

Exploration and Practice of Project-based Teaching in Landscape Design Course

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Abstract: Landscape design course, as one of the compulsory courses of environmental design specialty, has strong practicality. Based on the analysis of the problems existing in the teaching of landscape design course in our university, this paper explores the reform of project-based teaching. The main measures of this project-based teaching reform are to improve the teaching level of teachers, promote the cultivation of double-qualified teachers, optimize the teaching syllabus, enrich the teaching content, rely on the actual landscape design cases, implement project-based teaching, combine landscape design theory with practice, and improve students' comprehensive ability in practice.

1. Introduction

Landscape design course plays an important role in the teaching system of environmental art design specialty. Landscape design course is an important compulsory course for environmental art design specialty. It is usually opened in the next semester of junior year. It includes indoor landscape design, roof garden landscape design, residential landscape design, urban square landscape design and so on. There are many problems among these contents, such as large span and insufficient correlation, which make it difficult for students to master the professional knowledge of landscape design. Improving teaching methods and enriching teaching contents are of great significance to cultivating students' strong practical ability and solid theoretical basis. The main goal of landscape design teaching is to cultivate applied talents and solve various social problems to meet the needs of social talents. At present, because of the problems of teaching orientation, insufficient teachers and unbalanced teacher-student ratio, the teaching level of landscape design course is unbalanced in domestic universities, especially in Western regions. The reflection speed of social development is too slow, and there is a certain gap between landscape design teaching in other universities. Under this background, local colleges and universities in Western China should combine their own characteristics and take basic education of environmental art design as a platform to explore the regional characteristics in landscape design teaching, creatively establish, develop and improve the education system of landscape design with regional characteristics, explore new development directions, train talents in landscape education and new landscape design directions, and the task becomes more and more important. Important. With the support and encouragement of Mianyang Normal University, the curriculum system of landscape design for the major of environmental art design has been gradually established and the direction of landscape design has been gradually clarified. Through the project-based teaching as the teaching method and the school-enterprise cooperation as the means, the transformation and development of the school has been laid a solid foundation. The solid foundation.

2. Problems in the Teaching of Landscape Design for Environmental Design Major in Our University

2.1 Students have weak foundation, poor comprehensive design performance and limited teaching conditions.

Students majoring in environmental design have a good art foundation, but they lack knowledge

of science and engineering, and the study of landscape design course needs some knowledge of science and engineering; the teaching and training conditions of the school are insufficient, and the professional design and drawing room is insufficient. the students comprehensive design performance ability is insufficient, and they lack a comprehensive understanding of the landscape industry; many students' design expression is not standardized^[2]. For example, in the aspect of text compilation, we can't master the method of compiling design instructions, the drawings are not standardized and the analysis drawings are not clear; we don't know how to explain and analyze our own plans and how to communicate with Party A; students cultural literacy is insufficient, and the design conception is often formalism, lack of cultural connotation, simple functional layout and lack of design. Design creativity; lack of sense of teamwork. In the previous teaching process, most of the time, practice is carried out by individuals, lack of teamwork, only pay attention to individual ideas, do not know how to carry out teamwork, so as to design high-quality landscape design works^[3].

2.2 The curriculum orientation is not clear, the teaching content needs to be streamlined, the combination of teaching objectives and practice is not close, and the construction of teaching materials and syllabus is lagging behind.

The major of environmental design in our institute lays particular stress on interior design. Although landscape design is the core course of the specialty, there is no relevant preface course^[4]. The course arrangement is short, the content is many, the scope is wide and the items are detailed. It is almost impossible to train strong design ability in a few weeks. The contents are incomplete and the combination of environmental design is not enough. The cases and pictures in the textbooks are outdated. Landscape design course contains many contents and involves a wide range of subjects. Due to the limitation of class hours, many contents are generally discussed, and students really have little practical ability to grasp. Therefore, in view of these practical problems, we must reform and optimize teaching content, innovate teaching methods, break through teaching difficulties and strengthen the cultivation of students comprehensive ability of landscape design^[5].

