Discussion on the training strategy of Vocational Skills Competition using teaching as integration mode

Hairu Ma

(Wuchang Polytechnic College, Wuhan 430000, China)

Abstract: In the information age, the rapid development of network technology has led to the rapid rise of information network wiring vocational skills, which has become a field of concern in contemporary society. With the popularization of information network, the demand for wiring vocational skills is also gradually increasing, so it becomes vital to cultivate talents with relevant skills. However, the traditional training mode is often difficult to meet the needs of the rapidly developing industry, so it is necessary to explore more innovative and efficient training strategies. The purpose of this paper is to explore the training strategy of vocational skills competition based on the teaching and integration mode.

Key words: Teaching to do integration; Information network wiring; Higher vocational education; Vocational skills; training

As a training method that combines teaching with practical operation, the integrated teaching mode provides a new idea for the training of information network wiring vocational skills. By combining theoretical knowledge with practical operation closely, students' practical operation ability, problem-solving ability and teamwork ability can be better cultivated.

I. The theoretical connotation of the integrated teaching model

1. Teaching model and training strategy overview

Teaching model and training strategy is one of the key research directions in the field of education. The teaching model refers to the teaching methods, strategies and ideas adopted in the course of education, while the training strategy is the plan and method to develop students' skills and abilities in a specific field. The design and choice of teaching mode and training strategy directly affect students' learning effect and the improvement of comprehensive quality. Information network wiring vocational skills competition is an important competition in the field of information technology. The competition aims to assess the participants' skills in information network wiring, covering network planning, wiring design, equipment configuration and so on. Players participating in this competition need to have a solid theoretical knowledge and practical ability, so the teaching mode and training strategy for the competition are of great significance.

2. The application status of teaching and training in skill competition

At present, many skills competitions take teaching and training as the key links to ensure that players can give full play to their potential in the competition. In the field of information technology, players are trained in problem solving, innovative thinking and adaptability through simulation competitions, practical case studies and teamwork. However, different competitions may require specific teaching models and training strategies, so in-depth research is needed on how to combine teaching and training with specific competition requirements.

3. Characteristics and advantages of the integrated teaching mode

The model of integrated teaching and learning has many unique advantages in the field of education today. First, it can help students gain a deep understanding of the nature of knowledge and its inner connections. The traditional division of curriculum often leads to the fragmentation and isolation of knowledge and skills, while the integrated teaching mode enables students to see the interconnections and commonalities between knowledge and skills by integrating content from different fields. Secondly, it has a unique advantage in promoting cross-disciplinary thinking and comprehensive ability. With the rapid social development and changes, all walks of life have higher and higher requirements for talents. When dealing with complex problems, it is necessary to apply the knowledge in multiple fields for comprehensive analysis and innovative thinking. The integrated teaching mode can also cultivate students' independent learning ability and problem-solving ability. This teaching mode emphasizes from knowledge acquisition to knowledge application, encourages students to actively explore and practice, and cultivates their comprehensive skills in critical thinking, cooperation and leadership, information literacy and other aspects. By providing rich and diversified resources and combining project system and other methods to grasp the teaching joints, students can not only obtain a systematic and comprehensive knowledge system, but also cultivate innovation, collaboration and interpretation knowledge application that flexibly ADAPTS to different needs, and then accept incomplete and imperfect task design so that students can encounter and solve complex problems in the process of exploration and practice. Finally, teachers should study the relevant professional knowledge of the subjects involved and have a profound theoretical basis for listening reports to ensure the educational effect.

The integrated teaching mode is an important part in the development of modern education, and has significant advantages in promoting the cultivation of comprehensive ability. Taking the information network wiring vocational skills competition as an example, the integrated teaching mode enables students to better apply the knowledge in the actual operation. It is believed that with the deepening of education reform, the integrated teaching mode will play more potential and cultivate outstanding talents with comprehensive literacy and innovative thinking to promote social progress and development.

II. The integration of teaching and doing integration mode and vocational skills competition

1. The application of teaching integration in vocational skills competition

In vocational skills competition, the application of integrated teaching mode is of great significance and extensive influence. First of all, in the aspect of knowledge fusion, this model can integrate network wiring technology with related professional knowledge. Traditionally, network cabling has been regarded as a single course, while the teaching and doing integration model breaks this limitation, allowing students to fully understand the relationship and interaction between network cabling and computer networks, electronic information engineering and other fields. By incorporating knowledge elements from different fields into the educational process, students can better understand and master the relevant connections. They are able to dig deep into the intersections between the various fields and apply them in real-world case studies. For example, in an information network cabling competition, teachers can design project tasks that cover multiple aspects of technical requirements, on the basis of which they guide students to comprehensive thinking and problem solving.

Secondly, the integration of teaching also emphasizes practical operation and application in real situations. When using this mode in the information network wiring contest and daily practical training process, teachers will provide realistic demonstration router information network layout and other textbooks, and through physical wiring, network Settings and other means to help students practical operation and use the knowledge. This practice not only allows students to better understand the theoretical knowledge, but also cultivates their ability to solve problems in the real environment. In addition, the integrated model of teaching and doing emphasizes the development of teamwork and project management skills. In vocational skills competitions, students usually participate in teams, with each team member responsible for tasks in different stages or areas. Using the integrated teaching model, teachers can encourage and guide students to communicate and collaborate effectively, and provide resources to guide the design or optimization of inter-group workflows.

