Practice Teaching and Research on the Course of “Landscape Plants” in the Garden Major*

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Abstract—In view of students’ lack of space in practical teaching, the low enthusiasm for learning, and the lack of suitable practical places and practical materials, the paper proposes to change the training project of practice for the problems, strengthen field investigations and cultivate students’ sense of space. The practical course reform is a preliminary exploration according to the guiding principle of "project engineering" and in combination with practical greening project task.

Keywords—landscape plants; practical teaching; garden major

I. INTRODUCTION

"Garden-plants Landscape" is a subject that studies the gardening characteristics of garden plants, and the basic theory and technology of the landscape design. It is a practical and applied subject. It is also one of the compulsory professional courses for students who majoring in landscape architecture.

Objective: Students are required to be familiar with the biology, ecology and landscape characteristics of common garden plants. It enables students to effectively use words, pictures, tables and other forms to accurately express the intention of landscape plant landscape design and application and have certain computer-aided design capabilities. At the same time, it cultivates students to have the ability of landscape design and site operation of important landscape plants. However, in the actual teaching, the teachers pay more attention to the setting of the theoretical content and the classroom effect, while ignoring the teaching content such as the practical course and the practice class. As a result, most students majoring in landscape architecture are good at theoretical knowledge, but poor at practical ability and innovation ability.

II. THE NATURE AND TASK OF GARDEN PLANT LANDSCAPE COURSE

Garden plant landscape is a core and compulsory course of landscape architecture. It has strong practical application with rich content and wild coverage. By learning it, the students are required to learn the latest developments about the development of landscape plants at home and abroad. Also, they should be familiar with the basic theories of garden plant landscape and master all kinds of practical skills of it. And then, they can be competent for the different task of landscape plants in cities. What’s more, they should correctly deal with the relationship between garden plants and other landscape elements. At last, they acquire the ability to analyze and solve the practical problems in application of the garden plant practice.

III. PROBLEMS FOUND IN THE TEACHING OF GARDEN PLANT LANDSCAPE PRACTICE COURSES

A. Teachers Teach More While Students Practice Less

In the teaching reform of landscape architecture, some measures are taken, such as increasing the number of professional courses and reducing the teaching hours of each course, to meet the talent model of “thick foundation, broad caliber, high quality”. However, the teaching requirements cannot be lowered. Over time, the contradictions between less teaching hours and more teaching contents have becoming more obvious with technological progress. The total number of teaching hour is reduced, so the time of practice is cut down, too. Meanwhile, most teachers in different universities and colleges pay more attention to the arrangement of theory lectures and classroom effect. However, most of the students only master speculative knowledge, but they are poor in practice because of lack of attention to the teaching contents of practice class. Putting theory before practice appears now. Take such course of Jilin Agricultural Science and Technology College as an example. There are 60 teaching hours in total, including 40 class teaching and 20 clinical practices. Therefore, clinical practice is relatively less now. After class teaching, the students should master the methods, forms, cases, etc. of landscape plants, but they couldn’t gain
enough due to not be practiced one by one. Eventually, the quality of classroom teaching was not satisfied, and the practical abilities of the students were weakened.

B. Students Are Not Motivated to Learn

Psychologically, under the influence of the current severe employment pressure and the popularity of the school, the students are confused about their future career and do not know what to do. Whether or not the majors you have studied are suitable for the need of the society and whether they meet the requirements of the employers. This leads to students' slackness of study. In addition, the versatility of smart phone is becoming more and more attractive to students, and students with poor self-control ability often play games and surf the Internet during class.

In terms of cognition: garden plant creation is a practical subject based on the completion of courses such as "Garden Botany", "Plant Cultivation", "Garden Drawing", etc., combined with "Landscape Design" and "Computer Aided Design" design. In the actual teaching, students often have misunderstandings about the curriculum, thinking that the course is based on plants, which is just a step in the garden design. It doesn't matter. It is enough to learn garden design. As a result, although students have studied the related courses such as landscape dendrology, landscape florology and plant cultivation, they cannot comprehensively apply the ecological characteristics and ornamental characteristics of garden plants to create plant landscapes.

