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A Study on Project-Based Teaching Reform of University Lacquer Art Courses under the Orientation of Innovation and Entrepreneurship

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Abstract: This study focuses on the teaching reform of lacquer art courses in local universities against the backdrop of innovation and entrepreneurship education. By systematically analyzing the current operation of lacquer art courses and the College Students' Innovation and Entrepreneurship Training Program, it constructs a four-dimensional curriculum objective framework of "cultural foundation–technical competence–project awareness–innovation and entrepreneurship capability," and designs an innovative spiral learning pathway consisting of in-class incubation, extracurricular training, and competition-based validation. The study integrates multi-dimensional strategies in task design, regulation of teaching rhythm, diversified assessment, and university–local cooperation to promote systematic transformation of course teaching. Drawing on two typical national-level innovation and entrepreneurship projects as cases, it presents the dynamic trajectory from project generation and curricular support to implementation and students' competence development. Empirical results indicate that the innovation- and entrepreneurship-oriented project-based teaching model significantly enhances students' cultural understanding, craft integration skills, problem-solving awareness, and team collaboration, and effectively facilitates the transformation of classroom work into high-level innovation and entrepreneurship projects and market-oriented cultural and creative products. This study provides a replicable and scalable practical pathway and theoretical reference for local universities to further integrate traditional craft courses with innovation and entrepreneurship education.

Keywords: Lacquer art; College students' innovation and entrepreneurship training; Project-based teaching; Curriculum reform

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1. Introduction

With the continuous advancement of "New Liberal Arts" construction and innovation and entrepreneurship education, how to effectively connect traditional craft courses with college students' innovation and entrepreneurship training has become an important issue in talent cultivation for local universities [1,2]. Traditional

craft courses in art and design education play a dual role in skills training and aesthetic education, and are also important carriers for the inheritance and innovation of excellent traditional Chinese culture [3–6]. However, there is still a weak connection between such courses and the College Students' Innovation and Entrepreneurship Training Program (hereafter referred to as "innovation and entrepreneurship projects"). Classroom teaching often focuses on technique transmission and completion of works, while innovation and entrepreneurship projects place greater emphasis on topic innovation and project management. The two are not fully aligned in terms of objectives, pace, and evaluation standards [7].

Chuxiong Yi Autonomous Prefecture possesses rich cultural resources in Yi ethnic costumes and lacquerware. Its unique systems of patterns, color structures, and lacquering techniques provide fertile cultural soil for lacquer art courses and offer numerous possibilities for innovation and entrepreneurship project topics. On the premise of ensuring the depth of craft teaching, how to organically integrate innovation and entrepreneurship education into lacquer art courses and promote the transformation of classroom works into high-quality projects has become the core concern of this study.

2. Research background

As an important cluster area of Yi culture, Chuxiong has formed a relatively complete visual and technical system in the patterns, colors, and craftsmanship of Yi costumes and lacquerware. Relying on local resources over many years, lacquer art courses in local universities have developed a teaching framework that covers knowledge of natural lacquer materials, fabrication of wooden and fabric substrates, lacquering techniques, and the application of ethnic patterns [8]. However, in the context of new requirements for universities to serve regional culture and industrial development, remaining at the level of classroom product making is insufficient to comprehensively support students' overall competence development [9]. How to connect the cultural advantages of Yi lacquer art with the university's innovation and entrepreneurship resources, so that the course can both transmit techniques and stimulate innovation potential, has become the key to teaching reform [10,11].

A review of recent course implementation and interviews with teachers and students indicate that the current lacquer art course mainly has three problems:

(1) The teaching objectives are overly focused on technique training. Course emphasis is placed on material properties, substrate making, and techniques such as inlaying and gold leaf application, while students' problem awareness, project thinking, and teamwork, core literacy for innovation and entrepreneurship, receive insufficient attention. Students can complete technically sound works, but lack systematic consideration of user needs, usage scenarios, and market transformation [12].

(2) There is a mismatch between course pacing and project cycles. The course is organized by semester and weekly sessions, stressing class attendance, phased exercises, and final works. In contrast, innovation and entrepreneurship projects follow an annual cycle with procedures of project approval, mid-term inspection, and final review [13]. The lack of alignment in time and task arrangements between the two makes students struggle to cope with both course and project demands, and it is difficult to form a continuous and in-depth learning chain.