2. The role of integrated teaching mode in training strategy

The role of integrated teaching mode in training strategy can not be ignored, it can help students establish a systematic knowledge framework. Information network wiring vocational skills competition involves a wide range of knowledge fields, including computer network, electronic information engineering, communication and other professional. Traditionally, these specialties have been divided into separate entities and taught and understood as a single specialty. The application of the integrated teaching mode in vocational skills competition is of great significance. By integrating the knowledge of different courses together, it can cultivate students' comprehensive ability, improve their practical skills and problem-solving ability, and provide strong support for them to achieve excellent results in vocational skills competition.

III. Training strategy design and implementation

1. Determination of training objectives and contents

Determining the objectives and contents of the training of the network wiring vocational skills competition is a key step in developing a successful teaching plan. These objectives and content need to be determined based on competition requirements, student needs, as well as industry standards, and are designed to improve the skill level of students and help them excel in the competition. First of all, we can refer to the vocational qualification certification standards issued by relevant agencies or organizations, such as the National Vocational Qualification Certificate Grade Standards. These standards detail the knowledge and skills required for different levels and fields, and provide references to ensure that professionals with the appropriate level and meet the requirements of the industry are cultivated. Secondly, in designing training objectives, it is also necessary to listen to and understand the needs of students in terms of their ability development and practical application. Collect students' feedback through questionnaires, individual talks or group discussions, and grasp the corresponding training objectives in combination with educational experience.

For the content of the information network wiring vocational skills competition, you can refer to the guidelines and rules provided by the official competition. These documents usually clearly list the requirements of the competition as well as the technical details and tasks involved. Teachers need to carefully read these materials and make reasonable adjustments based on the actual situation to construct the course content. When choosing the training content, focus on the following aspects: First, theoretical knowledge and principles. Students need to understand the basic concepts, principles and operational processes of computer networks, electronic engineering and other related fields. This is followed by practical operation and practical application. By simulating real network scenes, using professional software simulators or laboratory equipment to carry out specific operations, so as to exercise students' ability to apply the knowledge to solve problems in the real environment. In addition, we should pay attention to the training of teamwork and project management skills, so that students can learn to cooperate with each other, coordinate their own division of labor, and effectively communicate and solve problems. Finally, we should strengthen the ability of practical innovation and practical situation application. Teachers can design project tasks or simulate real scenes to train students' innovative thinking, problem-solving and adaptability to real challenges.

2. Integration and utilization of teaching resources

In the training of information network wiring vocational skills competition, the integration and use of various teaching resources is very critical. Through the effective use of teaching materials, experimental equipment, software and other tools, and flexible use of the Internet and online resources, students can improve their learning effect and cultivate their skills. First of all, in the selection of teaching materials, you can refer to authoritative publications in your field, industry standards or certification course guides. These textbooks usually contain systematic, concise and comprehensive theoretical knowledge, operation steps and case studies. Integrate teaching materials related

to information network cabling at different levels or in different fields, and guide students to self-study according to the actual progress and students' ability. Secondly, in terms of experimental equipment, the existing laboratory or virtual simulation platform can be used to simulate the real environment for training. Especially for the operation that is difficult to control in some special scenes, the virtual laboratory can provide a more convenient, economical and flexible simulation environment. Students can carry out various network wiring tasks through the actual operation of the simulator, get familiar with the work of equipment connection and debugging, and get intuitive experience from it. At the same time, the use of computer-aided teaching software or online platform is also a very important resource. For example, in terms of cable maintenance and testing, professional instrumentation or virtual simulation interface is used to master and apply key technical points such as signal transmission and fault blocking. In terms of various practical training projects, students can implement simulation scenarios of different scales through cable library training software and other tools, combining theoretical knowledge with practical operation. Can help students deeply understand the latest development trends in the field and broaden the learning channels.

3. Arrangement of learning activities and practical training

In the training of information network wiring vocational skills competition, it is very important for students to participate in various learning activities and practical training. Through different teaching methods and techniques, students' practical ability and problem-solving ability can be effectively cultivated. One effective teaching method is project-driven learning (PBL). This method works by combining classroom content with practical projects and giving students the opportunity to work independently and autonomously on tasks to stimulate their interest in in-depth exploration of topics and problem-solving. Through teamwork, students can share ideas and methods, complement each other's skills, and improve the efficiency and quality of problem solving. Regular feedback and evaluation should also be emphasized in practical training. Teachers can set evaluation criteria and make use of self-assessment, peer assessment or expert assessment to comprehensively evaluate students' participation in the project. With the help of these feedback mechanisms, the progress of individuals or teams can be evaluated. Students can know their own achievements and shortcomings in time, and through the analysis of feedback results, they can recognize technical advantages and room for improvement. And target those improvements in the next phase of training.

IV. Conclusion

This study provides a useful discussion and enlightenment for the training strategy of vocational skills competition which adopts the mode of teaching and doing integration. However, further research and practice are needed to improve and expand the related work in this field. It is hoped that this study can provide valuable reference for relevant educational institutions and teachers.

References:

[1] Lizhi Qiao. Analysis on Training System of Technical Colleges participating in Vocational Skills Competition [J]. Science and Technology Vision,2020(20):115-116.

[2] Fei Li. Summary of training elements of Vocational Skills Competition [J]. Curriculum Education Research,2019(14):252.

[3] Jingjing Shi,Yun Wu,Yunfeng Wang. A practical research on the application of Information technology to the training of theoretical question Bank in Vocational Skills Competition [J]. Examination Weekly,2018(64):27.

[4] Ling Xu,Feng Ding,Weihong Xu. Exploration and practice of Vocational Skills Competition training Mechanism in Higher vocational colleges [J]. Xinjiang Vocational Education Research,2013,4(04):70-72+80.

[5] Jianfeng Zhuang. Training Exploration Based on Vocational Skills Competition [J]. Curriculum Education Research,2013(06):251-252.