

Research on professional teaching of electrical automation technology specialty in Higher Vocational Colleges

Junhua Liu

Nanjing Engineering Branch of Jiangsu United Vocational and Technical College, Nanjing Jiangsu, 210000

Abstract: the responsibility of vocational education is to cultivate and provide professional talents for the society, so as to meet the social demand for professional talents and promote the development of social economy. Therefore, teachers of electrical automation technology specialty in higher vocational colleges need to strengthen the development of professional teaching, pay attention to the cultivation of students' practical ability, so that students can have more outstanding competitiveness after graduation, and get the favor of the market. Based on this, this paper takes the professional teaching of electrical automation technology specialty in Higher Vocational Colleges as the research object to carry out research and analysis, aiming to find effective strategies for the professional teaching of electrical automation technology specialty in higher vocational colleges, so as to help China's Higher Vocational Colleges complete the professional teaching reform and cultivate more excellent professionals.

Key words: Vocational education; Major in electrical automation technology; Professional teaching

With the development of society, the competition in the market has become increasingly fierce. After entering the society, many students graduated from vocational colleges have difficulties in finding jobs and lack of competitiveness. This situation is mainly because many vocational colleges pay too much attention to the teaching of students' theoretical knowledge, but ignore the development of practical teaching, which leads to the lack of students' professional ability and affects students' future employment. As a field with high requirements for technical level, electrical automation needs more talents with excellent technical level. Therefore, higher vocational electrical automation technology teachers need to carry out professional teaching reform, pay attention to the cultivation of students' professional ability, so that students can find their favorite job after graduation, so as to obtain better development.

-
- [4] Li Zhang Research on the incentive mechanism of professional teachers in art colleges and Universities -- Taking Sichuan XX Art College as an example [d] Sichuan: southwestjiaotonguniversity, 2017
- [5] Ruiqiong Pan Analysis on the teaching reform and classroom incentive strategy of general education course for the cultivation of humanistic quality of students in Art Vocational Colleges [j]Consumption guide, 2021 (13): 83-84
- [6] Shanshan Ju,Jue Yang,Maolin Zhong Research on the incentive mechanism of young teachers in Colleges and universities [j]Pr world, 2022 (11): 95-97
- [7] Xiaoyan Huang Research on the optimization of teachers' incentive mechanism in private colleges [j]University education, 2022 (9): 284-286290
- [8] Wenqi Bai Literature research on the incentive mechanism of university teachers in China in the past decade [j]Journal of science and education, 2022 (22): 156-158
- [9] Ya Mu Research on incentive mechanism of university teachers [j]Science, education and culture, 2021 (2): 13-14
- [10] Hongwei Ling How to innovate the incentive mechanism for young teachers [j]Human resources, 2020 (16): 52-53
- [11] Yaoyan Lu,Liquan Yao,Hongwen Li, etal Analysis on the incentive mechanism of college teachers to help college teaching management [j]Science and education guide - Electronic Edition (late), 2021 (12): 88-89
- [12] Jing Sun,Min Kang Research on the incentive mechanism of young female teachers in Colleges and universities in Hebei Province [j]Industry and Technology Forum, 2022,21 (1): 200-201
- [13] Shuqing Dong The dilemma faced by the development of rural teachers' incentive mechanism and Its Countermeasures [j]Western quality education, 2022,8 (13): 114-116
- [14] Caixia Wang Research on the path of Higher Vocational Teachers' incentive mechanism innovation from the perspective of ERG theory [j]Journal of Jiujiang Polytechnic, 2022 (2): 56-59

Yuan Yuan (1981.9-present) , female; native of Xichang, Sichuan; associate professor; Master Supervisor; graduated from School of Art and Communication, Southwest Jiaotong University in 2007, now works in School of Fine Arts, Sichuan Normal University, director of landscape design teaching and Research Office of Environmental Design Major, whose research direction is art design education.

[fund project]:Interim achievement of the project of the Research Center for Reform and Development of Newly-built Universities "Research on the path of non-legacy aesthetic education to help the characteristic development of art major in new undergraduate universities" (project number: XJYX2021B02).

