

Under the Interdisciplinary Integration, the Teaching Team Construction and Curriculum System Integration of Professional Landscape Design Courses are set up

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Abstract: With the continuous development of China's urbanization process, the importance of landscape design industry in urban construction is gradually highlighted, landscape architect has become a popular profession in current urban construction. As the main training base of landscape design talents, the teaching quality of colleges and universities has an important impact on the development of landscape design industry. Landscape Design course is an important part of the environmental design major, aiming to cultivate students' innovative thinking and practical ability, so that they have a solid professional foundation and a wide range of knowledge. However, there are still some problems in the current teaching of environmental design in colleges and universities, which seriously affect the teaching quality and students' learning effect. Environmental design is a highly comprehensive major, involving the knowledge of many disciplines, such as architecture, landscape architecture, urban and rural planning, environmental psychology and so on. With the continuous development of the society, the talent training mode of a single discipline can no longer meet the diversified needs of the society. Therefore, in the process of talent training of environmental design majors, universities must pay attention to the cross-integration of disciplines, build interdisciplinary teaching teams, and promote the integration of curriculum systems. From the perspective of interdisciplinary integration, this paper discusses the integration of teaching team construction and curriculum system of landscape design courses for environmental design majors. By analyzing the current teaching status of landscape design courses for environmental design majors, this paper points out the existing problems and shortcomings, and puts forward the teaching team building strategy based on interdisciplinary integration and the curriculum system integration strategy based on interdisciplinary integration. Through the research of this paper, the purpose is to provide a useful reference for the teaching reform of landscape design courses for environmental design majors in universities.

1. Introduction

With the continuous development of society, people have higher and higher requirements for the quality of living environment, and the landscape design industry has developed rapidly. As an important base for cultivating landscape architecture talents, the teaching quality of environmental design has a direct impact on students' career development and social needs. However, there are some problems in the teaching of landscape design in the current teaching of environmental design in colleges and universities. In order to solve these problems, this paper puts forward the strategy of integrating teaching team construction and curriculum system of landscape design courses for environmental design majors based on interdisciplinary integration, so as to improve students' comprehensive quality and innovation ability and cultivate more outstanding landscape design talents for the diversified needs of society.

2. Teaching status of landscape design courses for environmental design majors in universities

2.1 Current situation of teaching team

(1) Teachers have a single subject background

At present, the teachers of landscape design courses for environmental design majors in universities are mostly from a single disciplinary background, such as architecture and landscape architecture. Although these teachers have high professional quality and teaching experience in their own subject fields, they lack interdisciplinary knowledge and skills, resulting in relatively single teaching content and methods, which cannot meet the diversified needs of students^[1]. At the same time, due to the limitations of the subject background, these teachers often find it difficult to organically integrate landscape design with other subject areas, which limits the development of students' learning vision and innovation ability.

(2) Teachers' communication and cooperation are not close enough

In the teaching team of landscape design courses for environmental design majors in universities, the communication and cooperation among teachers are relatively small. This is mainly reflected in two aspects: one is the lack of interdisciplinary teaching and research cooperation among teachers, which makes it difficult to improve teaching quality and teaching level; Second, the lack of communication and sharing of teaching experience and teaching methods among teachers leads to the waste and repetition of teaching experience and teaching methods^[2]. This lack of communication and cooperation not only limits the improvement of teachers' teaching level and teaching quality, but also limits the development of students' comprehensive quality and innovative ability.

(3) The comprehensive quality of teachers needs to be improved

In addition to the single subject background and the lack of communication and cooperation, the teaching team of landscape design courses for environmental design majors in universities still has the problem that the comprehensive quality of teachers needs to be improved. This is mainly reflected in the professional quality, teaching ability, scientific research ability and innovation ability of teachers. Some teachers have deficiencies in professional quality, lack of mastery and application of new knowledge and technology; In terms of teaching ability, some teachers lack flexible teaching methods and means to meet the different needs of students; In terms of scientific research ability and innovation ability, some teachers lack scientific research experience and innovation ability, and it is difficult to promote the development and progress of the discipline.