(3) Course evaluation is disconnected from project evaluation. Course assessment focuses on craftsmanship and classroom performance, whereas innovation and entrepreneurship projects emphasize topic originality, process management, and dissemination of outcomes [7]. Course outputs cannot be directly transformed into project outcomes, and innovation and entrepreneurship achievements are not effectively

fed back into course evaluation. This weakens students' awareness of the intrinsic connection between courses and projects.

3. Project-based reconstruction of curriculum objectives and structure

To address the limitations of the original technique-centered objectives, the course has been reconstructed around a four-dimensional objective framework of "cultural foundation–technical competence–project awareness–innovation and entrepreneurship capability."

In terms of cultural foundation, images, physical artifacts, and field investigations are used to systematically develop students' knowledge of Yi patterns, colors, and vessel forms, laying a solid basis of accurate terminology and coherent cultural narratives. In terms of technical competence, the course follows the logic of craft acquisition, strengthening lacquer preparation, substrate fabrication, and lacquering techniques in stages, thereby enhancing students' practical ability to match techniques with forms in their creations. In terms of project awareness, micro-projects are used to replace single assignments, guiding students through the full process from topic selection, design, and making to presentation and reflection, and shaping their systematic thinking in problem definition and scenario setting. In terms of innovation and entrepreneurship capability, group collaboration and presentations are used to cultivate students' division of labor, cooperation, and resource integration abilities, and to stimulate feasible ideas with the potential to develop into innovation and entrepreneurship projects. In this way, the course is transformed from a platform for single-skill training into one for comprehensive competence development, and the direction for systematic optimization of teaching strategies is clarified.

Based on the newly constructed objective framework, the course structure has been upgraded from a linear model combining theory and practice to a spiral, progressive pathway progressing from in-class incubation to extracurricular training and then to competition-based validation. In class, with Yi lacquer art as the theme, students are organized into groups to complete micro-projects that cover topic selection, research, design, making, and reflection, thereby achieving project-based learning and operation at the classroom level. In the extracurricular stage, teams with outstanding performance are encouraged to integrate their course outcomes and, under teacher guidance, apply for university-level or higher innovation and entrepreneurship projects, gaining richer resources to deepen practical exploration. Mature projects may be recommended to participate in various design and innovation and entrepreneurship competitions, using broader social evaluation to validate and optimize the projects and feeding back cases to course teaching. This structure effectively connects course learning, project practice, and outcome presentation, forming a continuous development pathway from classroom work to innovative achievements.

4. Teaching strategies and implementation pathways

Based on the reconstructed objective framework and course structure, teaching strategies have been comprehensively adjusted from four dimensions: task design, teaching rhythm, assessment methods, and university–local collaboration.

In terms of task design, the course adopts a problem-oriented approach and replaces traditional assignments with micro-projects. Students are guided to complete the full process from theme definition, data collection, and scheme design to production, implementation, and reflective presentation around concrete objects. For

example, in the task "Contemporary Expression of Yi Lacquer Jewelry," students must identify target users and usage scenarios, develop multiple design schemes via literature and artifact research, select the best scheme for production, systematically record craft difficulties, and articulate design logic and directions for optimization in their presentations. In this way, they experience the full cycle of a real project within the classroom.

The teaching rhythm is organized according to project progress. In the early stage, lectures focus on Yi lacquer culture and typical cases. In the middle stage, training in material formulation and technical processes is emphasized to consolidate operational foundations. In the later stage, attention is shifted to project advancement, with most class time devoted to group discussions, interim reports, and on-site teacher guidance. This design ensures both the systematic learning of techniques and the continuity of project progress, helping students complete the full loop from research to final products within limited class hours.

Assessment methods are constructed along three dimensions: process, outcomes, and potential. Process assessment focuses on the depth of research, quality of project logs, and interim design schemes. Outcome assessment emphasizes craftsmanship, form and color performance, and accuracy in the use of cultural symbols. Potential assessment concentrates on the clarity of target user positioning, possibilities for series expansion, cost awareness, and feasibility of applying for innovation and entrepreneurship projects. Assessment results serve as an important basis for recommending projects for further development, thus effectively linking course learning with innovation and entrepreneurship practice.

In addition, the course actively expands platforms for university–local collaboration. By cooperating with Yi lacquerware workshops and other intangible cultural heritage institutions, students are provided with opportunities for on-site research and craft prototyping. At the same time, resources from the university's innovation and entrepreneurship college and enterprise mentors are introduced to provide professional guidance on business model building and promotion strategies. As a result, some classroom projects can continue to be developed after the course ends and enter broader application and practice fields.

