Analysis of the current situation of classroom teaching in higher vocational installation cost course and the strategy of classroom order optimization and reconstruction

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Abstract: In order to understand the current situation of classroom teaching of installation cost course in higher vocational colleges and the expectations of teachers and students on classroom teaching, through questionnaire, personal interview, observation and other methods, this paper designs a questionnaire, interview outline and observation dimension about the classroom teaching of installation cost course in higher vocational colleges, in order to sort out and logically analyze the data of the survey and interview results. In-depth reflection on the reconstruction of classroom teaching mode suitable for higher vocational installation cost course is of great significance to promote the classroom revolution of installation cost course. Through this research, this paper aims to deeply analyze the current situation of classroom teaching of higher vocational installation cost course, optimize the revolutionary strategy of restructuring the classroom order of higher vocational installation cost course, and adapt to the social development and the development needs of teachers and students in higher vocational colleges.

Key words: higher vocational colleges; Installation cost; Classroom teaching status; Reconstruction of classroom order

1. Research background

In the Action Plan for Improving the Quality of Vocational Education (2020-2023), it is emphasized to promote the classroom revolution of vocational schools, adapt to the diversified characteristics of students, and push the curriculum teaching reform to the depth. In 2021, The General Office of the State Council issued the Opinions on Promoting the High-quality Development of Modern Vocational Education, pointing out that it is necessary to innovate teaching models and methods, widely carry out project teaching, situational teaching and modular teaching, promote the deep integration of modern information technology with education and teaching, and improve the quality of classroom teaching.

In order to accelerate the high-quality development and practice of vocational education and improve the supply capacity of educational services, the development and construction of vocational education courses take improving the quality of classroom teaching as the basic point. Effective classroom behavior can stimulate students' learning motivation, cultivate students' higher-order thinking, and create a positive classroom atmosphere, which is also the only way to improve the quality of classroom teaching. In the classroom teaching of higher vocational college, students are the main body of learning. From the perspective of learners, understanding their current situation of teacher-student interaction and their satisfaction is very important for improving the quality of classroom teaching.

2. Research methods

In order to deeply understand the current situation of classroom teaching of installation cost course in higher vocational colleges and the expectations of teachers and students on classroom teaching mode in higher vocational colleges, questionnaires were collected by using the questionnaire method and the main research data were obtained. In this study, 210 students of the installation cost course in Heilongjiang College of Architecture and Technology were investigated with a questionnaire recovery rate of 95.7%; In the survey, 87.56% were male and 12.44% were female. Among them, freshmen accounted for 48.76%, followed by sophomores accounting for 38.81% and juniors accounting for 12.44%.

In the process of the research, the method of one-to-one interview between the researcher and the research object was adopted to obtain the real data about the factors related to the classroom teaching mode in higher vocational colleges. The content of teacher interview covers the teacher's overall evaluation of higher vocational classroom teaching, the status quo of classroom teaching and other aspects. Taking the classroom teaching of installation cost in Heilongjiang College of Architecture and Technology as the object of observation, 17 classes were randomly selected for observation, in order to investigate and confirm the results of questionnaire survey and interview.

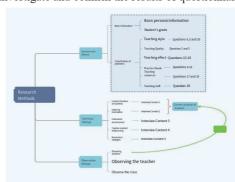


FIG. 1 Research method



3. Analysis of survey results

In the questionnaire survey, 56.22% of the respondents think that installation cost courses are very important in their majors, 20.9% think that they are important, 21.89% think that according to the status of professional needs, only 1% think that it is not important. The data show that most of the interviewees understand the importance of installation cost courses in their majors, can rationally sort out the professional knowledge system, and pay enough attention to the course links.

3.1 Teaching methods

The most popular teaching method is "teaching theoretical knowledge", accounting for 55.72%. It was followed by "project practice" accounting for 28.36%. It can be seen that students prefer the teaching mode of combining theoretical knowledge with project practical operation.

