

Practice of Scientific Research Back Feeding Teaching in the Teaching of Environmental Art Design Specialty

-- Customized Furniture Design of Hardbound Room

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Abstract

Teaching and scientific research are the two work focuses of teachers in higher vocational colleges. Teaching is to impart knowledge and scientific research is to innovate practice. Nurturing teaching through scientific research is an effective way to achieve mutual promotion and common development between teaching and scientific research, and also an effective method to improve teaching quality. Based on the mode of scientific research back feeding teaching, this paper integrates its own scientific research achievements into the teaching content of furniture design course and applies them to the practical teaching of "customized furniture design for hardbound rooms". Through classroom teaching, the combination of real project practical teaching and graduation design, participation in scientific research projects, science and technology competitions and other diversified teaching methods, it promotes the combination of theoretical teaching and practical application, cultivate students' ability to solve practical problems by using the knowledge learned, and improve students' practical application ability and technological innovation ability. Practice shows that scientific research nurturing teaching can not only realize the academic value of scientific research, but also realize the teaching value of scientific research. It is an effective way and method for environmental art design major in Higher Vocational Colleges to cultivate high-quality, high-quality and technical talents.

Keywords

Scientific Research Nurtures Teaching; Environmental Art Design; Hardbound Room; Customized Furniture Design; Teaching Mode.

1. Introduction

The major of environmental art design is to cultivate high-quality technical and skilled professionals with entrepreneurial awareness, innovative spirit and practical ability, guided by professional post work and around professional skills and post ability. Therefore, how to cultivate students' practical ability and innovative spirit and improve the quality of talent training is a talent training model that we have been actively exploring. This subject carries out teaching reform through the feedback of scientific research, integrates the scientific research achievements into the teaching in the course of furniture design, and leads the students to carry out the training of planned practical ability, innovative spirit and scientific research ability through diversified teaching teachers, which improves the students' interest in learning, stimulates the students' sense of achievement, fully reflects the feedback of scientific research applied to teaching, and is conducive to mastering theoretical knowledge and improving their practical and innovative ability, Realize the goal of scientific research feeding back teaching.

2. The Necessity of Scientific Research Nurturing Teaching

2.1. Curriculum Teaching Development

Furniture design is not only a theoretical and practical course, but also an expanding course for the major of environmental art design. In the teaching process, first of all, let the students systematically understand the concept, classification and development history of furniture, master the style, shape, functional size, materials, structure and design methods of various commonly used furniture, master the close relationship between design and interior design, and have the ability to design and lay out furniture according to different functional spaces, so as to have the knowledge and skills of interior and furniture integrated design, Better provide people with a better living and working environment.

At present, the exploration and practice of teaching reform in which scientific research feeds back teaching, however, because the content of teaching materials can not keep up with the needs of social development and industry integration, the new technologies and methods covered in teaching materials are limited and often lag behind the forefront of the industry. One of the problems in teaching is that the content of teaching materials is not synchronized with the development of technology.

2.2. Industry Development

In the 21st century, with the rapid development of China's construction industry, the decoration industry has also developed rapidly, and the rapid promotion of the industrialization of residential decoration, under the background of the full implementation of "hardbound house", it has also ushered in the rapid integration of the decoration of residential hardbound house and the customized furniture industry. Customized furniture has changed from directly facing the market to directly facing residential users. How to meet the needs of different consumers and provide a more reasonable, scientific and systematic overall design scheme for customized furniture. Provide residents with the most suitable living style and living needs, and improve furniture manufacturing enterprises to adapt to the new market demand.

Based on meeting the personalized and diversified needs of customers and the development needs of the industry market, this paper uses the scientific research feedback teaching mode to expand the practical teaching of customized furniture design for hardbound rooms in home space, cultivate students' practical application ability and innovation ability, and improve the quality of talent training.

3. Reform Measures of Furniture Design Course

3.1. Integrating Scientific Research Achievements into Practical Teaching

Practical teaching and graduation design is an important practical teaching link of environmental art design specialty. Its teaching goal is to cultivate students' ability to comprehensively use their professional theoretical knowledge and comprehensive skills to solve practical problems, and have professional quality suitable for professional posts. Therefore, the topic selection of graduation design in the environmental art design specialty should meet the requirements of comprehensive training and the real projects applied to the actual enterprise as the topic selection of graduation design. Combined with the scientific research project, it should be conducive to expanding the professional knowledge and deepening the design. The proportion of true graduation design questions selected from scientific research projects reached 33.2%, which fully shows that through the organic integration with scientific research projects, the seamless connection between teaching and

scientific research from professional knowledge and skill learning to professional posts can be realized.

