

Teaching Reform and Innovation Practice of “Electrical Automation Technology” Professional Integration Course Based on “Internet +” Background

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Abstract: “Internet +” has become an inevitable trend in the current national development, and is also one of the strategies for national development and future action. The current education field is also undergoing continuous changes under this background. Under the reform and implementation, the individualized development of students themselves has been continuously developed and progressed. Under the reform of “Internet +” education, students will reduce the time and space constraints, and at the same time, they can set different curriculum plans according to the different developmental personality of students, and at the same time use the fragmented time to further study. Through the “Internet Automation” environment under the “Internet +” environment, this article further protects students in such conditions by making full use of the school's “Internet +” foundation and better training and practical conditions and hardware facilities. Under the premise of achieving skills training and mastery. In addition, Internet technology can effectively change the traditional teaching methods of the school, and at the same time, it can integrate the teaching resources under “Internet +”, so that teachers and students in the teaching can fully interact and communicate, and further guarantee the “Electrical Automation Technology” profession. Achieve integrated teaching results.

1. Introduction

At present, the Internet can continuously deepen the achievements and depths of achievements in various fields and social fields through its own technological development, and further change the efficiency of production and organizational forms, thereby further becoming the foundation for the development of the Internet and society. The driving force behind the final form of development. At present, the influences and technologies of mobile terminals, information technology and learning and analysis capabilities continue to expand in the field of teaching, and teaching methods and information technology tools have greatly promoted the development of teaching. In addition, the micro-course forms, teaching resources, and the prevalence of flipping classrooms in teaching are able to change the way knowledge is transmitted and the way students acquire knowledge.

2. Problems in the integration of “electrical automation technology” training

At present, the most important position of technical training for talents in higher vocational colleges is to train their technology. Therefore, the proportion of integrated teaching in the whole teaching process is quite large, and the number of current school enrollment has not only increased, but the school itself accounts for Ground, equipment, etc. basically do not have much expansion. For example, the “Electrical Automation Technology” professional course has limited working stations for practical training. There is no way for students to fully understand the training and completion of training in this environment. Under the “Internet +” environment continues to influence the current teaching community.

2.1 The lack of development motivation for the professional course of “Electrical Automation Technology”

The course development of the “Electrical Automation Technology” professional course takes a long time, and it requires a lot of economic and human support. The teachers also need to undertake the task of curriculum development, and at the same time shoulder the task of classroom teaching. His own tasks are quite heavy, and it is very difficult to complete his own teaching tasks, so he can't take more time and energy to develop the curriculum and lose the enthusiasm and initiative of developing the curriculum.

2.2 Insufficient systematic and scientific curriculum

In the course of course teaching, the training objectives of talents should be clarified, the knowledge system and the construction of the teaching system in the field of curriculum teaching should be determined, the categories of disciplines should be determined by their tasks, the curriculum standards and the construction of teaching materials. At present, there are quite a lot of content to be developed and constructed in the process of system development in the course of “Electrical Automation Technology”, and there are quite a lot of fields involved. For the low degree of curriculum development, it is limited to a single course and is aimed at the course. With detailed planning, and can effectively increase the practice of the course, the teaching effect has improved, but the degree of perfection of each course has different phenomena, which has a big problem for the comprehensive development of students.

2.3 Poorly created curriculum atmosphere

The “Electrical Automation Technology” professional course requires students to have the skills and professional skills to work. It is necessary to unify the results of the study and the results of the process, and to achieve in the “Electrical Automation Technology” professional course. In the work practice, we must be able to solve various problems, but we can now find that the development of the “Electrical Automation Technology” course and the teaching environment are poor in higher vocational colleges. One is the lack of enthusiasm of students and teachers. One is that the hardware facilities of the course have a big problem. In the process of learning, the students are more boring because of the theoretical nature of the course, and the teachers are taught in the process of teaching. It is difficult to enhance the initiative and enthusiasm of the students for the course learning, and the teachers rarely seldom themselves. The enthusiasm for teaching is devoted to the teaching of the course, basically to reduce the uncertainty of teaching and the number of times that the teaching task can be completed to reduce the number of reforms.

