

Integrating Student Entrepreneurship Studios with Professional Curricula: A Case Study of the Landscape Architecture Program at Guangdong Baiyun University

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Abstract: Against the background of higher education reform in innovation and entrepreneurship education, the Landscape Architecture program at Guangdong Baiyun University actively explores the construction of student entrepreneurship studios, optimization of professional talent training programs, and integration strategies for professional courses. By establishing five distinctive studios, including an Artificial Intelligence Landscape Design Studio, an Ecological Restoration and Green Building Studio, and others, the program builds practical platforms and introduces real projects, promoting student engagement with actual demands in extracurricular activities and enhancing their innovative and entrepreneurial capabilities. Meanwhile, in conjunction with core professional courses, the program explores paths to update teaching content and improve the practical teaching system, achieving deep integration of professional education and entrepreneurship education. This study summarizes a set of reasonable integration strategies, providing references for similar higher education institutions in professional curriculum reform and innovation and entrepreneurship education.

Keywords: Landscape Architecture Program; Student Entrepreneurship Studios; Integration Strategies of Professional Courses; Innovation and Entrepreneurship Education

1. Introduction

In the context of rapid socio-economic development, innovation and entrepreneurship education has become an important direction for the reform of talent cultivation models in higher education. Against this background, the Landscape Architecture program at Guangdong Baiyun University is exploring how to effectively integrate elements of innovation and entrepreneurship education into the professional curriculum system and talent cultivation

programs. The ultimate goal is to cultivate high-quality composite talents who not only have solid professional knowledge but also possess innovative spirit and entrepreneurial abilities. This study is based on the actual situation of the Landscape Architecture program at Guangdong Baiyun University. It conducts an in-depth analysis of the current status of innovation and entrepreneurship education and proposes specific practical strategies and approaches.



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2. Planning of Student Entrepreneurship Studios in Landscape Architecture Program

2.1 Artificial Intelligence Landscape Design Studio

Background: With the increasing application of artificial intelligence (AI) in design, AI - empowered landscape design has emerged as a significant trend. This studio aims to explore the integration of AI technology into landscape architecture, enhancing design efficiency and quality.

Entrepreneurial Activities: The studio undertakes diverse landscape design projects, offering professional services to real estate firms and government agencies. It collaborates with companies on AI - related R&D, driving industry wide technological advancements.

Professional Integration: The studio integrates AI - related content into core courses such as "Landscape Architecture Design," "Computer - Aided Design," and "Comprehensive Landscape Architecture Design." Corporate experts are invited to participate in teaching and guide students in design projects, bridging the gap between curriculum and industry needs.

Practical Situation: The Scenery Creation Studio at our university combines landscape design with AI - empowered design, focusing on providing outstanding landscape design solutions by integrating cutting - edge concepts with practical needs. In collaboration with the listed company Shanshui Bide, the AI Shanshui Zhihui Student Studio was established, enabling students to engage in the development of AI - assisted design tools and improve landscape design efficiency.

2.2 Ecological Restoration and Green Building Studio

Background: Amid growing attention to the ecological environment, ecological restoration and green building have become important research directions for the landscape architecture program. This studio will focus on innovative entrepreneurial practices in the field of ecological restoration and green building, providing students with opportunities for in - depth exploration in this area.

Entrepreneurial Activities: Carry out ecological restoration project consultation, green building design and construction, and other services. Cooperate with environmental organizations, construction enterprises, etc., to participate in ecological restoration projects

and green building projects, accumulating practical experience.

Professional Integration: Rely on the research achievements of professional teachers in the field of ecological restoration and green building, and integrate relevant knowledge into the teaching of courses such as "Ecology" and "Green Building". Organize students to participate in actual projects, deepening their understanding and application of professional knowledge through practice.

Practical Situation: The T + Green Building Studio of our school has always been committed to research on green building and ecological restoration and has carried out practical projects in cooperation with relevant enterprises.

2.3 Rural Landscape and Cultural Revitalization Studio

Background: The rural revitalization strategy has provided a broad space for the development of the landscape architecture program. This studio will focus on rural landscape design and cultural revitalization, committed to improving the rural environment and inheriting rural culture.

