

The Development and Execution of the "Specialized Creation and Integration" Framework in the Pursuit of Rural Revitalization: An Exemplary Analysis in the Field of Architecture

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Abstract: In the context of rural revitalization, higher education in our country needs to explore a new way to combine the professional skills of college students with rural development. Taking architecture as an example, this paper discusses how to build a practical teaching system of "three fronts advancing at the same time, two cores building soul" around the needs of the times of rural revitalization and the goal of cultivating professional talents, and how to set up a practical education platform of "rural revitalization workstation + rural revitalization work camp", so as to build a hierarchical and progressive ability training system for innovation and entrepreneurship, guide students to practice from classroom, and promote the organic integration of professional education and creative education, so as to meet students' needs for broadening the professional field of vision and improving innovation ability. Based on this model, the following three aspects of training effects have been achieved: 1) extending professional skills, cultivating the feelings of "helping farmers"; Through a series of practical explorations, students' interest in learning and professional identity has been strengthened, the awareness of using professional knowledge to serve the society has been cultivated, and the ability of innovation and entrepreneurship has been improved comprehensively.

Keywords: Rural Revitalization; Specialized Integration; Practical Education; Architecture.

1. Introduction

Youth are a crucial force for the future development of a country and an integral part of its revitalization strategy. Reforming the innovation and entrepreneurship practice system for university students and strengthening rural innovation and entrepreneurship education align with national strategies. Combining entrepreneurship education with professional education represents a deeper and more comprehensive innovation and transformation of higher education in China. It is a key step in innovative development, economic driving, and innovative talent cultivation models.

2. Characteristics and Current Status of Architectural Professional Training

2.1. Characteristics of Architectural Professional Training

Under the new situation, the talent cultivation model in architecture is shifting from a traditional discipline-based approach to an "application-oriented" educational model. Traditionally, architectural training emphasized basic skills and theoretical knowledge, lacking in practical skills and innovative awareness. However, with changing societal demands for architectural professionals, rural revitalization involves various fields like industrial development, cultural inheritance, and human settlement environment. The demand for rural construction talents goes beyond single-discipline knowledge, requiring interdisciplinary knowledge. Moreover, it extends beyond mere architectural techniques and engineering abilities, necessitating comprehensive engineering practical skills. This poses higher-level demands on architectural training.

2.2. Current Status Analysis of "Integration of Professionalism and Innovation" in Architecture.

Inadequacy in Professionalism and Practicality of the Existing Education System

The current education system mainly consists of two levels. Firstly, the school's general innovation and entrepreneurship courses, a common mode of dual innovation education. This curriculum model offers a wide range of innovation and entrepreneurship training activities with broad coverage. However, due to its low compatibility with the architecture profession, it fails to effectively guide the cultivation of innovation and entrepreneurship abilities directly related to architectural students' professional skills. Secondly, various professions arrange work-study alternation, professional cognition, professional internships, or hire external personnel to conduct thematic lectures according to the curriculum. Although this approach can enhance professional quality, practices like "lecture-style," "visit-style," and "experiential" education have short cycles and lack continuous guidance. They cannot effectively promote the integration of architectural students' professional skills with innovation and entrepreneurship in practice.

2.3. Lack of Practical Education Platform.

In recent years, despite frequent exposure to practical work tasks from enterprises in the teaching practice of innovation and entrepreneurship in architecture under the environment of work-study integration and industry-education integration, students are unable to integrate into the entire task process due to constraints such as student numbers, environment, equipment, and funding. Especially in the architectural field, due to restrictions such as industrial characteristics, funding,

and objectives, most universities still conduct "vacuum-style," "self-indulgent" simplified practical training, far from real-life scenarios. This leads to students' inability to genuinely understand the design needs of real sites and test the feasibility of their plans in practice, making it difficult to comprehensively cultivate and enhance their professional skills and practical abilities.

3. Cultivation and Improvement Path of Innovation and Entrepreneurship Abilities Based on the "Integration of Professionalism and Innovation"

Addressing the aforementioned issues, our team, combining innovation and entrepreneurship training programs in Chinese architectural universities, conducts research and practical exploration on cultivating innovation and entrepreneurship abilities in architecture based on the "Integration of Professionalism and Innovation."

3.1. Constructing a Practical Teaching System Based on the "Integration of Professionalism and Innovation".

The current architectural teaching curriculum system overly emphasizes the role of courses in the discipline's development, resulting in students' poor practical, innovative, and comprehensive abilities. Therefore, based on the contemporary needs of rural revitalization and professional talent cultivation objectives, we have established a practical teaching system of "three lines advancing simultaneously, with two cores building the soul."

"Three lines advancing simultaneously" refers to constructing a practical curriculum system based on three main lines: architectural theory, professional design, and skill practice, integrated into the practical curriculum system from the first to the fifth year. The architectural theory line focuses on cultivating core knowledge and abilities in architecture, the professional design line emphasizes architectural scheme design skills, and the skill practice line concentrates on practical application abilities. Each module's courses are designed at two levels: basic skills and dual innovation skills. For instance, the "Architectural Design" series includes basic design specifications and fundamental skill instructions for scheme design. It also aims to cultivate students' dual innovation skills to propose creative solutions to real-world problems. Under this framework, we utilize real project demands from partner villages as design topics. Through practical training, we organically combine professional design, architectural technology, and rural innovation and entrepreneurship practical skills, expanding students' innovative awareness and striving to achieve a seamless connection between architectural theory and rural practical applications.

