

The Framework and Thinking of the Talent Training Mechanism of "Production, Education, Research and Innovation" in Environmental Design Specialty

Yangyang Wei

Henan University of Animal Husbandry and Economy, Zhengzhou, Henan, 450046, China

Keywords: Environmental Design Major; Industry-University-Research-Creation; Talent Training Mechanism

Abstract: Under today's innovative educational background, art design majors should adopt an advanced talent training mechanism if they want to reflect a new development model, implement a culturally innovative educational development strategy, and promote the rapid development of my country's cultural industry. Learning, research and innovation is an important educational development direction in the practice of art education. Innovate the existing talent training mechanism and model to build a talent training model that meets market demand, which is in line with the actual development of teaching and has certain regional characteristics. This article mainly discusses the idea of creating the talent training model of production, education, research and innovation.

1. Introduction

With the increasing popularity of the environmental design major, more students will choose this major for self-professional study. In terms of teaching, teachers should innovate the existing talent training mechanism, and consider adopting methods such as production, education, research and innovation to further promote the in-depth development of art education. Comprehensive colleges and universities should clarify the current employment environment of students in practical teaching activities, and change the existing teaching mode and teaching ideas according to students' future employment orientation. Consider adopting the teaching method of industry-university-research-creation to drive the in-depth optimization of the subject teaching of environmental art design, and promote the continuous innovation and development of the design cultural industry.

2. Characteristics of the talent training mechanism of “Industry-University-Research-Innovation”

Industry-university-research innovation is an important trend in the development of colleges and universities in recent years. This new teaching model mainly reflects the connection between students' learning and employment development, as well as research and innovation, and further solves the teaching problems caused by the increasing enrollment scale. Especially in today's era of rapid economic and technological development, education presents the characteristics of integrated development.[1] In order to enable students to assume the important responsibility of building the

motherland, to reflect a diversified development model in their future career paths, and to improve their future employment skills. In order to cultivate comprehensive talents who can build the motherland and serve the society, it is necessary to provide students with more complex teaching activities in the teaching activities of environmental art design. Deeply combine liberal arts and engineering arts to innovate existing teaching systems and models.

The discipline of environmental art design is gradually developing in the direction of refinement, specialization and discipline. The overall employment situation and talent training plan continue to be adjusted, and the teaching mechanism of industry-university entrepreneurship reflects the multi-disciplinary integration teaching design research of environmental art design. Under the background of interdisciplinary integration, based on the experimental application of environmental art design majors to reform and optimize basic courses, strengthen the third classroom, and provide opportunities for practice and exploration for the course teaching of environmental art design majors.

3. Current Situation and Opportunities of "Industry-University-Research-Creation" Talent Training

At present, the school is still based on the traditional teaching method dominated by theory and technology, and has optimized the structure of disciplines, lacking the penetration and integration of inter-professionals, so that the "combination of skills" has always been in the primary stage. The existing experimental instruments and equipment of various majors in colleges and universities still need to be strengthened. The teaching staff has been on the front line for a long time, and the teaching content is outdated and closed, which reflects the general lack of training software and hardware configuration. In addition, in terms of strengthening the proportion of practical training, increasing market research and field training, extending the period of professional practice, and strengthening graduation design assessment, it is an inevitable trend to strengthen practical technical training such as school-enterprise cooperative teaching and studio training[2].

In the context of interdisciplinary intersection, the talent training mechanism of "industry-university-research-creation" in art should distinguish the pursuit of value and the convergence of interests of three subjects. Innovative countries are in urgent need of high-quality cultural and creative talents who possess the spirit of innovation, ability to innovate, and can transform knowledge into innovative achievements. Important measures to drive talent transfer in design and related industries.