Entrepreneurial Activities: Undertake rural landscape planning, rural cultural excavation and presentation projects, providing professional rural construction services for government departments and village committees. Cooperate with cultural and tourism enterprises to develop rural tourism products and promote rural economic development.

Professional Integration: Combine professional courses such as "Rural Planning and Design" and "Professional Course", integrating the concept of rural landscape and cultural revitalization into teaching. Guide students to conduct research and design in rural areas, enhancing their sense of social responsibility and professional mission.

Practical Situation: Since 2020, the T + Agricultural Assistance Team has been actively participating in the activities of rural special commissioners at the level of hundreds of millions of projects under the guidance of team teachers, achieving certain results. The UR Design Studio established in 2024 is committed to providing intelligent renewal solutions for traditional villages, with innovative driving, sustainable development, collaborative win - win and responsibility as the core values, actively exploring new paths for rural

revitalization. Relying on advanced GIS, big data and artificial intelligence technology, we have constructed a multi - dimensional value evaluation platform to deeply excavate the ecological, cultural and economic potential of villages, providing scientific basis and precise support for the sustainable development of villages.

2.4 Plants and Therapeutic Landscape Studio

Background: With the increasing attention paid to health and psychological therapy, plant and therapeutic landscape design is gradually emerging. This studio will focus on the research and practice of plant therapy landscape, exploring the impact of plants on human physical and mental health.

Entrepreneurial Activities: Carry out therapeutic landscape design, plant therapy project consultation and other businesses. Cooperate with medical institutions and sanatoriums to create landscape spaces with therapeutic functions and enhance the added value of landscapes.

Professional Integration: Rely on professional courses such as "Botany" and "Landscape Psychology", integrating the knowledge of plants and therapeutic landscape into teaching content. Exercise students' professional skills through practical projects and cultivate their innovative thinking.

3. Optimization of Professional Talent Cultivation Program

3.1 Reconstruction of Curriculum System

Analyze the professional curriculum system: Conduct a comprehensive analysis of the landscape architecture program's curriculum system to identify entry points where innovative and entrepreneurial education elements can be integrated, breaking away from the entrenched thinking of traditional professional courses.

Redesign the course teaching syllabus: Reasonably integrate elements of innovation and entrepreneurship education into professional courses, focusing on the cross - integration of course content, breaking down disciplinary barriers, and promoting the organic integration of knowledge from different disciplines within the courses.

Increase opportunities for innovation and entrepreneurship practice: Students should not only systematically learn the theories and methods of innovation and entrepreneurship through basic courses

but also join at least one professional entrepreneurial team, participating in studio projects and activities in their spare time to enhance their practical abilities.

3.2 Innovation in Teaching Methods

Adopt diversified teaching methods: Widely use innovative teaching methods such as project - driven teaching, case - based teaching, and problem - oriented teaching during the teaching process to stimulate students' interest and initiative in learning.

Strengthen practical teaching links: Allow students to exercise their innovation and entrepreneurship abilities through practical project operations, internships, and other means. For example, organize students to participate in landscape design competitions and entrepreneurial project practices both on and off campus.

Guide students in critical and creative thinking: Encourage students to question and innovate traditional design concepts and methods during teaching, cultivating their awareness and ability to innovate.

3.3 Construction of Teaching Staff

Enhance the innovation and entrepreneurship education capabilities of professional teachers: Improve teachers' levels of innovation and entrepreneurship education through training, seminars, corporate practices, and other means, enabling teachers to proficiently master the theories and methods of innovation and entrepreneurship education and integrate them into professional teaching.

Introduce enterprise talents to form a "dual - innovation" team: Attract enterprise experts with rich practical experience to participate in education and teaching, forming a "dual - innovation" team. Corporate experts can bring the latest industry trends and practical experience to students, working together with professional teachers to guide students' innovative and entrepreneurial projects and achieving complementary advantages.