3. Teaching reform of integrated course of electrical automation technology based on “Internet +” background

The current education is mainly to enable the educators to acquire knowledge and skills through the education of the educators in the township, and further develop the educators into useful talents for the society, and the current intersection between the Internet and the education field is deepening. Changes in educational technology are also constantly strengthening. First of all, the “Electrical Automation Technology” integrated teaching can be linked with information, and the teaching process of Zeng Ge can be more diversified, flexible and richer. Once again, the main body of teaching can be effectively changed so that students can be in the same position as teachers. Under the equal status, teachers generally play the role of guidance and communication in this process, which can effectively reduce the passiveness of students, enhance students' self-innovation ability, etc., and reduce the disadvantages caused by traditional teaching. Rigid thinking; in addition, it can effectively break through the space constraints, allowing students to remotely implement integrated training on professional courses related to “Electrical Automation Technology”.

Currently, the main method in the process of combining the Internet with the “Electrical

Automation Technology” professional integration course is online learning, but it is easy to cause the final effect of learning by simply relying on online learning, and the content of the assessment is prone to cheating. The phenomenon of online learning is basically based on the students' consciousness and initiative. By combining the teaching method of the Internet with the offline teaching method and as an auxiliary teaching, it can effectively solve the problem of too many teaching people and places. The problem.

4. The idea of integrated teaching design reform under the background of “Internet +”

The defense line and development path of teaching reform in higher vocational colleges rely on “Internet +”. Due to the existence of “Internet +”, the current teaching methods for students, teaching procedures and evaluation of teaching effects have undergone considerable changes. In the past, the traditional mode of teaching according to the process has been abandoned. The effect of teaching has changed from empirical evaluation to data evaluation. At the same time, there are quite a few nodes in the teaching process, which enables the learners to follow. The teacher's progress and different teaching nodes according to his actual situation enter it. In view of “electrical automation technology”, the process of teaching reconstruction mainly involves teaching design, teaching implementation and teaching evaluation.

4.1 Implementation plan and content of integrated teaching design reform under the background of “Internet +”

The current “Electrical Automation Technology” professional integrated teaching training further interconnects various devices through the Internet, mainly by connecting touch screens, PLCs and inverters, and students can connect with devices through the Internet through mobile terminals. As long as there is a network, students can control PLC programming in different locations and adjust it. At the same time, through the camera in the laboratory to communicate, the training of the training skills under such conditions can effectively solve the problem of site limitations, the number of personnel and equipment shortage, currently through Internet technology and information technology can The development mode of training operation has been further changed to ensure that “Electrical Automation Technology” can effectively integrate and develop the modern “O2O” teaching mode with the current model, which can effectively promote the new revolution of project-based teaching.

As an example of the “Electrical Automation Technology” professional course, the current curriculum design of the major, the professional courses are divided into different tasks to ensure the smooth reform of the course. Firstly, the task of the course will be published online on the communication platform in advance, and the content, goals and themes of the task will be clarified. Secondly, the students' cognitive understanding of the course will be improved, and the learning effect of the students will be accessed in the resource library. Students are encouraged to interact and communicate with teachers on the online platform. Once again, each student is divided into several groups, and the team can be collaboratively divided, and the combination and matching of hardware devices can be carried out online. Linkages promote the effective integration and development of online and offline learning. In addition, through video, the course is supervised, tested and analyzed, and the evaluation of the published course tasks is completed.

4.2 Realizing online and offline mixed teaching through the network resource library platform

At present, through the Internet technology, the learning resources of “Electrical Automation Technology” can be fragmented, and various forms such as video, communication platform, and animation can be used to effectively change the learning mode, and at the same time break the boundaries between time and space. The way students learn is no longer just implemented in classroom teaching. Learners can choose different courses according to their actual situation and learn in different places.

At the same time, a large number of teaching resources related to “Electrical Automation Technology” are developed, and the teaching of the hybrid teaching mode becomes possible.

Students can conduct pre-class preparations online, and test the course after the course, so that teachers can provide targeted guidance through the teaching results, so that online preparation can be effectively linked to and complement each other. The construction of the network resource library platform pays attention to the various dynamics of students, and judges and warns the students' own learning effects, so that students can complete the learning tasks according to their own planning and learning progress, and must be able to follow the teaching results. Feedback, urge students to complete the learning task.