5. Case analysis of national-level innovation and entrepreneurship projects

Under the support of this curriculum reform framework, several innovation and entrepreneurship projects in lacquer art have been approved in succession, among which two national-level projects were rated "excellent" and "good" upon completion. The following sections analyze the generation and implementation of these projects.

5.1. "Fire and Tiger" Yi lacquerware tea set project (Rated Excellent)

This project originated from the course unit "Regional Culture-Themed Vessel Design." Based on the cultural connotations of "fire" as a symbol of reunion and "tiger" as a guardian totem in Yi culture, the team proposed the design concept of "gathering people by fire and guarding vessels by tigers." At the course stage, the team had completed design drawings for cups, bowls, and trays that integrated flame and tiger patterns. Multiple rounds of experimentation were conducted in class on substrate selection, lacquer-layer thickness, and texture expression.

For example, a composite technique combining natural wrinkling and gold-leaf application was used for the flame and tiger patterns so that the gold leaf formed natural cracks and undulations under the tension of the lacquer layer, thereby enhancing visual layering and tactile experience. By controlling lacquer thickness and drying time, the team also improved the wear resistance of the vessels in daily use.

After project approval, the team optimized the completeness and practicality of the tea set system, designing

a combination of forms including teapots, teacups, and tea trays (**Figure 1**), and refining details such as grip comfort and capacity. Meanwhile, the project team summarized its experimental process and design practice and published an academic paper, completing a conceptual elevation from practice to theory [14]. The project performed well in cultural positioning, system design, and craft implementation, demonstrating the project-based support function of the course in terms of cultural and technical training.

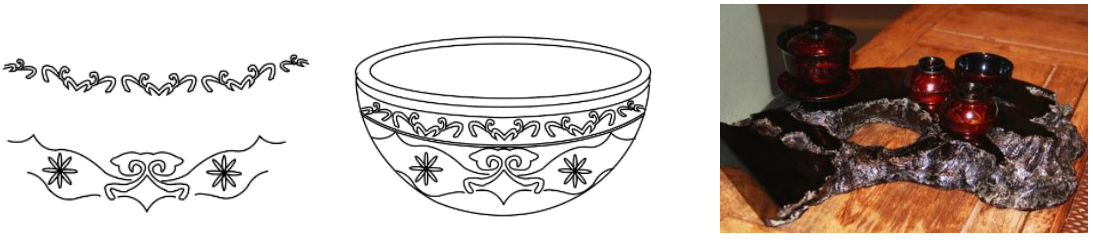

Figure 1. Design process of the "Fire and Tiger" Yi lacquerware tea set project.

5.2. "Yi Lacquer Jewelry Series Design" Project (Rated Good)

This project originated from the course unit "From Apparel Ornaments to Object Ornaments." Using traditional Yi headdresses and silver jewelry as prototypes, students transformed patterns and colors into lacquer jewelry, forming a series of works including the "Yi Fire Coronet" headpiece, the "Cloud Tassel Silver Scarf" hat ornament, the "Floral Star Hairpin" series, the "Flame-Ring Flow" earrings, the "Looping Yi Red" bracelet, and the "Spiral Spring Branch" hairpin (**Figures 2–5**). Under course assessment and teacher guidance, the team integrated these outcomes and applied for a national innovation and entrepreneurship project.

During implementation, the team clarified target users and usage scenarios by sorting the forms of Yi headdresses and investigating contemporary accessory needs. At the same time, targeted adjustments were made to structure and techniques, for instance, the weight of lacquer hat ornaments was reduced through segmented "detachable" hollow lacquer techniques combined with internal support rings; in the "Floral Star Hairpin" series, modular units were refined to adapt to different wearing combinations. The project received recognition from reviewers for its work on extracting ethnic cultural elements, serial design, and craft implementation, and reflected the positive effect of project-based course design in cultivating students' abilities in problem analysis, user research, and team collaboration.