C. Students Have Insufficient Ability to Recognize Plants and Lack Space Sense

The precondition for plants landscaping is to know plants first. Only by knowing this knowledge, you will know what choices are available. Only by understanding their habits and heights will they know who to use them. However, in the design of plant landscape, students' cognitive ability to plants is poor and they are not clear about what kind of spatial effect the plant height, crown width and breast diameter of different plants have, so that in the design process, they are just random or imagined to draw a plant planting map. As a result, most of the maps are filled with woods, lacking closed spaces, open spaces, vertical spaces and other spaces [1].

D. Lack of Attention to Practical Teaching and the Connection Between Theory and Practice Is Not Close

In the past, students often paid more attention to theoretical knowledge and neglected practical operation because of the relationship to test scores. At the same time, the traditional practice courses only focus on copying and drawing through the visits to typical green spaces such as schools and parks. As a result, the students often take the trouble to copy other people’s programs, do not really exercise their practical ability to work on specific projects and have poor practical and innovation skill.

E. Lack of Suitable Practice Sites and Practical Materials

The school is located in the northern part of the city. Because of the geographical restrictions on the school, the factory area, the community, the park and other types of plant configuration, the green space is relatively scarce and the remote internship study is often inoperable due to time and financial constraints [2].

IV. THE REFORM AND DESIGN OF GARDEN PLANT LANDSCAPING PRACTICE TEACHING

The design of the garden plant landscaping practice course should set the course tasks with the aim of professional ability, and organize the course content centering on the work tasks. Against the above problems, the specific practices are as follows:

A. Determining a Reasonable Practice Teaching Program

Practical teaching should be closely integrated with theoretical knowledge. The school's plant landscaping course has 30 hours of study time. It mainly arranges two large experiments. The first experiment takes 6 hours. In this experiment, students are grouped to investigate the local gardens such as local parks, large public green spaces, residential quarters, botanical gardens and so on, aiming to master the main identification characteristics of plant species, master the growth and application of common plants and complete data collection and design analysis. The second experiment takes 24 hours. In this experiment, students are required to complete the actual greening project tasks and complete the main steps of planting planning and design and post-service under the guidance of teachers.

B. Strengthening Practical Investigation and Cultivate Students' Sense of Space

Through the organization of students to different types of green space to make on-site measurement, evaluation and on-site mapping of typical plant communities or plant configurations, it is available to cultivate students' sense of scale, analysis, hand-painting and teamwork and get students realized that plant landscaping is very comfortable or imaginative. When making a plant landscape design plan, it is necessary to find the reason, combine the function and consider the human experience and use, while the variety is second. Don't put a gap in it, don't "spread beans" and look for the connection.

C. Combining with the Actual Greening Engineering Tasks and Completing the Practical Teaching

In combination with the campus greening reconstruction project in recent years, it is available to get teaching and engineering incorporated into the practice teaching of landscape plant landscaping and students can complete the survey, actual measurement, program design and construction of the actual project. Exercise student's post goal (green chemical design worker), ability goal (plant landscape design plant landscape analysis) and quality goal (enhance collaboration ability, analytical expression ability).

D. Standardizing the Practice Teaching Assessment and Promoting the Practical Learning with Skill Assessment

According to the practical teaching and training program, the students are mainly based on the comprehensive design
of the complete project, and establish a practical evaluation standard evaluation index system to comprehensively reflect the students' whole process performance, objectively reflecting the students' theoretical knowledge and basic skills. Grade accounting: Practice score = 70% (40% of assignments, 20% of assessments, 10% of presentations) + 30% of finals (plan design or program report) [3].

V. CONCLUSION

Garden plant landscaping is an important professional basic course for gardening students. It plays a positive role in cultivating and applying innovative talents in its practice teaching reform [4]. Therefore, in the design of content, we should adhere to the engineering application-oriented arrangement of practical teaching content and comprehensively cultivate students’ ability and practical ability to solve practical problems.

REFERENCES