



Exploration and Practice of Art Experimental Teaching System in Comprehensive Universities in the Context of “New Liberal Arts” Construction: A Case Study of the Arts College of Sichuan University

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Abstract. This paper identifies the advantages of reforming undergraduate art experimental teaching in comprehensive universities in the context of new liberal arts construction. Three approaches are proposed to address the two core issues of undergraduate art education—the need for multidisciplinary integration and the cultivation of cultural confidence—in new liberal arts construction: the absorption of interdisciplinary knowledge for art teaching in the process of industry-academia-research integration; the art empowerment of other disciplines; the construction of aesthetic education that combines practice, interaction, and experience. Taking the Arts College of Sichuan University as an example, the paper introduces the specific measures and effects of experimental teaching system reform.

Keyword: new liberal arts · art discipline · experimental teaching

1 Introduction

China implements the Program of New Liberal Arts Construction, aiming to cultivate liberal arts talents with innovative spirit and ability [1]. The program endows the art profession and discipline with new roles and missions. For one thing, it is necessary to educate people in artistic and aesthetic ways. For another, it is essential to incorporate interdisciplinary knowledge into undergraduate art and design teaching in the process of industry-academia-research integration, thus vertically and horizontally enhancing the art and design undergraduates’ abilities in artistic innovation and achievement transformation. Multidisciplinary integration is a vital approach to new liberal arts construction. Compared with professional art institutes, the art discipline in comprehensive universities, thanks to multidisciplinary support and interaction, is more qualified and capable to undertake the important task of exploring and constructing an innovative mode of art talent training from the perspective of new liberal arts construction [2–4].

2 The Core of New Liberal Arts Lies in Multidisciplinary Integration and Aesthetic Education Construction

New liberal arts construction has put forward new requirements for undergraduate liberal arts teaching. After a great deal of research, the educators have reached a consensus to address the two core issues of new liberal arts construction as follows: 1. Knowledge integration between liberal arts and other disciplines in undergraduate teaching; 2. The infusion of humanistic heritage and the cultivation of cultural confidence among undergraduates [2–8].

As a comprehensive university, Sichuan University boasts the advantage of integrating liberal arts, science, engineering, and medicine. To resolve the above two core issues, Sichuan University has resorted to the National Experimental Teaching Demonstration Center of Liberal Arts and the teaching and research units on and off campus in a dozen disciplines led by Arts College. From the three dimensions of experimental teaching, art research, and achievement transformation, the university has supported an innovative experimental teaching system based on institutional guarantee, teaching achievement award, experimental hardware and practice base construction, experimental teaching projects, textbook construction, and interactive exhibitions of aesthetic education (as shown in Fig. 1). Furthermore, exploration has been carried out in the following three aspects:

1. How do we absorb interdisciplinary knowledge for art teaching in the process of industry-academia-research integration, thus vertically and horizontally enhancing the abilities in artistic innovation and achievement transformation of art undergraduates at comprehensive universities? According to the target, orientation, levels, and characteristics of art undergraduate training in the double first-class comprehensive university, Sichuan University has explored the construction of a new art experimental teaching system from interdisciplinary and industry-academia-research dimensions, forming a trinity of “art research”, “experimental courses”, and “achievement transformation” to improve art undergraduates’ abilities to innovate and create.

2. How do we empower liberal arts, science, engineering, and medicine with art, thus enhancing the knowledge innovation ability of undergraduates of all disciplines at comprehensive universities? Sichuan University has implemented the spirit conveyed by the Ministry of Education in the video work conference of December 2020. Adhering to the mission of art education, the university has explored the art empowerment of liberal arts, science, engineering, and medicine and developed an experimental teaching system of art-thinking orientation and interdisciplinary knowledge integration and transformation to improve all undergraduates’ ability to innovate knowledge.

3. How do we integrate practice, interaction, and experience in art teaching, thus enhancing the aesthetic ability and instilling the humanistic spirit among undergraduates at comprehensive universities? Sichuan University has implemented the relevant spirit and instructions of the Ministry of Education on strengthening aesthetic education in colleges and universities. To be specific, it has explored the integration of comprehensive aesthetic education elements, including practice, interaction, and experience, as well as operation, immersion, and locality, into experimental teaching, forming