3.2. Combination of Scientific Research and Practical Teaching

I have presided over the "development of overall customized furniture products for hardbound rooms" since 2019 and the "performance of interior space design projects" since 2021. In the process of project research, actively organize the students of this major to participate in the teachers' scientific research projects, adopt the principle of voluntary and two-way selection, assign the project team composed of the students participating in the scientific research projects to the project team according to the students' professional expertise and advantages, and the teachers are responsible for assigning specific tasks, and select the students with strong ability as the team leader to organize the project progress. All teachers of the project team will give lectures or trainings on how to carry out scientific research projects, guide students to participate in scientific research activities step by step, ask questions and discuss relevant issues of the project, and gradually cultivate students' innovative thinking and innovative methods. Then the scientific research progress report will be conducted every 2-3 weeks. The students will report the recent achievements, and the teachers of the project team will give evaluation and guidance to the students' reports. Figure 1 Traditional wardrobe in the project. Figure 2 A case of customized wardrobe design. The picture can compare the cases of traditional wardrobe and customized wardrobe design in the project.



Fig 1. Traditional wardrobe in the project



Fig 2. A case of customized wardrobe design

Scientific research feedback teaching not only enriches teachers' professional skills and scientific research practice ability, but also provides a good path for cultivating students' practical ability, innovative thinking and innovative ability, improves students' professional practice ability and job cognition, and expands students' innovation ability and team cooperation spirit.

3.3. Combination of Scientific Research and Skill Competition

Using the teaching mode of scientific research feedback, combined with professional competition projects to promote the training of professional talents. In the teaching process of environmental art design major, some students lack of understanding of the major and do not set up clear learning objectives, resulting in low learning enthusiasm and laziness. In order to fully mobilize students' learning enthusiasm and change their confused and passive learning state, teachers integrate their own scientific research achievements into the design of competition training projects according to the contents and requirements of the competition. In the training process, from topic selection, drawing to design performance, teachers sort out and put forward effective solutions to students' problems. Teachers adopt detailed objectives and strict checks to fully mobilize students' learning enthusiasm, To stimulate students' potential, students gradually become confident in the process of overcoming difficulties and gaining recognition, stimulate strong and conscious learning desire, develop good learning habits, form certain design thinking and analysis ability, and greatly improve their professional quality and learning attitude. The major actively organized the college skills competition. From 2019 to 2021, the number of students majoring in environmental art and design participating in the school skills competition totaled 216, accounting for 82%, which also laid a good foundation for participating in the national and provincial competitions and achieved better and better results. Since 2017, teachers have organized students to participate in various professional skills competitions and won awards. In 2017, he won the group special prize in the national decoration comprehensive skills competition of higher vocational colleges. In 2017, he won the group special prize in the national BIM Technology Competition for decoration in higher vocational colleges. In 2019, he won the second prize in the decoration comprehensive skills competition of Zhejiang higher vocational colleges. In 2019, it won the second prize in the garden construction technology competition of Zhejiang higher vocational colleges. In 2021, he won the second prize in the decoration comprehensive skills competition of Zhejiang higher vocational colleges.

4. Conclusion

Under the concept of "scientific research nurturing teaching", the teaching mode of "teaching, research and innovation" which is suitable for talent training in higher vocational colleges has been gradually explored, which has realized the mutual benefit and integrated development of teaching and scientific research, and promoted the cultivation of practical and innovative talents. On the one hand, it has integrated its own scientific research projects into teaching, carried out innovative reforms in terms of teaching content and traditional teaching mode, expanded the frontiers, applicability and interest of teaching content, enriched teaching content and teaching methods, and improved teachers' teaching ability and scientific research level; On the other hand, the integration of fresh research cases into teaching helps to realize the service of scientific research achievements to teaching. Teachers lead students to participate in practical projects, broaden students' professional vision, cultivate students' ability to actively explore and solve practical problems, improve students' practical ability and innovative spirit, cultivate students' communication and teamwork ability, improve teaching quality, and help students move towards work in the future, It has accumulated experience in solving design and

construction problems, and achieved the goal of cultivating high-quality technical and skilled professionals with sustainable development ability in higher vocational colleges.

Acknowledgments

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