1. Problems in professional teaching of electrical automation technology specialty in Higher Vocational Colleges

1.1 The teaching mode is too traditional

The traditional teaching mode is one of the main problems encountered by the professional teaching reform of the electrical automation technology specialty in higher vocational colleges. The traditional teaching mode is too rigid, and the teaching content can not be effectively linked with the actual operation, which leads to the students' mastering of the theoretical knowledge described by the teacher, but can not be effectively applied in practice. It has affected the students' future career development. Not only that, the traditional teaching mode pays too much attention to the teaching of theoretical knowledge, so it has always been based on the teaching of knowledge in the classroom, which leads to the boring atmosphere of classroom teaching, makes students' interest in learning professional knowledge drop in the process of learning, and affects the development of students' professional ability. Based on this, if higher vocational electrical automation technology teachers want to effectively realize the professional teaching reform, they need to start from changing the traditional teaching mode.

1.2 Few opportunities for practical operation

Vocational colleges are places for cultivating professional talents, which need to pay attention to the teaching of students' professional knowledge and skills, and finally cultivate professional talents with equal emphasis on theory and practice. But at present, some teachers of electrical automation technology in Higher Vocational Colleges ignore the importance of practical teaching in the process of teaching, so that students have fewer opportunities to practice. Because of this, the students can not really confirm the theoretical knowledge in practice, which leads to the students not only not effectively mastering professional skills, but also too one-sided understanding of professional knowledge. These factors lead to the students' failure to obtain the recognition of relevant enterprises after graduation, which hinders their career development. Therefore, the lack of practical operation opportunities is also one of the main problems in the professional teaching reform of electrical automation technology major in higher vocational colleges, which is not conducive to students' future career development.

1.3 The structure of teachers is too single

At present, most teachers in higher vocational colleges are composed of fresh students who have just graduated from major universities, and some older teachers who have been engaged in Vocational Education for a long time. The teacher team composed of these personnel structure leads to the single structure of teachers in higher vocational colleges. In particular, most teachers graduated from normal colleges have basically not participated in relevant practical work, so their practical ability is poor and can not bring effective practical teaching to students. This situation will also lead to many students' problems in practice, unable to obtain corresponding solutions from teachers, which affects the cultivation of students' practical ability. Therefore, the single structure of teachers is also one of the problems encountered in the professional teaching reform of electrical automation technology specialty in higher vocational colleges, which needs to be solved as soon as possible.

1.4 The course content is too old

The progress of the times has promoted the development of society. In the new era, great changes have taken place in various fields, including knowledge theory and technical operation methods, which also means that the requirements for talents in various fields have become more stringent. However, at present, the teaching contents of many higher vocational electrical automation technology courses in China have not been updated in time. Most of the teaching contents are outdated, no longer applicable to the current society, and do not meet the current social demand for electrical automation professionals. As a result, many students graduated from the major of electrical automation technology in higher vocational colleges can not effectively engage in the work of related majors, and have to be forced to change careers, which affects the development of the major of electrical automation technology in higher vocational colleges, and also interrupts the professional teaching reform of the major of electrical automation technology in higher vocational colleges. Therefore, to solve the problem of outdated curriculum content is the top priority for teachers of electrical automation technology specialty in higher vocational colleges, which is related to the future development of electrical automation technology specialty in higher vocational colleges.

2. Professional teaching strategy of electrical automation technology specialty in Higher Vocational Colleges

2.1 Optimize teaching mode with the help of information technology

Teachers of electrical automation technology specialty in higher vocational colleges can use the power of information technology to optimize the teaching mode, so that students can understand professional knowledge more efficiently and improve their professional ability, so as to achieve the purpose of professional teaching reform of electrical automation technology specialty in higher vocational colleges. But if we want to effectively use information technology to optimize the teaching mode, we also need teachers to have a detailed understanding of the teaching effectiveness of information technology, and design teaching methods according to the teaching content, so that students can be interested in learning professional knowledge and improve their learning efficiency.

For example, teachers of electrical automation technology specialty in higher vocational colleges can use information technology to simulate different electronic automation operation scenes, and tell students about the relevant knowledge in textbooks according to the scene content. This teaching method is not only more vivid and flexible, but also more convenient for students' understanding and mastering of professional knowledge. Even higher vocational electrical automation technology teachers can use information technology to create some

fault scenarios, allowing students to point out the problems in the scenarios according to their knowledge? How to solve it. This way can make students more flexible to use their knowledge to solve practical problems, which is helpful for the professional reform of electrical automation technology specialty in higher vocational colleges.