4.3 Guiding and helping students complete their learning tasks

The current learning platform built through Internet technology is not forcing students to inculcate knowledge, but an auxiliary tool that can effectively assist students in understanding various kinds of knowledge, and build according to the learner's ability and perspective. Internet-based oriented learning system. Generally, by constructing the e-learning platform, the evaluation system and the verification system of the curriculum and the teaching system of the curriculum are constructed, and various difficult points are analyzed and described, and the logical sequence before and after is constructed to effectively help the students to The construction of a learning knowledge system for electrical automation technology.

4.4 Effectively innovating the teaching methods and means of “Electrical Automation Technology”

The current course method used in “Electrical Automation Technology” mainly adopts the integrated project teaching, and examines and evaluates the students according to the teaching results. The training room is mainly used in the teaching place, which mainly aims at improving the professional ability of the students. At the same time, it effectively turns boring theoretical knowledge into practical operation, effectively improving students' learning ability and learning efficiency. In the process of teaching, the combination of Internet technology, modern information technology and integrated project teaching is effective, which enables teachers to make full use of Internet technology to realize the construction of teaching resource pool, and through the teaching methods of integrating various Internet technologies. Use, for example, situational teaching, case teaching, and on-site teaching to further improve the effectiveness of teaching

5. Conclusion

At present, “Internet +” has a considerable influence in the field of education. It has effectively improved the effectiveness and efficiency of teaching to a certain extent, further satisfies the learning needs of different learners, further conforms to the individual needs of learners, and promotes learning. The person can arrange the learning content according to his own progress. Through the “Internet +” teaching form, the “Electrical Automation Technology” integrated online and offline teaching can be connected, and the connection and association between teachers and students are continuously linked, which makes the professional curriculum more enriched and enriched. .

References

- [1] Leng Xuefeng, Ren Aizhen, Jiang Zhengyan. Exploration on the Integration of Theory and Practice of Higher Vocational Courses Based on the Cultivation of Professional Core Competence[J]. Vocational and Technical Education in China, 2016(14): 18-23.
- [2] Lan Ziqi, JIA Haiyan. Practical Research on the Application of Resource Library Platform in Teaching Reform of Electrical Specialty[J]. Journal of Huanggang Vocational and Technical College, 2016, 18(03): 34-36.
- [3] Xu Deming, Yang Qingzhi. Reform and Practice of Professional Training Program for Electrical Automation Technology in Higher Vocational Colleges--Taking Zhangzhou Vocational and Technical College as an Example[J]. Journal of Jilin Engineering and Technology Teachers College,

2016, 32(05): 79-81 .

[4] Cao Wei, Jing Xinyu. The Construction and Research of the Teaching Mode Reform Based on the Open Teaching Practice Platform--Taking the Electrical Automation Technology Major of Jiangyin Vocational and Technical College as an Example[J]. Journal of Jilin Radio and Television University , 2013 (04): 52-54.

[5] Xu Zhibao, Chen Chonghong, Chen Lijun, Su Lianghe. Innovation and Practice of Training Mode of Electrical Automation Technology Talents Promoted by Competition[J]. Fujian Computer, 2017, 33(03): 92-93.

[6] Qin Ping, Yan Ning. Research on Core Curriculum Reform of Electrical Automation Technology Specialty in Higher Vocational Education[J]. Vocational and Technical Education in China, 2017(21): 70-75.

[7] Zeng Xiaofeng, Wang Lin. Research on Teaching Reform of Electrical Automation Technology Based on Skills Competition[J]. China Training, 2018(02): 53-54.

[8] Yin Yuanyuan. Analysis of Modularized Teaching of Electrical Automation Technology in Secondary Vocational Schools[J]. Occupation, 2018(22):94-96.

[9] Xing Guining. Research on the development of electrical automation professional courses under the combination of work and study [D]. Hebei Normal University, 2012.

[10] Li Junxiu. Innovation and Practice of Career-oriented Integrated Teaching[J]. Higher Vocational Education (Journal of Tianjin Vocational University), 2008(03): 17-19.