2.3 The teaching method and examination method are single, and the teaching effect is not outstanding.

Landscape design course in our school adopts examination to assess students learning situation. Students complete a set of landscape design project design. In the teaching method, the teaching is teacher-centered, knowledge and theory-based, lack of interaction between teachers and students, and lack of integration with practice, so that students' interest in landscape design learning is not high enough and students reality is cultivated. Interoperability is not strong enough. The software used by students in landscape design and drawing are CAD, 3D Max and Photoshop^[6]. The operation of these software, especially 3D Max software, is the most difficult, and many students can not grasp it. Therefore, the performance of landscape design effect map is not enough. Through years of teaching, the author finds that when students make landscape design and drawing, there is no problem in the operation of CAD software and landscape effect map. Performance if the use of sketch master (SU) to produce, students are easier to start. Landscape design course is a highly operational and practical course. In order to improve the quality of teaching and make students learn useful, we must reform the teaching methods and assessment methods.

3. Discussion on the Reform of Project-based Teaching in Landscape Design Course

3.1 Constructing a Reasonable Curriculum System

Landscape design course is to cultivate the design ability related to indoor scenery matching, which is a kind of professional ability training, so the curriculum should be biased. Since the curriculum orientation is clearly defined, it requires professional teachers to understand the whole training plan of students, especially the coherence and continuity of the courses related to landscape design courses, so as to set up the curriculum content reasonably and make the teaching content a complete system. According to the actual situation of our school, landscape design course takes

small and medium-scale landscape design cases as teaching objects, such as villa courtyard design, roof garden design, urban small garden design, etc. These contents are more integrated with the students of this major, and it is easier to design. At the same time, the course content is set up from easy to difficult, from shallow to deep, step by step. Landscape design course has strong practicality and is closely related to society. Besides the teaching of professional teachers, our school also invites landscape design engineers, well-known designers in domestic landscape design circles and professors in landscape design of famous universities to teach, to introduce the latest development trends in the field of landscape design, and to provide more opportunities for students to learn professional knowledge. Take students out to investigate outstanding landscape design cases.

3.2 Improving Teachers Teaching Level and Promoting the Training of Double-qualified Teachers

Landscape design itself keeps moving forward, which requires teachers to constantly improve their quality and renew their knowledge reserves, especially to improve their practical ability in the process of landscape teaching. Therefore, professional teachers can undertake landscape design projects or research projects in the direction of landscape design in their spare time, and let students participate in them. This is conducive to the formation of a school atmosphere of combining production, education and research, and also provides opportunities for students to understand society, broaden the scope of knowledge, and cultivate team spirit. In the process of teaching, we should first cultivate student 'interest in landscape design; when carrying out a set of project design tasks, we can let students cultivate team spirit in the process of landscape design, and require students to communicate more with each other, so as to promote the smooth implementation of the project. The evaluation scheme should enable students to think independently, cultivate their sense of space and design ability, and encourage them to provide better creativity. At the same time, teachers should guide students to make full use of network resources to search for professional information and collect design materials, and also recommend some professional design reference books to students. In recent years, the teachers of environmental design specialty in our school have developed in-depth through enterprise post practice, in-service refresher training, school-enterprise cooperation and other industries. Combining with the actual landscape design projects, while improving practical ability and teaching level, they have formed a “double-teacher” teaching team with excellent quality and excellent technology, which plays a greater role in teaching, scientific research and service enterprises function.