2.2 Current situation of curriculum system

(1) The curriculum is not comprehensive enough

Some universities pay too much attention to the teaching of theoretical knowledge while ignoring the setting of practical links in the curriculum of environmental design, resulting in the lack of practical operation ability and practical experience of students, which is difficult to meet the needs of society^[3]. Some colleges and universities lack foresight and innovation in curriculum, and do not keep up with the development trend of the industry and changes in market demand, resulting in students' professional knowledge and skills lagging behind the development of the industry.

(2) Lack of cross-integration of curriculum content

Environmental design is a comprehensive major involving multiple disciplines, which needs to integrate the knowledge and skills of architecture, urban and rural planning, landscape architecture, environmental psychology and other disciplines^[4]. However, at present, some colleges and universities lack of cross-integration with other disciplines in the setting of landscape design courses, resulting in narrow knowledge of students and lack of interdisciplinary comprehensive literacy. This also limits the development of students' innovation and problem-solving skills.

(3) The traditional teaching method is single

At present, some colleges and universities still adopt traditional teaching methods in the teaching process of landscape design courses, such as teaching method and demonstration method. Although these methods can impart knowledge to a certain extent, they lack interactivity and practicality, and are difficult to stimulate students' learning interest and enthusiasm. At the same time, it also limits the cultivation and development of students' innovative thinking and practical ability.

(4) Lack of practice and case teaching

Landscape design is a highly practical subject, which requires students to explore and practice in practice. However, at present, some universities lack practical links and case teaching in the setting of landscape design courses, resulting in the lack of practical operation ability and practical experience of students^[5]. At the same time, it also limits students' understanding and cognition of the landscape design industry, and it is difficult to adapt to the needs of society.

3. Teaching team building strategies of landscape design courses for environmental design majors

3.1 Build an interdisciplinary teaching team

(1) Introduce teachers with interdisciplinary backgrounds

Universities can enrich the disciplinary composition of teaching teams by introducing teachers with interdisciplinary backgrounds. For example, teachers with different disciplinary backgrounds such as architecture, urban and rural planning, landscape architecture, and environmental psychology can be introduced to participate in the teaching and scientific research of landscape design courses. This can provide students with a diversified knowledge background and way of thinking, and promote the improvement of students' comprehensive quality and innovation ability.

(2) Improve the comprehensive quality of teachers

Colleges and universities should pay attention to improving the comprehensive quality of teachers, including professional accomplishment, teaching ability, scientific research ability and innovation ability. Training, further study, academic exchange and other activities can be organized to improve teachers' professional quality and teaching ability. By encouraging teachers to participate in scientific research projects and teaching reform projects, teachers' scientific research ability and innovation ability can be improved. At the same time, an incentive mechanism can be established to encourage teachers to actively participate in teaching and scientific research to

improve teaching level and teaching quality.

3.2 Strengthen exchanges and cooperation among teachers

(1) Establish a regular teaching and discussion mechanism

Colleges and universities can establish a regular teaching discussion mechanism and organize teachers to jointly discuss the teaching problems and reform direction of landscape design courses. Through teaching seminars, communication and cooperation among teachers can be promoted, teaching experience and teaching methods can be shared, and teaching level and quality can be jointly improved^[6]. At the same time, it can find and solve the problems and shortcomings in teaching in time, and promote the in-depth development of teaching reform and teaching innovation.

(2) Carry out interdisciplinary teaching and research activities

Colleges and universities can encourage teachers to carry out interdisciplinary teaching and research activities to explore how to integrate the knowledge and skills of different disciplines into the teaching process of landscape design courses^[7]. Through interdisciplinary teaching and research activities, it can promote the cross-integration between different disciplines, expand students' knowledge and vision, and improve students' comprehensive quality and innovation ability. At the same time, it can provide new ideas and methods for the teaching reform of landscape design courses.