"Two cores building the soul" refers to strengthening the two cores of innovation and entrepreneurship practice and architect's business practice, which are comprehensive and professional trainings conducted using external practice platforms based on the fundamental platform.

3.2. Building a Practical Platform of "Rural Revitalization Workstation + Rural Revitalization Work Camp"

Rural Revitalization Work Camp: Student members are

recruited every summer and winter vacation to participate in a series of volunteer activities at the practice base. After learning relevant knowledge in professional courses, students are led by practical teachers to enter the rural practice base to conduct social surveys, complete skills training such as status surveys, information processing, innovative question-raising, and report writing.

Rural Revitalization Workstation: Jointly establish physical sites with local governments to guide teachers and students to take root in rural areas during the semester and provide long-term on-site services. Select outstanding dual-innovation students at the practice base as the heads and members of the rural revitalization workstation, formally connect with village governments and villagers to meet their needs, attempt to transform design outcomes, and complete innovative ability training based on professional knowledge. Relying on the workstation, optimize the professional knowledge of team members in combination with the development needs of the assisted villages, enabling teachers and students to apply what they have learned. During this period, members of the workstation also actively participated in innovative and entrepreneurial activities such as "Internet+", "Innovation in Youth", and "Challenge Cup", sorting out entrepreneurial ideas and plans during the competition, and incubating entrepreneurial teams.

Based on the "work camp + workstation", students are involved in the entire process from demand investigation, site investigation, scheme planning to construction implementation, breaking through the traditional professional practice model of "talking on paper" and exploring development paths that "provide professional services to villages with needs based on professional technology, injecting new vitality into rural development" to expand the connotation of practical training.

3.3. Building a Hierarchical and Progressive Capacity Training System for Innovation and Entrepreneurship

Utilize the rural revitalization work camp to organize summer and winter practice research activities, establish a rural revitalization social survey team, led by teachers to conduct social surveys in cooperative villages, and complete skills training such as status surveys, information processing, innovative question-raising, and report writing.

Utilize the rural revitalization workstation to establish an organized and well-functioning operation team, formally connect with village governments and villagers to meet their needs, conduct cultural refinement for villages under teacher guidance, help villages with architectural cultural protection, design village IPs, and connect with clients to attempt design outcome transformation, completing innovative ability training based on professional knowledge. Students can incubate personal entrepreneurial teams relying on the rural revitalization workstation, undertaking projects such as village wall painting and village streetscape beautification design. Entrepreneurial teams independently complete the overall work of projects from status surveys, scheme design, field execution to evaluation and summary, comprehensively training their innovative and entrepreneurial abilities.

Through project training at different levels and stages of the two platforms, the integration and promotion of students' professional knowledge skills and innovative and entrepreneurial abilities are achieved.

4. Achievements of the Practice-Oriented Talent Cultivation Mode of Integrating Specialty and Innovation

Combining In-class and Out-of-class Learning to Foster a Helping Farmer's Sentiment. Based on the practical teaching system of "three lines advancing in parallel, two cores building character," an organic combination of in-class and out-of-class practical teaching modes is adopted. Classroom teaching is used to exercise students' knowledge accumulation in integrating specialty and innovation, and practical bases are utilized to expand the classroom to extracurricular activities through work camp and workstation activities, enhancing students' subjective initiative in participating in practice. Through systematic and hierarchical training, students are able to develop the consciousness and ability to analyze and innovatively solve problems. Strive to make all practical processes focus on real construction projects, strive to closely integrate teaching content with real life, and enable students to truly understand, enter, and understand rural areas. During this process, a batch of practical projects with distinctive characteristics emerged: 2 companies were successfully registered by students for entrepreneurship, fostering multiple agricultural and rural innovation and entrepreneurship projects such as "Companion Township" and "Old House Rebirth." They won two silver awards in the provincial competition of the "Internet+" College Student Innovation and Entrepreneurship Competition's Red Journey Track, three national-level college student innovation and entrepreneurship projects, 4 provincial-level innovation and entrepreneurship projects, and more than ten related competitions. Among them, the "Old House Rebirth" project follows the requirements of developing, protecting, and renovating the central village, reaching a cooperation agreement with villagers on village renovation, customizing a "three new, three living" model for the countryside to renovate old houses, and the first project designed by the team was completed in May 2023.

5. Conclusion

Through years of exploration and practice, adhering to the concept of "combining expertise and innovation, project leadership, platform support, resource sharing, and collaborative education," we are committed to establishing a practical education system of "three lines advancing in parallel and two cores building the soul." We have established rural revitalization practice bases and formed a practical model of "rural revitalization workstation + rural revitalization work camp," providing college students with practical venues and experience platforms for participating in rural innovation and entrepreneurship. We have strengthened practical teaching that combines expertise and innovation, achieved unity of knowledge and action, broadened horizons,

promoted cross-thinking, combined the "feelings for agriculture, rural areas, and farmers" with the professional learning of college students, and strengthened their spirit of innovation and entrepreneurship, demonstrating good educational results.

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