **3. The Importance of Craftsman Spirit in the Training of Electrical Automation Talents**

New development environment, the enterprise for electrical class talented person's demand continues to grow, vocational colleges teachers must base on the spirit of craftsman backdrop to promote electrical automation course teaching reform and innovation, ensure that students can master the knowledge related to electrical automation and operation skills, to cultivate a sense of responsibility of comprehensive, specialized technical personnel oriented.

In the new era, vocational education emphasizes on teaching students with truly operable technologies and requires students to have professional knowledge that can be used in practical operation scenarios. This requirement seems simple, but it is difficult to realize. The core of it lies in two aspects: one is that students must master the corresponding professional knowledge; the other is that students must adapt themselves to the actual situation and apply the professional knowledge into practice. The essence of the craftsman spirit is to maximize the value of each technical talent, guide students to truly understand the craftsman spirit, form a reverence for the profession, and be responsible for the work.

The spirit of craftsman can promote the improvement of productivity. With the development of technology, more and more people realize the important role of artisans in social production and social development. Spirit will be introduced into the education teaching and personnel training, so that the students in the mastery of professional knowledge at the same time can have the craftsman fine god, better able to plunge into work, optimize the process technology and equipment innovation, meet the new requirement of the social and economic development in the new period, promoting social comprehensive transformation and upgrading of production, improve the level of social productive forces.

### **4. Problems Existing in the Teaching of Electrical Automation Professional Skills**

#### **4.1 Too Much Basic Theory**

More basic theory courses will affect students' ability to grasp basic knowledge. The professional skill course of electrical automation belongs to a basic course of mechanical and electrical major, which has a high requirement for practical ability. However, from the perspective of teaching, there are too many basic theories in the course and the teaching time is relatively short, which makes the practice teaching seriously lag behind and the teaching effect cannot be guaranteed.

#### **4.2 Traditional Teaching Model**

In the teaching process of electrical automation professional skills in vocational colleges, the teaching mode is too traditional, and many of them directly follow the teaching mode of ordinary high schools. However, the basic ability of vocational college students is relatively weak, so they can't adapt to the teaching mode of ordinary colleges and universities. The course itself of electrical automatic professional skills is relatively abstract. The single teaching mode and learning method lead to boring classroom teaching, which fails to stimulate students' interest in learning and even causes them to resist the relevant courses.

### **4.3 Lack of Practice**

In the course teaching of electrical automation professional skills, the theory and practice teaching should be combined to ensure the teaching effect. However, from the perspective of the actual teaching situation in vocational colleges, the practical teaching time is seriously insufficient, and some colleges still have the problem of missing practical links. Simple theoretical knowledge explanation cannot well meet the practical needs of course teaching and talent training.

## **5. The Teaching Reform of Electrical Automation Professional Skills Course from the Perspective of Craftsman Spirit**

The teaching of electrical automation professional skills is mainly aimed at cultivating practical talents, which requires vocational colleges to combine with the market demand. And the actual situation of teaching to do a good job in the continuous reform work, to train students with the spirit of craftsmen.

### **5.1 Reform the Traditional Teaching Concept**

Electrical automation professional skills course teachers need to be timely on their own. Teaching thinking is updated, traditional teaching ideas are reformed, advanced teaching ideas and methods are actively studied, and the spirit of craftsman is introduced into the profession. In course teaching, improve the effectiveness of course teaching. Vocational colleges should focus on cultivating students' spirit of craftsman and teach them vocational skills in the teaching process. The role and value of education were brought into full play. From the practical point of view, vocational colleges should set up the corresponding teacher training mechanism, do a good job in the publicity and education of the spirit of craftsman, and promote the rapid change of teachers' teaching concept with the help of teaching research, school spirit formulation and other measures.

### **5.2 Develop New Curriculum System**

In the process of reforming the teaching of electrical automation specialty skills, undergraduate colleges should emphasize the combination of theory and practice, continuously optimize and improve the practice curriculum system from the perspective of craftsman spirit, and ensure the integrity of teaching and learning content and clear responsibilities.

It is necessary to reform the teaching time of electrical automation course, appropriately extend the class time and combine the classes to ensure that the teachers can complete the theoretical knowledge. After the explanation, students can set aside certain class time for practical operation. If conditions permit, students can be led to the laboratory to develop professional practice, so that students can consolidate theoretical knowledge and improve their major Application ability.

It is necessary to make clear the connotation of the spirit of craftsman, explore the commonness and characteristics of the spirit of craftsman in combination with the characteristics of schools, and develop the new curriculum system by integrating various factors. By developing the school-based curriculum system that inherits the spirit of craftsman, the teaching work of professional courses and public courses of electrical automation can be extended and expanded, so as to realize the goal of cultivating students' spirit of craftsman.

In the course of setting up specialized courses, undergraduate colleges should start with the students' professional characteristics to impart professional knowledge and cultivate professional skills. In the process of ability, the professional quality reflected in the course should be strengthened, so as to ensure that students can develop good behavior habits and professional ethics while learning professional knowledge.

### **5.3 Construction Enterprise Practice Platform**

In the process of implementing practical teaching of electrical automation, undergraduate colleges need to take the enterprise platform as the support, establish a good school-enterprise cooperative relationship, maintain the communication with enterprises, grasp the changing situation of the society, the industry and enterprises' demand for talent information, and carry out timely

reform and completion of professional courses. Enterprises should timely inform their own needs for talents to help schools complete the construction of the curriculum system. Vocational colleges should own actual demand, the electrical automation specialized skills in the process of curriculum reform and cultivate students' spirit attention to practice teaching, completes the electrical and mechanical practice and update the procurement of equipment, testing equipment, improve facilities construction of training base, guarantee the smooth implementation practice teaching, improve teaching effectiveness.

#### **5.4 Reposition the Teaching Objectives**

The undergraduate course should pay attention to the cultivation of students' professional quality, pay attention to professional ethics and craftsman's spirit, reposition the teaching objective, and identify the students as professional and skilled talents with craftsman's spirit. From the practical point of view, the cultivation of artisan spirit should be regarded as a core content in teaching. In the process of setting the teaching target of electrical automation major, it is important to improve students' specialty Basic knowledge level and practical operation ability.

#### **6. Conclusion**

The craftsman spirit is reflected in many aspects in the teaching of electrical automation professional skills. Teachers should not only pay attention to the explanation of professional knowledge and the cultivation of professional skills, but also pay attention to the professional ethics of students and improve their craftsman spirit from the perspective of macro view and humanity. For students, with a full grasp of the spirit of craftsman, they will be able to recognize their major more, develop a good habit of independent learning, and take the initiative to learn professional knowledge after class to improve their professional ability.

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