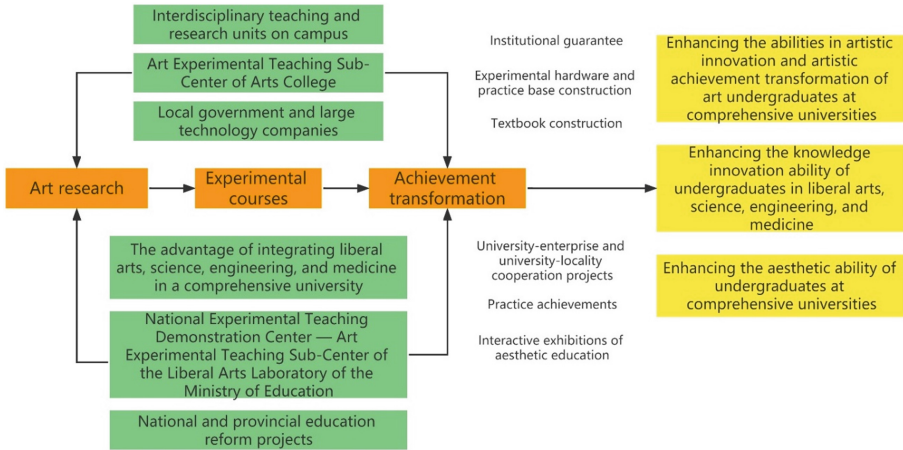


Fig. 1. Experimental Teaching System of the Arts College of Sichuan University

an innovative experimental teaching system for aesthetic education that combines theories, skills, and transformation to improve the aesthetic ability and instill the humanistic spirit among all undergraduates.

3 Specific Measures

To solve the above teaching issues, the Arts College of Sichuan University has established an art experimental teaching system intended for a comprehensive university. Through ten years of exploration, the teaching team has built four structures and realized four crossovers. On this basis, an undergraduate experimental teaching mode featuring the fusion between new liberal arts and other disciplines has been well practiced, laying the foundation of an experimental teaching system for cultivating innovative and versatile high-level talents to serve China and especially the west.

The four structures include the National Experimental Teaching Demonstration Center which combines theoretical research, art product development, and art achievement transformation, an experimental teaching mode that focuses on “art research”, “experimental courses”, and “achievement transformation”; 22 professional and general course groups that involve multiple disciplines and majors, and an innovative experimental teaching system for aesthetic education that integrates practice, interaction, and experience.

The four crossovers include the expertise blend in art categories; the integration of art theoretical research, art creation, and social transformation of art achievements; the fusion between art and liberal arts, science, engineering, and medicine; the cooperation in achievement development and transformation between the university and the local government or technology enterprises.

3.1 Introducing an Interdisciplinary Knowledge System for Art Experimental Teaching in the Process of Industry-Academia-Research Integration

A teaching structure of art research, experimental courses, and achievement transformation has been established to enhance the abilities to innovate and transform achievements among art undergraduates at the comprehensive university. Specifically, Sichuan University has brought art research achievements into art experimental platforms, guiding its undergraduates to use its multidisciplinary experimental teaching resources to develop products. Besides, the university has set up industry-academia-research cooperation projects and built teaching practice bases with more than 20 organizations, including the government, enterprises, and research institutes.

An interdisciplinary experimental teaching system has been established to upgrade the interdisciplinary knowledge structure of art undergraduates at the comprehensive university. Sichuan University has created platform courses in humanities and art, and interdisciplinary theory and practice courses for art majors. It has laid the foundation for new liberal arts experimental teaching reform and integrated art majors. With the support of its 7 national experimental centers, the university has offered art public courses and experimental projects that combine different disciplines such as “art + medicine”, “art + information”, “art + machinery”, “art + cognitive science”, and “art + life science”. At the same time, the university has organized 12 teaching and research units on campus to collaboratively design innovative joint training schemes, offer interdisciplinary majors or directions, introduce elite mentorship, and work out an industrial training plan that integrates elite creation and guidance (Fig. 2).