4. Reflections on the talent training mechanism of "production, education, research and innovation" in environmental design majors

4.1. Curriculum system update and reconstruction

Under the comprehensive background of industry-university-research-creation, in order to achieve better educational effects, environmental art design majors should focus on innovative talent training mechanisms, and carry out reforms and attempts with in-depth thinking. It is necessary to update the curriculum system, choose and establish specialized courses suitable for students' study, and cultivate talents with application-oriented skills. The main purpose is to combine theoretical teaching and practical exercises, improve students' comprehensive employment skills, accelerate the integration of the overall teaching framework system of the environmental art design major, and carry out curriculum teaching reform. Attention should be paid to the teaching, research and analysis of basic courses. For example, in the teaching activities of "Architectural Design and Drawing", students should establish a preliminary sense of space and a sense of logic in drawing, and then explain the special courses related to "Design Performance" to students. Students are provided with certain architectural aesthetic teaching and social activities teaching[3]. Then explain the basic content

related to "Site Design" to the students, standardize the students' design expression, so that the students can choose from the space generation materials to complete the local space design and expression. Finally, by explaining the "Design Principles" to the students, let the students understand the characteristics of such an architectural system and the forms and methods of composition, which can shape the students' overall cognition and feeling of the functional structure of the building space.

4.2. Improve the talent training program in colleges and universities

In the cultivation of applied talents in university environment design of "industry-university-research-creation", consideration should be given to how to take into account the relationship between "cultivation subject" and "cultivation mechanism". Among them, the "industry-university-research cooperation talent training center" is set up in the university, and the "training subjects" are screened, and it is proposed that the "training subjects" participating in school-enterprise cooperation must have certain theoretical knowledge and practical work experience. Enterprise tutors and academic tutors pass the written test and interview, and after participating in the enterprise practice, they will conduct regular skills training and assessment, so that the "training subject" can make better use of school-enterprise resources and improve their theoretical application and practical ability. The formulation of the training mechanism should be based on three-party negotiation between "training subjects-students" and "training objectives-enterprise tutors + academic tutors", aiming at the actual situation of "training objects", study plans and employment prospects, professional development and career development trends and other factors, to formulate project-based learning plans and practical course plans.

4.3. The connection of teaching practice in subject teaching

Through the establishment of "studio" and "college student entrepreneurship training base", the campus practice has been realized. Represented by the infrastructure teaching and research department, it has established scientific research platforms such as "temporary construction design" and "BIM teaching", which closely integrates building information modeling technology with design resources, so as to improve design efficiency, pay attention to project cost, improve design quality, and control projects. Purpose of investment costs. Through the 3D printing model laboratory, we assist undergraduate graduates to deduce their plans, and use technologies such as light curing and paper layering to convert drawings into practical applications, thereby promoting the promotion and application of environmental design cases and promoting the relationship between universities and the market. Seamless. The establishment and use of off-campus practice bases is the key to the "industry-university-research-creation" talent training model.

As Chinese society has higher and higher requirements for the development of tourism industry, landscape planning and garden planning are more and more inclined to combine ecology and sociology. The school has established a campus landscape education practice base on campus to cultivate students' social practice ability, attach importance to cultural inheritance and cultural innovation, and design the "Humanities Cup" technology design competition. Set up an "interior design practice base" and work with a local design engineering company to build a school-enterprise cooperation platform, aiming to promote complementary advantages and achieve Resource sharing, to achieve a scientific training plan for jointly cultivating "industry-university-research-creation" talents, and truly provide solid practical talents for the continuous innovation and long-term development of enterprises.

4.4. Development and assessment of the applied talent training program

Universities focus on the effectiveness of collaborative training and the innovative ability of design talents, so as to adapt to the changing market needs and constantly test and verify them. Due to the influence of traditional teaching concept, design professional in practical application stage still have old concept, theory, therefore, in the "teaching", should be clear theory, technology, comprehensive ability of comprehensive promotion target, from second grade, until the third grade clear landscape, architecture, interior, display and other professional course direction, supplemented by space performance, innovation practice and graduation design and other three comprehensive course blessing, build characteristic of fine professional development direction.

In the cultivation of applied talents of university environment design of "industry-university-research innovation", we should weigh the two aspects of "training subject" and "training mechanism". Among them, in the university set up "industry-university-research cooperation personnel training center", to identify "subject", put forward to participate in university-enterprise cooperation "training subject" must have certain theoretical knowledge and practical work experience, by enterprise mentor, academic mentor through the written interview, after enterprise internship, regular skills training and testing, make "subject" can better use of university-enterprise cooperation resources, improve their theory and practical ability. "Training mechanism", should be by the "students" and "enterprise + mentor + academic tutor" tripartite consultation, in view of the actual situation of "training object", learning plan and employment prospects, professional development and career development trend, learning plan and internship course plan, and according to the basic ability of "training object" and work needs, study plan, a regular evaluation, improve the use efficiency of talent, effectively use and professional career development.

