# Teaching Reform of Environmental Design Major Based on Studio Teaching Mode

## Wang Xiaofei

Nanyang Institute of Technology, Nanyang, Henan, China

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**Abstract:** The environmental design major of colleges and universities has higher requirements for students' practical ability. The traditional teaching mode pays too much attention to theoretical teaching, which leads to the disconnection between students' ability and corporate needs, which limits the successful employment rate of students. This paper briefly analyzes the application advantages of the studio teaching mode, focusing on the shortcomings of the traditional teaching mode and the measures to carry out environmental professional teaching reform based on the studio teaching mode, in order to enhance the comprehensive ability of the students.

#### 1. Introduction

Environmental design refers to the design of indoor and outdoor space environment, requiring practitioners to have rich practical work experience. Because the traditional teaching mode focuses on the theory, the students of environmental design majors in colleges and universities generally have large deficiencies in knowledge application and innovation, which not only restricts the follow-up career development of students, but also reduces the graduation employment rate. Therefore, colleges and universities should reform the professional teaching model and break the shackles of the traditional model.

# 2. Application Advantages of the Studio Teaching Mode

## 2.1. Breaking the traditional teaching mode

The teaching focus of the traditional teaching mode is theoretical knowledge. Although theoretical knowledge is the core of understanding and engaging in the environmental design industry, the profession also emphasizes practical ability. If students only learn theoretically better, they cannot actually implement it into practical work. Inevitably, it will limit its career development. The studio teaching mode emphasizes practice, focuses on cultivating students' practical ability, breaks the shackles of traditional teaching mode, and has a positive impact on improving the quality of environmental design.

# 2.2. Strengthen students' communication and cooperation ability

The strength of a person is always small. In order to improve the quality and speed of work, when designing the indoor and outdoor environment of the building, it usually takes the form of a team. Only the designers can communicate and cooperate with each other to ensure that the work is guaranteed within the specified time. The warranty is completed. The learning tasks in the studio teaching mode are mostly team tasks. If students want to successfully complete the tasks, they must clearly define their position in the team and explore ways to improve their design capabilities through solidarity and cooperation, which enhances their communication skills and fosters cooperation. Has an important role.

## 2.3. Avoid students and companies out of touch

Students in the traditional teaching mode not only lack serious practical operation ability, but also limit their own scope of vision and knowledge level to the textbooks, and pay little attention to extracurricular knowledge and engineering projects, which leads to the disconnection between their

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own abilities and the professional requirements of enterprises. If the studio teaching mode is implemented, colleges and universities will become a bridge to strengthen the relationship between enterprises and students. Through school-enterprise cooperation and construction of simulation training grounds, students will be able to enrich their work experience and exercise practical ability, which will help them to quickly adapt to their positions.

# 3. Problems in the Current Teaching of Environmental Design Majors in Colleges and Universities

#### 3.1. The course arrangement is unreasonable

Environmental design involves the environmental status of many fields, requiring students to learn more, including environmental microbiology, environmental chemistry, environmental impact assessment, environmental law, environmental management, environmental planning, environmental economics, environmental design, etc. At this stage, when arranging courses, colleges and universities set some courses with pure theoretical and teaching content to be equal to other courses with less learning content and mixed theoretical and practical courses. Teachers can complete teaching in a limited time. Tasks, have to reduce the frequency of communication with students, and this kind of curriculum arrangement can not make teachers meticulous and systematic teaching, resulting in poor actual teaching results, most students can not really understand and master all the learning content[1].

## 3.2. Teaching methods are too single

The teaching methods adopted by environmental design teachers in colleges and universities are relatively simple when they carry out classroom teaching. Generally speaking, teachers are taught on the stage and students are listening to the audience. This kind of teaching is similar to that of primary and secondary schools. Although it can effectively improve students' theoretical achievements, However, it is impossible to strengthen the practical ability, which is inconsistent with the requirements of modern college students' ability and quality education. In addition, the classroom under the single teaching method is very boring. Although the classroom discipline can be guaranteed, the students' enthusiasm and initiative will be seriously degraded, and some students with poor self-control will sneak in inadvertently, and they will not be able to return to God. Keeping up with the teacher's thinking, if such events are repeated many times, students will feel that learning is getting more and more difficult and gradually loses their confidence in learning.

## 3.3. Lack of practical courses

Environmental design is a professional that emphasizes practicality. If students do not participate in supporting practice activities in time after completing theoretical knowledge, the memory in their minds will gradually disappear with the passage of time, leading students to quickly adapt to their positions after entering the workplace, affecting the actual situation. Quality of work and follow-up career development. At present, colleges and universities usually arrange students to practice in juniors and seniors, and in the process of internships, they mainly focus on observations, and there are very few practical hands-on opportunities, plus most students study computer graphics during school. The enthusiasm is not high, resulting in the practice efficiency of the internship is relatively low, can not meet the expectations of the company's masters, naturally can not learn useful skills and knowledge during the internship.