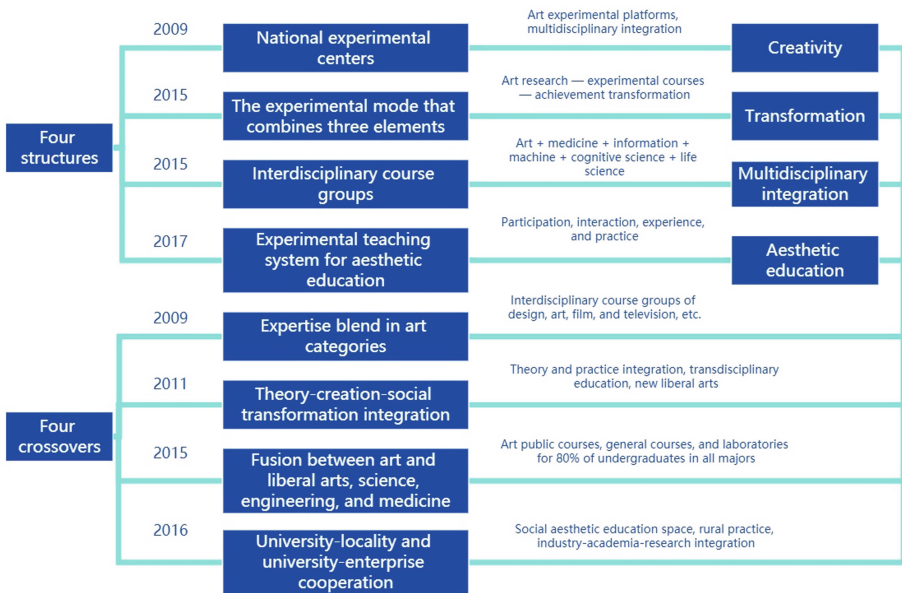


Fig. 2. Four Structures and Four Crossovers

3.2 Constructing an Interdisciplinary and Transdisciplinary Experimental Teaching System of Knowledge Integration and Transformation to Enhance the Knowledge Innovation Ability of All Undergraduates

A total of 22 university-level platform courses, 10 core general courses, and 14 art general courses have been offered to enhance the knowledge innovation ability of undergraduates at the comprehensive university. Over the past nine years, Arts College has empowered liberal arts, science, engineering, and medicine by creating art general course groups that cover 80% of undergraduates at Sichuan University, so as to improve all undergraduates' abilities to integrate, deepen, and innovate knowledge. Artistic imagination has become an effective tool to promote the knowledge innovation of other disciplines.

A collaborative creative space for experimental teaching open to liberal arts, science, engineering, and medicine has been established. Through the National Experimental Teaching Demonstration Center, Sichuan University has created a "24/7 collaborative creative space" for all undergraduates to support interdisciplinary experimental teaching, innovative training, and scientific research. It has also formed an instructor team composed of multidisciplinary teachers and support staff to guarantee undergraduates' independent experiments. Furthermore, experimental facilities, technical equipment, and teaching methods for artistic creation have served as approaches to empower liberal arts, science, engineering, and medicine undergraduates' abilities in knowledge innovation, achievement transformation, and interdisciplinary research.

Policy resources have been used to promote teaching through competitions and research. Sichuan University has incorporated teacher instruction for academic innovation as an assessment index and created a multidisciplinary instructor team with more than 10 units on and off campus to encourage undergraduates to form interdisciplinary groups to participate in competitions. Undergraduates have been supported to declare vertical research projects independently, and to participate in faculty research projects as project team members.

3.3 Promoting Participatory, Interactive, Experiential, and Practical Art General Education on the History of Revolution at Sichuan University to Enhance the Aesthetic Ability and Instill the Humanistic Spirit Among Undergraduates at this Comprehensive University

Through deeper exploration of the tradition of revolution, Sichuan University has provided a series of art exhibitions on the history of revolution to form the unique system and characteristics of related aesthetic education at Sichuan University. Taking a communist heroine called Jiang Zhujun as an example, the university has dug deeper into the revolutionary history and martyrs' deeds and promoted participatory, interactive, experiential, and practical art general education on the history of revolution by means of theatrical performances, artistic creations, and art exhibitions.

An educational system of traditional Chinese culture has been developed for all undergraduates to cultivate inheritors and promoters of Chinese culture. Based on culture and art platform courses and core general courses of Sichuan University, efforts have been made to strengthen liberal arts, science, engineering, and medicine undergraduates' understanding of excellent traditional Chinese culture and to cultivate artistic innovators

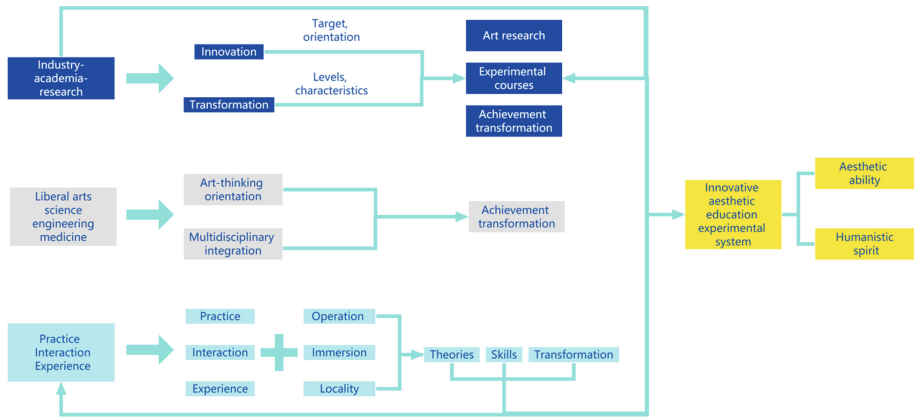


Fig. 3. Innovative aesthetic education experimental system

and creators with a Chinese cultural stance, Chinese traits, Chinese thinking, and the ability to tell good Chinese stories.