3.3 Reforming teaching methods and implementing project-based teaching in combination with competition projects and construction practice

3.3.1 Promoting learning by competition, combining with competition items, adopting project case teaching method.

Combining various skills competitions and training projects, such as the Landscape Design Competition of YuanYe Cup and the Landscape Design Competition of IDEA-KING, and other national college students' competitions, according to the process of landscape design and the actual landscape design projects, the main role of students is highlighted, and the ability of students to observe, think independently and solve problems is stimulated. In the teaching of teacher guidance, according to “project-oriented, task-driven” as the main line, the specific project will be “task decomposition self-planning”, from shallow to deep, from simple to complex, step by step and targeted repeated intensive training. According to the current situation analysis scheme conception computer graphics work typesetting report on results comprehensive evaluation of design scheme, teaching training is carried out. Combining with the “roof garden landscape design project”, project design is proceeded from the current situation analysis, such as scheme design, CAD drawing, 3D modeling or sketch master modeling, post-processing of PS effect drawing, text typesetting of PS scheme, and teaching is reported. And the comprehensive evaluation design scheme of the training, let the students go to the project site to survey the real terrain, carry out the contents of overall landscape planning and design, functional zoning, road traffic system analysis, landscape node

design, landscape plant configuration design, etc., and then use computer graphics software to display and process the work plan, forming a more feasible work, so that the students have the landscape design. Ability of measurement and performance chart.

3.3.2 School-enterprise cooperation, combined with project construction practice, on-site experience teaching.

The school is now in a critical period of transformation and development. School-enterprise cooperation is a practical means of transformation of environmental art specialty. Through this way, students can combine practical engineering practice to conduct on-site experience teaching, and organize students to visit landscape design companies, landscape effect drawing production companies and landscape construction enterprises, so that students can make on-site visits to various landscape designers. The design method and process of the project have perceptual knowledge, such as villa garden landscape design, residential landscape design, urban park landscape design, agricultural sightseeing garden landscape design, etc. Therefore, the school encourages all specialties to cooperate with enterprises, cooperate with landscape engineering companies, and establish a practical teaching platform. According to the teaching arrangement, every semester to develop appropriate plans to ensure that students have enough time to participate in business and social practice, in practice to improve students' professional knowledge and ability.

3.3.3 Encouraging students to participate directly in project design and role simulation teaching.

According to the teaching content of landscape design, we can adopt the method of “making up real questions or making up false questions”, so that every student can participate in the actual project with real roles. Taking a small park in a residential area as an example, teachers can set up a design project group of 3-5 people for this topic. Students play the roles of project leader and team member respectively, and project leader organizes everyone to advance. During this period, teachers should first take students to carry out on-site survey, mainly in the surrounding environment, terrain, water system of the project site, and explain clearly the requirements of Party A. Finally, each group will produce its own works, and each group will send its members to the class. The general will explain the plan he designed and discuss it with his classmates. The teacher will comment on it and put forward some improvement measures. Through participating in the actual landscape design project, students have a clear understanding of the whole landscape design process, and have learned how to proceed with landscape design. At the same time, they have trained the students' coordination ability and team cooperation ability, and will be engaged in landscape design work after graduation, so as to adapt to the role of public posts as soon as possible, and give full play to their design potential.

4. Conclusions

This project-based teaching reform, combined with the actual situation of our school, has made some achievements in the teaching reform of landscape design course for environmental design specialty, and laid a foundation for the future development of landscape design specialty. The main measures of this teaching reform are to enrich the teaching content while improving teachers teaching level, to implement “project-based” teaching based on actual landscape design cases, to cultivate students' comprehensive design expression ability, to explore various teaching methods, and to strengthen practical teaching links, so as to continuously improve student 'ability of understanding and drawing landscape design, and to strengthen teaching depth. Such as textbook compilation, reference books, courseware production and animation, to enhance student grasp of landscape design theory, deepen their understanding of landscape design discipline, expand their horizons, and cultivate students' self-learning ability, theoretical thinking ability and critical learning ability in practice. Under the guidance of “project-based” teaching method, students comprehensive ability in landscape design has been developed by leaps and bounds, so that students can adapt to work faster after graduation.

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