(3) Establish a resource sharing platform

Colleges and universities can establish resource sharing platforms to provide teachers with sharing services of teaching resources and scientific research resources. Through the resource sharing platform, teachers can obtain teaching resources and scientific research results of different disciplines, providing strong support for teaching and research. At the same time, it can promote the communication and cooperation among teachers and improve the teaching level and scientific research ability (Table 1).

Table 1 Construction of resource sharing platform

Resource sharing content	Sharing mode	Expected effect
Teaching courseware	Upload to the platform for teachers to download and use	Improve teaching efficiency and reduce repetitive work
Teaching case	Share excellent cases in the teaching process for other teachers' reference	Promote the innovation and exchange of teaching methods
Research project data	Share research reports and data of scientific research projects	Promote scientific research Cooperation and accelerate the transformation of scientific research results
Academic exchange materials	Share information and experience from academic conferences and lectures	Broaden the academic horizon and improve the academic level

3.3 Improve the comprehensive quality of teachers

(1) Strengthen the cultivation of teachers' professional quality

Colleges and universities should strengthen the cultivation of teachers' professional quality and improve their discipline quality and professional skills. Training, further study, academic exchange and other activities can be organized to improve teachers' professional quality and teaching ability. At the same time, teachers can be encouraged to actively participate in scientific research projects and teaching reform projects to improve their scientific research ability and innovation ability.

(2) Pay attention to the cultivation of teachers' teaching ability

Colleges and universities should pay attention to the cultivation of teachers' teaching ability and improve their teaching level and teaching quality. Activities such as teaching observation and teaching competitions can be organized to promote communication and cooperation among teachers and share teaching experience and teaching methods. At the same time, a teaching evaluation system can be established to regularly evaluate and feedback the teaching quality of teachers to help teachers constantly improve their teaching level.

(3) Encourage the cultivation of teachers' innovative ability

Colleges and universities should encourage the cultivation of teachers' innovative ability and improve their innovative consciousness and ability. Activities such as innovation competition and application of scientific research projects can be organized to stimulate teachers' innovation enthusiasm and creativity. At the same time, innovative platforms and resources can be provided for teachers to help them carry out innovative teaching and scientific research.

4. Integration strategy of landscape design curriculum system for environmental design major

4.1 Optimize the course structure

(1) Sort out the logical relationship between courses

Colleges and universities should sort out the logical relationship between the courses of landscape design, and make clear the sequence and relation between each course. By sorting out the logical relationship, the repetition and conflict between courses can be avoided, and the organic connection and cohesion between courses can be formed. At the same time, it can help students better understand and master the curriculum knowledge, improve students' comprehensive quality and innovation ability.

(2) Add interdisciplinary courses

Universities can add interdisciplinary courses in landscape architecture courses, such as environmental psychology and urban planning principles. By adding interdisciplinary courses, students can broaden their knowledge and vision, and improve their interdisciplinary literacy and comprehensive ability^[8]. At the same time, it can provide students with a diversified way of thinking and problem-solving methods, and promote the development of students' innovative ability and problem-solving ability.

(3) Introduce practical courses and case teaching

Colleges and universities should pay attention to the introduction of practical courses and case teaching to strengthen students' practical ability and practical experience. Students' practical ability and practical experience can be improved by setting up practical courses, carrying out practical training and organizing social practice. At the same time, case teaching can be introduced, so that students can learn and master the knowledge and skills of landscape design in actual cases, and improve their comprehensive quality and innovation ability.

4.2 Integration of course content

(1) Sort out the repeated parts of the course content

Colleges and universities should sort out the repetitive part of the content of landscape design courses to avoid repeated teaching between different courses. By sorting out repeated parts, the course setting and course content can be optimized to improve teaching efficiency and quality^[9]. At the same time, it can avoid students' time and energy being wasted on repeated learning, and improve students' learning efficiency and innovation ability.