2.2 Strengthen school enterprise cooperation and provide practice opportunities

Students' lack of opportunities for practical operation will lead to students' practical ability can not be effectively cultivated, let alone the application of theoretical knowledge in practical operation, which will affect the growth of students' professional ability over time. Based on this, the person in charge of higher vocational colleges should change this phenomenon and formulate appropriate strategies to provide more opportunities for students to practice.

The person in charge of higher vocational colleges can provide more practical opportunities for students by strengthening the cooperation between colleges and enterprises, so that students can effectively integrate theoretical knowledge and practical operation, achieve the teaching purpose of improving students' professional ability, and achieve better development. Higher vocational colleges can strengthen school enterprise cooperation in two ways, so that students can provide more practical opportunities. The first way is to build relevant practice base or add relevant practice equipment for the school by signing cooperation agreement and funded by enterprises, so that students can use the place for practice operation, so as to provide students with relevant practice opportunities, cultivate students' practical ability and promote students' career development. The second way is that the school encourages students to enter the enterprise for internship, and carry out practical operation and learning in the process of internship. Learn the working methods of older employees and absorb their working experience, so as to form their own operating skills and realize the effective cultivation of students' practical ability. But for students at different stages, we should adopt different ways of practice. For example, for the graduating students majoring in electrical automation technology in higher vocational colleges, they can directly enter the enterprise practice, so as to accumulate work experience and cultivate practical ability before graduation. However, for students who have just entered the school, the school can organize students to visit the enterprise regularly to learn and experience the work process during the visit, which is also a way to increase students' practice opportunities. Therefore, strengthening school enterprise cooperation in higher vocational colleges is not only an effective way to provide students with practice opportunities, but also an effective way to help students cultivate and improve their practical ability, which is conducive to students' future career development.

2.3 Carry out teacher training and improve teacher structure

The person in charge of higher vocational colleges can carry out training for relevant professional teachers to build a team of double qualified teachers, so as to improve the teacher structure of higher vocational colleges, provide students with a more superior teaching environment, help students improve their professional quality and ability, and complete the professional teaching reform of electrical automation Technology Specialty in higher vocational colleges.

The so-called "double qualification team" refers to teachers with double certificates or double professional titles, that is, teachers in vocational colleges have professional qualifications above the intermediate level in addition to teachers' qualifications. Such teachers often have a solid theoretical foundation and strong practical operation ability, which can bring better teaching for students in education and teaching, and realize the professional teaching reform of electrical automation technology specialty in higher vocational colleges. In order to achieve the construction of double qualified teachers, the person in charge of higher vocational colleges can establish relevant assessment system and carry out relevant teacher training. The first is to establish the relevant assessment system. The person in charge of higher vocational colleges can require each teacher to complete the relevant professional qualification examination within the specified time and obtain the relevant professional certificate. Teachers who fail to obtain professional certificates or qualifications will be punished or even dismissed accordingly. This can stimulate teachers' learning motivation, enable teachers to constantly learn knowledge, improve themselves, and create a better learning environment for students. The second is to carry out relevant teacher training. The development of teacher training should focus on practical operation skills training. The person in charge of higher vocational colleges can invite some skilled staff from cooperative enterprises to carry out practical training for teachers through school enterprise cooperation, so that teachers can learn relevant technology and knowledge from these staff with rich work experience, Realize the improvement of self professional level, so as to promote the construction of double qualified teachers in higher vocational colleges. In this way, the teacher structure of electrical automation technology specialty in higher vocational colleges can be improved, so that students can enjoy good professional teaching, get better promotion and development, and finally achieve the purpose of promoting the professional teaching reform of electrical automation technology specialty in higher vocational colleges.

2.4 Grasp the market dynamics and update the course content

The person in charge of Higher Vocational Colleges and the teachers of electrical automation technology specialty in higher vocational colleges should collect relevant market information to grasp the market dynamics, so as to update the course content, truly cultivate the professional talents needed by the society, and realize the professional teaching reform of electrical automation technology specialty in Higher Vocational Colleges.