3.2 Teaching effect

43.78% of the respondents think that the most important aspect to be improved is the teaching content, 13.43% think it is the teaching equipment, 9.45% think it is the teaching method, no one chose the quality of teachers, 33.33% choose other aspects. Therefore, the teaching content is the most need to improve the installation cost class of courses, for the choice of other needs, need to further understand the specific situation.

3.3 Practical requirements

The data shows that 90.05% of the respondents believe that installing cost courses needs to strengthen the connection with practical work. Among them, 57.21% of the respondents have participated in practical activities related to installation cost courses, and more than 70% of them think that practice is helpful to course learning, and 92.04% of them think that installation cost courses need to strengthen school-enterprise cooperation in educating people. In addition, 74.13% of the respondents said that they understood the needs of enterprises in related industries for the teaching of installation cost courses, 91.54% of the respondents believed that the courses need to strengthen the connection with national policies, and 75.62% of the respondents understood the requirements of relevant national policies for course teaching.

3.4 Teaching Resources

According to the survey data, 91.54% of the respondents believe that schools need to provide more teaching resources for installation cost courses. Abundant teaching resources are conducive to stimulating students' enthusiasm for learning and transforming them from passive knowledge receivers to active knowledge builders.

3.5 Teachers' Situation

The data shows that 86.57% of the respondents believe that it is necessary to strengthen the training of teachers of installation cost courses. It is one of the main problems to strengthen the teachers' strength, especially the double-qualified teachers' strength to solve the installation cost course in higher vocational colleges. 90.55% of the respondents believe that schools need to strengthen the investment in the installation of cost courses teaching equipment.

From the results of the above survey and research, we can draw a conclusion from multiple dimensions and perspectives that curriculum is always the core of talent training and the fundamental guarantee for improving teaching quality. With the rapid development of technology, the post capacity of the installation cost industry is changing, and the teaching content of the installation cost class is bound to move with it.

4. Revolutionary strategy for the reconstruction of classroom teaching order of installation cost course in higher vocational colleges

4.1 Deepening the reform of the three education, teacher guidance, textbook assistance, teaching methods active

Teachers should be empowered in classroom teaching. According to the analysis of the installation cost course in higher vocational colleges, teachers should do a good job in the content design of pre-class guidance, in-class introduction and after-class extension. Promote knowledge imparting, ability training and value leading synchronously; It is necessary to use loose-leaf teaching materials, integrate new ideas, new technologies and new products into classroom teaching in a timely way, promote independent exploration, highlight the principal position of students, and gradually transform the teaching position of traditional classroom of installation cost courses into a place to guide students to "learn".

Reform teaching materials in certificate docking. "Course and certificate integration" is a powerful means to solve the problem of asymmetric course arrangement and job demand of vocational education installation cost. The textbook development of the installation cost course should pay attention to the combination of the two certificates from the course level to promote the improvement of students' vocational skills and employment competitiveness. Integrate the teaching objectives of the course certificate, upgrade the connotation dimension of the teaching materials, and help complete the reconstruction revolution of the classroom teaching order of the installation cost course in higher vocational colleges.

Activate teaching method in Sanquan education. It is necessary to establish and improve the training system of Sanquan education, design and install the teaching methods of Sanquan education from the whole staff, all aspects and the whole process, increase course visualization resources, start school-enterprise collaborative education, and encourage young teachers to study deeply in enterprises, pay attention to industry trends, obtain actual engineering cases, technology research and development, project research and resource expansion.

4.2 Fit the training objectives, guide behavior, create environment and change the model

The classroom environment management of the installation cost course in higher vocational colleges needs to be highly consistent with

the goal of talent training, and the teaching behavior should be guided by the goal of talent training to serve the training of talents in higher vocational colleges. In the course of higher vocational installation cost, in the process of theoretical guidance, practice introduction and after-school extension, students should be guided to establish a correct view of career and employment, which is also the ultimate topic of higher vocational installation cost course.

The classroom environment of higher vocational installation cost course is not only the stage of imparting knowledge, but also the main battlefield of educating people, so creating a suitable classroom environment is also a necessary part of the virtuous circle of teaching order. Therefore, the concept of classroom environment management in higher vocational colleges should keep pace with The Times, and the management of classroom dynamic and static environment should be flexibly changed, cross-complementary and flexible design; Open the closed loop of the former teachers, students and textbooks, and gradually build an inquiry learning environment with students as the main body.