4. Integration Strategy of Professional Courses

4.1 Update of Teaching Content

Combine with studio project practices: Timely update the teaching content of professional courses based on the project practices and market demands of the studio. Integrate cutting - edge technologies, practical cases, and project experiences into classroom

teaching, closely combining the teaching content with the actual industry situation to improve the pertinence and effectiveness of teaching.

Integrate innovation and entrepreneurship cases: Introduce successful innovation and entrepreneurship cases in professional course teaching, such as the development history, innovative design concepts and methods of outstanding domestic and foreign landscape architecture design companies, etc., to let students understand the practical application of innovation and entrepreneurship in the professional field.

Update teaching resources: Regularly update teaching resources, including textbooks, reference books, academic papers, online courses, etc., to ensure that students have access to the latest professional knowledge and innovation and entrepreneurship concepts.

4.2 Improvement of the Practical Teaching System

Build a complete practical teaching system: Including experimental teaching, course design, internship training, graduation project, and other links. Through practical teaching, let students exercise their professional skills and innovation abilities in a real working environment, and cultivate students' teamwork spirit and the ability to solve practical problems.

Strengthen the construction of laboratories and practice bases: Improve the facilities of school laboratories to provide good experimental conditions for students. At the same time, establish long - term and stable cooperative relationships with enterprises and scientific research institutions to jointly build off - campus practice bases and provide more practice opportunities for students.

Carry out innovation and entrepreneurship practice competitions: Organize students to participate in various innovation and entrepreneurship practice competitions, such as the "Internet +" Innovation and Entrepreneurship Competition for College Students, the Challenge Cup, etc., to promote learning through competition and improve students' innovation and entrepreneurship practice abilities.

4.3 Reform of Assessment Methods

In traditional assessment systems, there is often an excessive focus on students' mastery of theoretical knowledge, while neglecting the cultivation and assessment of their innovation and entrepreneurship

capabilities. Therefore, it is necessary to significantly increase the weight of innovation and entrepreneurship capabilities in the assessment content related to professional courses. Students' innovative thinking, entrepreneurial plans, and practical achievements should be included in the assessment scope.

Innovative thinking reflects whether students possess keen powers of observation, unique ways of thinking, and the courage to break through traditional concepts. In the assessment of professional courses, open-ended questions and case analyses can be set to examine whether students can think about problems from different perspectives and propose novel and insightful views and solutions. For example, by presenting a specific commercial landscape design case and asking students to use their innovative thinking to design corresponding strategies, their innovative consciousness and thinking abilities can be assessed.

5. The Significance of Establishing the Studio

5.1 Enhancing Students' Innovation and Entrepreneurship Capabilities

By participating in the projects of the studio, students can accumulate a wealth of experience in innovation and entrepreneurship, enhancing their professional quality and comprehensive abilities. In practice, students apply the theoretical knowledge they have learned to real-world projects, cultivating innovative thinking and entrepreneurial awareness, and laying a solid foundation for their future career development.

5.2 Strengthening Professional Service Capacity to the Society

The project practices of the studio are closely centered around social needs, enabling it to provide high-quality landscape architecture professional services to society. By solving practical problems and creating value for society, it enhances the professional's social influence and reputation, promoting positive interaction between professional education and social needs.

5.3 Promoting Industry-University-Research Cooperation and Achievement Transformation

The studio serves as a bridge between enterprises and universities, fostering deep integration of industry, university, and research. Through jointly carrying out project research and development, technical training,

and other activities, it promotes the transformation and application of scientific and technological achievements, injects new vitality into the development of the industry, and achieves coordinated development of education, industry, and economy.

Conclusion

Through constructing student entrepreneurship studios, optimizing professional talent training programs, and improving professional curriculum integration strategies, the Landscape Architecture Program at Guangdong Baiyun University has effectively achieved deep integration of innovation and entrepreneurship education with professional education. This initiative provides students with a broader platform for practice and development space, cultivating more high-quality landscape architecture professionals with innovative spirit and entrepreneurial ability. During the implementation process, we continuously summarize experiences and optimize strategies to ensure more significant effects of the deep integration of innovation and entrepreneurship education with landscape architecture professional courses, making positive contributions to industry development and social progress.

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