If higher vocational electrical automation technology teachers want to cultivate professional talents who meet the requirements of the society, they should understand the specific requirements of the current market for electrical automation technology talents, and then update and adjust the teaching content of the course. By updating and adjusting the course content, students' professional ability and quality can be improved, so as to pave the way for students' future career development. For example, teachers of electrical automation technology specialty in higher vocational colleges should actively communicate with the relevant principals of cooperative enterprises to collect the specific

requirements of the market for electrical automation technology professionals. In addition, teachers majoring in electrical automation technology in higher vocational colleges should also go to the workplace of the cooperative enterprise for on-the-spot investigation, have a detailed understanding of some brand-new instruments and equipment, and then add these knowledge to the course content. Finally, the person in charge of higher vocational colleges should establish a market research mechanism to understand and collect the market dynamics and policy requirements of relevant majors in real time, so as to analyze and sort out these information and provide it to relevant professional teachers to help them effectively adjust and update the course content, so as to ensure that the course content can be updated in time and meet the social needs. Therefore, grasping the market dynamics to update the course content is an effective strategy for the professional teaching reform of electrical automation technology specialty in higher vocational colleges, and provides help for students' future career development.

In a word, the professional teaching reform of electrical automation technology specialty in higher vocational colleges is the main direction of the development of Vocational Education in China, and it is also a way to meet the social demand for electrical automation professionals. Teachers of electrical automation technology specialty in higher vocational colleges need to formulate reasonable solutions to the problems existing in the current teaching of electronic automation specialty, create a superior learning environment for students, so that students' professional ability and professional quality can be effectively developed, and finally become professional talents needed by the society to broaden their future development path.

References:

- [1] Xujuxiang Research on professional teaching of electrical automation technology specialty in Higher Vocational Colleges [j]China modern education equipment, 2021 (23): 181-183
- [2] Lumengmeng, Yin Sibe, Hao Tao Research on graduation design reform of electrical automation technology major in Higher Vocational Colleges under the background of entrepreneurship and innovation [j]Science and technology wind, 2021 (23): 70-71
- [3] Chenchunyan, Chen min Research on curriculum reform of electrical automation technology specialty in Higher Vocational Colleges [j]Technology and innovation, 2021 (11): 11-12
- [4] LAN Ziqi Discussion on professional teaching of electrical automation technology specialty in Higher Vocational Colleges [j]Guangdong sericulture, 2020,50 (09): 43-44
- [5] Wei ruilu Construction of professional curriculum system for electrical automation technology specialty in Higher Vocational Colleges [j]Guangxi Education, 2020 (24): 32-33+91
- [6] Pengxiaoping Teaching reform practice of "competition teaching integration" for electrical automation technology specialty [j]Technology and innovation, 2022 (09): 127-129
- [7] Tangjianhao Analysis of modular teaching strategy of electrical automation technology specialty courses in Higher Vocational Colleges [j]Shanxi youth, 2022 (1): 70-72
- [8] Peibei, Zhaoli Research on the development of electrical specialty in Higher Vocational Colleges under the background of Internet + [j]Science and technology information, 2018,16 (9): 2
- [9] Guyue Discussion on talent training of electrical automation technology specialty in Higher Vocational Colleges under the background of intelligent manufacturing [j]New curriculum research, 2021 (14): 42-44
- [10] Hu Lijun Reform and practice of curriculum system and teaching content of electrical automation technology specialty in Higher Vocational Colleges [j]Papermaking equipment and materials, 2021,50 (02): 131-133
- [11] Baizhifeng, mafengwei, liujixiu Research on talent training mode of electrical automation technology specialty in Higher Vocational Colleges under the background of intelligent manufacturing [j]Occupation, 2020 (21): 41-42
- [12] Qu Jing Research on Modular Teaching of electrical automation technology specialty in Higher Vocational Colleges [j]China new communications, 2018, v.20 (06): 185
- [13] Qin Ping, Yan Ning Research on the core curriculum reform of electrical automation technology specialty in Higher Vocational Colleges [j]China Vocational and technical education, 2017 (21): 70-75
- [14] Lijianrong, wangtingjun Exploration on Modern Apprenticeship talent training mode of electrical automation technology specialty in Higher Vocational Colleges [j]Journal of Hunan Polytechnic, 2016,16 (03): 76-78
- [15] Duyubing Research on teaching reform of electrical automation technology specialty in Higher Vocational Colleges [j]Nanfang agricultural machinery, 2019 (6): 1