# 4. Measures for Teaching Reform of Environmental Design Major based on Studio Teaching Mode

#### 4.1. Using bim technology to build a professional environment design studio

When adopting the studio teaching mode, colleges and universities can design professional learning content based on the environment, combine bim technology to build a relatively complete

function studio, and at the same time improve the studio guidance mechanism, and prepare for the implementation of the teaching model. Studio guidance mechanism The main role is to ensure that teachers can fully play a guiding role in leading students to carry out project planning. This mechanism requires teachers to follow the concept of life-oriented, continuously infiltrating the modern environmental design concept in the teaching process, and at the same time improve the rational allocation of theory and practice. Sexuality; strengthen the students' creative ability and innovative ability, exert more emphasis on subjective initiative, organize targeted practice training on theoretical content regularly, and enhance the practical ability of environmental design students by giving full play to the application advantages of bim technology. It forms a personalized thinking[2].

The organic combination of bim technology and studio teaching mode has an important impact on improving the quality of environmental design teaching. In order to promote students to truly realize the unification of theory and practice, universities should integrate the teaching of bim technology with environmental design majors. Fully implement the teaching practice of architectural design, interior design, landscape design and other courses, and at the same time play the role of the Internet and other technologies, first use the network to collect information related to the teaching content, and then use the bim technology to combine the data provided by the data to build a model. The aspect can help students master and skillfully apply bim technology, on the other hand, it can broaden students' cognitive vision and help them achieve the purpose of learning.

# 4.2. Contact the enterprise environmental construction test site

Under the requirement of enhancing the practical ability of environmental design students, colleges and universities should establish a good cooperative relationship with enterprises, based on the environmental design process, job content, business operation mode, environmental design teaching tasks, etc., to build a studio teaching mode test site, configuration And optimize the basic teaching facilities, through the simulation of the actual environment design work atmosphere, procedures, to promote students to fully grasp the requirements of environmental design positions, based on the current market needs of the workplace to set the direction of talent training, in order to ensure the achievement of good teaching results. The studio test site for environmental design should include interior design, outdoor design, material model making, etc. Scanners, color printers, digital cameras, stone cutting machines, wood trimming machines, polishing machines, etc. should be installed and placed in accordance with standard specifications. As for the computer necessary for environmental design work, colleges and universities ensure that their configuration can meet the requirements of model building, drawing design, micro sand table production, and finished product display platform design. For example, famous universities in a certain city have conducted surveys and visits to many well-known local enterprises. Many teachers of environmental design have developed a simulation plan for the simulation test site. After review and revision by various departments, the program was officially adopted. The students of environmental design majors have verified the knowledge gained by simulating the environment, which greatly enhanced the ability of knowledge application and innovation, and has promoted the quality of environmental design professional reform.

#### 4.3. Actively undertake projects related to environmental design majors

Implementing the project teaching method in the teaching of environmental design major, and enhancing the connection between this teaching method and the studio teaching mode, is conducive to improving the problems existing in the allocation of the traditional teaching mode in the course time, improving the students' enthusiasm for learning, and promoting the project It is of great practical significance to synchronize with the actual teaching. Therefore, when the university conducts teaching reform for the environmental design major based on the studio teaching mode, it must actively undertake the engineering projects related to the professional teaching content. The teacher group should conduct research around the project. The results of the study propose different design topics, which are arranged for different student teams and require them to complete tasks in a team form[3].

For example, an applied undergraduate college has undertaken a small project for a local architectural decoration enterprise for the four student teams of environmental design majors – retro-style interior decoration, under the "double-master" and "studio" teaching modes. The company arranged a designer with relatively rich work experience, and the school sent two teachers with solid theoretical knowledge. The corporate designers and university teachers provide technical and theoretical guidance for the four student teams, and finally draw four design drawings; after combining the requirements of the home owner, some of the four drawings are merged, and finally The highly feasible design solution perfectly completed the task of the project. In the process of participating in the project, the practical ability of environmental design students has been vigorously exercised, such as solidarity and cooperation, communication and communication skills; a large number of work experience has been enriched, providing strong support for enhancing employment competitiveness and quickly adapting to positions.

#### 5. Conclusion

In summary, the studio teaching model has the application advantages of breaking the traditional teaching mode, strengthening the ability of students to communicate and cooperate, and avoiding the disconnection between students and enterprises. Based on this model, the problem of improving the teaching of environmental design in colleges and universities is to enhance students' practice. Ability and the effective means to improve the employment rate. In this regard, colleges and universities can combine the teaching content of bim technology and environmental design professional to build a studio, and at the same time contact the enterprise environmental construction testing ground and actively undertake related projects to help students strengthen their practical ability. Rich work experience.

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