Art popularization salons, art exhibitions, aesthetic education lectures, and other forms of aesthetic education activities have been organized facing the whole society. Joint endeavors have been made on public construction, including the “Community Aesthetic Education Space” of the Chengdu Municipal Government and the Program of University Alliance in Chengdu-Chongqing Economic Circle. Meanwhile, undergraduates have been led to carry out artistic practice activities in communities and villages a dozen times, leading to stronger awareness and capability of serving society during such community aesthetic education activities (Fig. 3).

3.4 Building Art Experimental Teaching Hardware Platforms that Combine Theoretical Research, Product Development, and Achievement Transformation and Launching Achievement Transformation Projects Based on the National Experimental Teaching Demonstration Center of Arts College, with the Government, Institutions, and Enterprises

The hardware construction of art experimental teaching platforms has been strengthened. For over ten years, more than 20 million yuan has been invested in the construction of 1,296 square meters. A number of special construction projects funded by the government have been formed and approved, including the 985 undergraduate laboratory construction project, the special fund of the central financial purchase and repair plan, the national special fund for entrepreneurship and innovation, and the central special fund for improving universities’ basic conditions. Besides, the university has established the Experimental Center for Art and Cognitive Science, the Art Museum of Sichuan University, the Imaging Experimental Center, and various art creation and product R&D spaces.

Strategic cooperation projects for art experimental teaching have been established with the local government, large enterprises, and universities nationwide to provide

experimental teaching featured by industry-academia-research integration. In collaboration with enterprises, Sichuan University has built 13 research and teaching laboratories and training bases, on which basis enterprise instructors and the university's teaching team have worked out experimental teaching schemes according to the latest scientific and technological developments. With the assistance of more than 10 domestic and foreign universities or research institutes, Sichuan University has established joint undergraduate graduation design programs and joint art experimental teaching collaboration programs. At the same time, in cooperation with the local government and public institutions, the university has carried out achievement research, development, and transformation activities such as artifact development and digital protection and the exhibition of cultural relics.

The construction of the teaching team, institution, and textbooks for art experimental teaching platforms has been improved. Through internal training and external attraction, Sichuan University has formed an undergraduate experimental teaching team of 31 people with high professional titles, high academic degrees, and multidisciplinary backgrounds, and 16 teams of enterprise instructors outside the university. By means of detailed investigation, design, and demonstration, the university has established a scientific and reasonable undergraduate experimental teaching program. Meanwhile, the university has actively encouraged and organized the teaching team to design 65 experimental projects and compile 170,000 characters of experimental lecture materials and 11 experimental textbooks, thus ensuring the availability of supporting resources for undergraduate experimental teaching. Furthermore, the university has set and improved 36 rules and regulations for undergraduate experimental teaching to provide an institutional guarantee for integrating art and science into teaching.

4 Conclusion

Through seven years of practice and three years of verification, the art experimental teaching system has yielded certain application effects and facilitated Innovation I of the industry-academia-research and interdisciplinary experimental teaching system: to build an interdisciplinary art experimental teaching system featuring industry-academia-research integration in the art discipline at a double first-class comprehensive university. To be specific, Sichuan University has vertically and horizontally enhanced art undergraduates' abilities in art innovation and art achievement transformation, that is to serve the economy, culture, and society in western China. Besides, the university has constructed an experimental teaching system for interdisciplinary knowledge integration and transformation to improve the knowledge innovation ability of undergraduates at this comprehensive university. The art experimental teaching system has also facilitated Innovation II of the experimental teaching system for aesthetic education: to build an aesthetic education experimental teaching system on the history of the revolution with the characteristic of Sichuan University as a double first-class university. In this aspect, Sichuan University has promoted participatory, interactive, experiential, and practical art general education on the history of revolution and dug deeper into the tradition of revolution to create related art exhibitions with the university's unique characteristics, thus forming an aesthetic education system on the history of the revolution with moral

values. Through traditional cultural education, the university has endeavored to cultivate the bearers of Chinese culture. Lastly, the art experimental teaching system has facilitated Innovation III of art experimental teaching platforms: to build art experimental teaching platforms of industry-academia-research integration and university-enterprise collaboration, which combine theoretical research, art product development, and art achievement transformation. In this regard, Sichuan University has created hardware platforms, teaching teams, institutions, and textbooks for art experimental teaching based on the combination of classrooms, experimental platforms, and practice, and of practical training bases and joint practice projects. The university has also worked with other units to establish strategic cooperation projects and develop industry-academia-research teaching programs.

The art experimental teaching system is of great value for deeper exploration. The author and his unit will continue to reform and innovate in an effort to promote new liberal arts construction in the art discipline of Sichuan University.

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