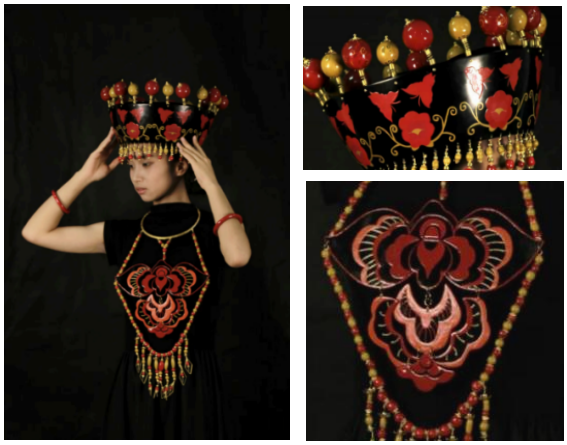

Figure 2. "Yi Fire Coronet" headpiece series. Camellias and butterflies are blended with fiery hues, symbolizing light and ceaseless vitality.

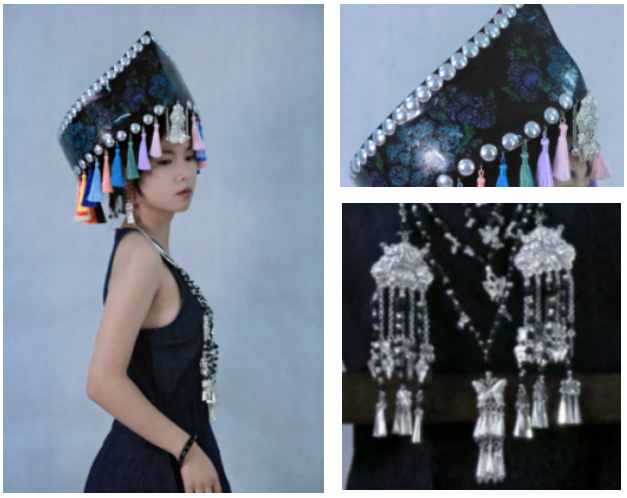

Figure 3. “Cloud Tassel Silver Scarf” hat ornament series. A rice-grain texturing technique is used to form floral motifs, while silver ornaments evoke the silhouette of wheat ears, symbolizing abundance and lightness.

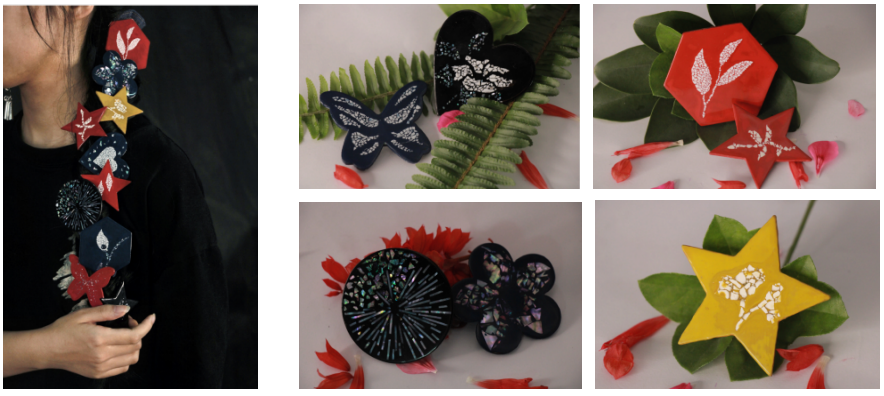

Figure 4. “Floral Star Hairpin” series.The sheen of lacquer and mother-of-pearl inlay embellishes the motifs, with silver “stars” dotted on the tips of the branches, as if quietly wearing the night in one’s hair.

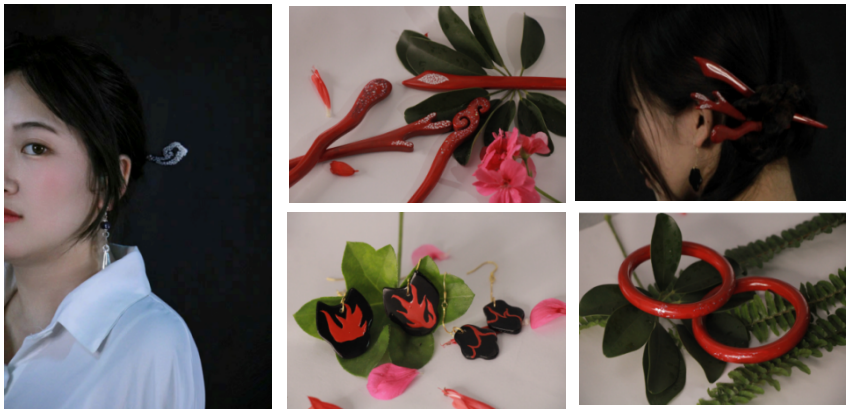

Figure 5. “Flame-Ring Flow” earrings, the lacquer hoops swaying at the ears resemble leaping flames, their flowing lines echoing ancient rhythms of life.“Looping Yi Red” bracelet, Concentric layers of red lacquer emulate traditional Yi patterns, encircling the wrist with auspiciousness and the resonance of history.“Spiral Spring Branch” hairpin, A touch of lacquer in the hair spirals upward like a newly sprouting vine, fixing in place the upward-growing posture of spring.