(2) Integrate interdisciplinary knowledge points

Universities should integrate interdisciplinary knowledge points and organically integrate and penetrate relevant knowledge points between different disciplines (Table 2). By integrating interdisciplinary knowledge points, students can broaden their scope of knowledge and vision, and improve their interdisciplinary literacy and comprehensive ability. At the same time, it can provide students with a diversified way of thinking and problem-solving methods, and promote the development of students' innovative ability and problem-solving ability.

Table 2 Integration methods of interdisciplinary knowledge points

Interdisciplinary knowledge point	Integrated curriculum	Integration mode
Principles of environmental psychology	Principles of landscape design	Through case analysis, the application of environmental psychology in landscape design is explained
Urban planning theory	Urban planning and landscape design	Combined with urban planning cases, the role of landscape design in urban planning is discussed
Principles of ecology	Plant configuration and landscape design	Explain the application of ecological principles to plant selection and allocation

(3) Introducing cutting-edge technologies and theories

Universities should pay attention to the introduction of cutting-edge technology and theory, update and improve the content of landscape design courses. By focusing on industry dynamics and the latest research results, cutting-edge technologies and theories can be introduced into the curriculum, so that students can understand and master the latest knowledge and skills. At the same time, it can stimulate students' learning interest and enthusiasm, improve students' comprehensive quality and innovation ability.

4.3 Innovative teaching methods

(1) Promote project-based learning

Project-based learning is a student-led and project-based teaching method, which can help students combine theoretical knowledge with practice and cultivate students' practical ability and problem-solving ability. Colleges and universities can promote project-style learning in landscape architecture courses, and improve students' practical ability and practical experience by organizing students to participate in the design and implementation of actual projects. At the same time, it can promote students' innovative thinking and teamwork ability.

(2) Applying digital teaching methods

Digital teaching methods such as virtual reality (VR) and augmented reality (AR) can provide students with a more intuitive and vivid learning experience. Colleges and universities can apply

digital teaching methods in landscape design courses, such as using VR technology to simulate landscape design scenes, to help students better understand and master the knowledge and skills of landscape design^[10]. At the same time, it can stimulate students' learning interest and enthusiasm, improve students' comprehensive quality and innovation ability.

(3) Implementing cooperative learning and flipped classroom

Cooperative learning and flipped classroom are two commonly used interactive teaching methods. Cooperative learning can promote communication and cooperation among students, improve students' teamwork ability and problem-solving ability; Flipped classroom allows students to preview course content at home, and the classroom is more used for discussion and practice, improving teaching efficiency and quality. Colleges and universities can implement interactive teaching methods such as cooperative learning and flipped classroom in landscape design courses to stimulate students' learning interest and enthusiasm, and improve students' comprehensive quality and innovation ability.

5. Conclusion

Based on the analysis of the current teaching situation and problems of landscape design courses for environmental design majors in universities, this paper puts forward the strategy of teaching team construction and curriculum system integration based on interdisciplinary integration. In terms of teaching team construction, the key to achieve interdisciplinary integration is to build interdisciplinary teaching team, strengthen the communication and cooperation among teachers and improve the comprehensive quality of teachers. In the integration of curriculum system, optimizing curriculum structure, integrating curriculum content and innovating teaching methods are important means to realize the integration of curriculum system. Through the implementation of these strategies, we can effectively solve the problems existing in the current landscape design course teaching of environmental design major, improve the comprehensive quality and innovation ability of students, and cultivate more excellent landscape design talents for the society. In the future, with the continuous development of society and the progress of technology, the teaching of landscape design courses for environmental design majors will face more challenges and opportunities. In order to meet the needs of society and the development of the industry, colleges and universities should continue to strengthen the research and practice of teaching team construction and curriculum system integration. It is believed that in the near future, through continuous efforts and practice, the teaching of landscape design courses for environmental design majors in universities will achieve more remarkable results and progress.

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