4.5. Connect the teaching practice link in the multidisciplinary teaching

The environmental design major has formed a relatively complete teaching institution, including: basic architecture, interior design, landscape architecture, display art, design performance, practice room, etc. These teaching and research sections complement each other, promote each other, and jointly promote the on-campus practice of university graduates. Through the "WORKSHOP work camp", "college students entrepreneurship training base" and other ways, the campus internship is realized. Represented by the infrastructure construction teaching and Research Section, scientific research platforms such as "temporary construction design" and "BIM teaching" have been established to closely combine the building information modeling technology with the design resources, so as to achieve the purpose of improving the design efficiency, paying attention to the project cost, improving the design quality and controlling the project investment cost. Through the 3D printing model laboratory, assisting undergraduate graduates to derive the scheme, using light curing, paper stratification and other technologies, to transform the drawings into practical applications, so as to promote the promotion and application of environmental design cases, and promote the seamless connection between universities and the market.

The practice teaching center has conducted multi-level and multi-level on-campus internship for students of various majors. The second grade student union organizes art practice and conducts immediate drawing exercises, so that students can fully understand the architectural principles of ancient emblem architecture and the context of the village road. The third grade student associations organized professional internships and visits to visit and visit on site, experience the connection between architecture and the city, and understand the historical and cultural elements of architecture, so as to apply them in design practice. At present, the lack of study of the current art design type, lack of effective reference for foreign copyright protection, lack of comprehensive grasp of the art design industrial structure transformation, the lack of property rights protection of art design works in China,

especially in college research and use is facing a lack of regulatory system and common infringement. Therefore, in the healthy development of new cultural forms today, we should comprehensively protect intellectual property rights from the macro perspective of social development, and at the same time vigorously promote the dissemination of research results. Since the date of the establishment of practice center, display art teaching center has held the luban woodworking basic strokes and woodworking interest group, and invite the professional teachers and students and the professional teachers and students, carry forward the spirit, using wood for simple traditional mortise and tenon joint modelling and field, cultivate the students' practical ability, conform to the "Belt and Road" the essence of Chinese traditional culture. Strengthen the students' cultural literacy, so that students in the design process into a more diversified cultural content, enrich the self-design content.

5. Conclusion

To sum up, "industry-university-research-creation" is an innovative teaching mode, and the talent training mode of environmental art design requires the joint efforts of all parties to make the teaching mode achieve the goal of sustainable development. Strengthen the feasibility and effectiveness of curriculum reform under the background of "industry-university-research-creation", cultivate innovative practitioners who meet the development requirements of the times, and promote the sustainable development of the design talent training mechanism.

Acknowledgement

Fund Project: Henan Agricultural University Teaching Reform Research and Practice Project in 2022: The research results of the completed research project of "Curriculum Reform Research and Practice Based on the Integration of Industry-University-Research-Innovation". Item number: 2022XJGLX060.

References

- [1] Wang G, Wang C, Tang B. Research on the talent training mechanism of local colleges and universities through the integration of production, education and research—Taking the Wetland College of Yancheng Normal University, a key industrial college in Jiangsu Province as an example [J]. *Theoretical Research and Practice of Innovation and Entrepreneurship* 2022; 5(10):1-4.
- [2] Xue F, Sun J. Research on the cultivation mechanism of top-notch innovative talents in collaborative innovation of industry-university-research in colleges and universities [J]. *University* 2022; (10):64-67.
- [3] Zhang S, Wang H, Song H, Wu C, Yan , Liu L, Wei X. Research on the innovation mechanism of excellent engineering talents in the combination of industry, university and research under the background of Dazhi cloud [J]. *Journal of Shandong Industry and Business College*, 2022,36 (01): 105-117.