The classroom environment of the installation cost course in higher vocational colleges should change the previous solidified form, the corresponding relationship between subject and object, and the operation method of the teaching implementation process, and update the implementation mode. The content is three-dimensional, so that the theoretical classroom and the practical classroom cycle observation; The scope is extended, so that the physical classroom and the virtual classroom can be used cross-over.

4.3 Stimulate classroom energy, adjust order, positive energy and focus on innovation

Adjust the classroom order and stimulate the classroom vitality. In the course of implementation, we should first adjust the main position of teaching and learning between teachers and students, and guide students to change from passive knowledge receivers to active knowledge builders. Pay attention to cultivating students' team consciousness through team culture, promote the classroom atmosphere of mutual help through joint discussion, and create a high-quality and efficient classroom with teacher-led, student-oriented and multi-dimensional three-dimensional evaluation.

The classroom is guided by positive energy to help improve the quality of the curriculum. When creating the classroom environment, focus on developing the teaching method of classroom encouragement, and properly use positive motivational slogans and sayings of positive energy will help to form a positive classroom atmosphere and campus culture. In the reconstruction of the classroom order, we should pay attention to the subtle changes in the "psychological field" of teachers and students, and strive to improve the effective participation of students in the classroom.

Pay close attention to the curriculum standards of higher vocational colleges and pay attention to the cultivation of innovative thinking. In the classroom teaching reform of the installation cost in higher vocational colleges, teachers should further focus on the research focus, and gradually implement the core knowledge points under the drive of tasks, so as to cultivate students' core qualities such as scientific inquiry and innovation consciousness, scientific attitude and social responsibility. Inspire students to study professional knowledge more deeply and comprehensively, guide students to carry out extended learning after class, let students extract knowledge points in the analysis of problems, learn knowledge in the completion of tasks, and guide students to put forward new questions in the further application of exploration, explore the unknown.

5. Epilogue

Vocational education in the new era has a heavy responsibility to shoulder. National construction urgently needs technical innovative talents who have a strong sense of innovation, can adapt to the change of production mode, and can strive to transform knowledge into technical wealth. The classroom revolution of higher vocational installation cost course is imminent. It is necessary to let students master the basic principles of project cost and the basic methods of preparation through the course, pay attention to cultivating students' engineering consciousness and management consciousness, enhance students' social responsibility, and become composite talents who understand economy, technology and management. According to the post knowledge, ability, quality requirements to decompose knowledge points, theory with practice, pay attention to ability training, and cultivate high-end skilled composite talents.

References:

- [1] Chen Zhang, Shuchao Ma, Yang Guo. Improving the system and Breaking through the compaction responsibility: Three characteristics of the Action Plan for Improving the Quality and Training of Vocational Education (2020-2023) [J]. Vocational and technical education in China, 2020 (33): 7. DOI: 10.3969 / j.i SSN. 1004-9290.2020.33.002.
- [2] Xiangjin Tang. "Opinions on Promoting High-quality Development of Modern Vocational Education" Led by university-Enterprise Co-construction of Industrial college Platform and path innovation [J]. Journal of Yunnan Open University, 2023, 25(1):75-79.
- [3] Xiling Gao, Xiaoling Wang, Huanying Shen. Application of Information Technology in the course of "Installation Engineering Cost" [J]. Vocational Technology, 2018, 17(4):69-71.
- [4] Liqin He. On the teaching design of "Installation Engineering Budget" course for Engineering cost major [J]. Asia Pacific Education, 2015(26):130-131.
- [5] Lijuan Zhu. Exploration on Teaching Methods of Installation Engineering Cost in Higher Vocational Colleges [J]. Science and Technology Vision, 2020 (18):158-160
- [6] Shaoqing Guo. Connotation of Task-driven Teaching Method [J]. China Audio-Visual Education, 2006.7

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