6. Conclusion

The project-based teaching reform of lacquer art courses oriented toward innovation and entrepreneurship transforms innovation and entrepreneurship education from an extracurricular supplement into an embedded and continuously optimized component of in-class teaching. The four-dimensional objective framework promotes a shift in the course from technique-centered training to comprehensive competence development. The spiral pathway connects classroom learning, project training, and outcome presentation, while project-based tasks, multi-dimensional assessment, and university–local collaboration provide systematic support for project incubation.

The practice of two national-level innovation and entrepreneurship projects shows that this framework not only improves students' craft skills but also strengthens their abilities in problem analysis, user insight, and team collaboration, thus effectively promoting the transformation of classroom work into high-level projects and cultural and creative products.

Future research can be deepened in several aspects: expanding the application of this model to other specialties and traditional crafts; introducing more rigorous effectiveness evaluation tools; strengthening cross-faculty collaboration and university–enterprise cooperation; and exploring the applicability of project-based teaching models in various traditional craft courses. By integrating digital technologies and social practice, lacquer art courses can further enhance their function in serving regional cultural revitalization and industrial development.

Disclosure statement

The author declares no conflict of interest.

References

[1] Zhang G, Liu J, 2020, Research on Innovation and Entrepreneurship Education for Visual Communication Design Majors. Reference for Middle School Political Teaching, 12: 103.

[2] Li M, Jin Y, 2019, A Brief Exploration of Innovation and Entrepreneurship Education in Art and Design at Ethnic Universities. Journal of Yanbian University (Social Science Edition), 52(4): 111–116.

[3] Zhang H, 2023, Design Practice Oriented by the Inheritance and Innovation of Chinese Traditional Crafts. Packaging Engineering, 44(22): 5–11.

[4] Yuan Z, Jiang J, 2023, Development of School-Based Chemistry Curriculum Based on Excellent Traditional Chinese Culture: Printed and Dyed Textile Crafts. Chemistry Education (Chinese and English), 44(21): 23–34.

[5] Wang X, 2023, Upholding Tradition and Pursuing Innovation: Talent Cultivation Concepts and Practices in the Department of Arts and Crafts at the Academy of Arts and Design, Tsinghua University. Decoration, 2023(05): 16–17.

[6] Dong Z, 2022, The Necessity and Practical Path of Incorporating Traditional Arts-and-Crafts Education into the National Education System. Art Exploration, 36(03): 67–73.

[7] Han Z, 2019, Teaching Exploration of Innovation and Entrepreneurship Courses in Fiber Art: Taking "Innovation and Entrepreneurship Projects" in Environmental Design as an Example. Decoration, 2019(04): 132–133.

[8] Yang S, 2025, Cultural Codes in Yi Costume Patterns in the Chuxiong Area. Tiangong, 2025(25): 28–31.

[9] Bi J, 2017, Construction of a Goal-Oriented Teaching System for Basic Courses in Art and Design Majors at

Comprehensive Universities. Art Education Research, 2017(12): 144.

[10] Chen Y, 2025, Construction and Implementation of an Integrated Teaching Model for Traditional Lacquer. Tiangong, 2025(27): 125–128.

[11] Lu X, 2024, Development and Practice of Lacquer Art in Fine Arts Curricula in the Chengdu Region, thesis, Chengdu University.

[12] Li M, Huang Z, 2020, Practical Research on Applying Yangzhou Lacquer Techniques in Cultural and Creative Design Courses. Decoration, 2020(07): 124–125.

[13] Chai Y, Xiao X, 2018, Construction of a Management Model for College Students' Innovation and Entrepreneurship Training Programs: A Project Management Perspective. China University Teaching, 2018(2): 70–73.

[14] Li H, Yang M, He G, et al., 2025, Modern Translation and Innovative Practice of Yi Cultural Symbols: A Case Study of the "Fire and Tiger" Themed Tea Set Design Series. Shanghai Packaging, 2025(08): 37–39.