

# Research on the Collaborative Education of Science and Education Integration in Art Applied Universities Based on the Background of New Liberal Arts

Weien Feng

Shanghai WEIEN Education & Technology, Shanghai 200050, China

---

**Abstract:** In the context of the construction of new liberal arts, applied art universities are facing urgent needs for educational reform and innovation. The integration of science and education and collaborative education, as a new educational model, is of great significance for cultivating innovative talents and promoting the deep integration of art education and technology. The aim of this study is to explore how applied art universities can utilize AI and multimedia technology to achieve interdisciplinary, cross professional, and cross domain integration and collaborative education, in order to adapt to the trend of education reform in the new era, improve the quality of education and teaching, and cultivate more high-quality art talents that meet social needs.

**Keywords:** New liberal arts; Art oriented applied universities; Integration of Science and Education and Collaborative Education

---

## 1. Introduction

In the context of the construction of new liberal arts, applied art universities are facing unprecedented development opportunities and challenges. The traditional art education model is no longer suitable for the diversified and high-level needs of talent cultivation in the new era. Therefore, exploring a new path of integrating science and education for collaborative education is particularly urgent. The integration of science and education, as an innovative educational concept, emphasizes the deep integration of scientific research and educational teaching. Through scientific research leading teaching, teaching feeds back scientific research, and forms a positive interaction. For applied art universities, the integration of science and education can not only enhance students' artistic literacy and creative ability, but also cultivate their innovative thinking and practical abilities, thus better serving the development of social culture and the art industry.

## 2. Educational Reform of Science and Education Integration and Collaborative Education in Applied Art Universities

### 2.1 Establishing new goals for classroom teaching

In traditional art education, classroom teaching often focuses on imparting knowledge and training skills, but in the context of new liberal arts, this teaching method is no longer able to meet the diverse needs of society for artistic talents. Therefore, applied art universities must change their educational concepts and establish new goals for classroom teaching. This includes:

(1) Cultivate students' innovative thinking and creativity. Art courses should encourage students to unleash their imagination and dare to try different forms of artistic expression, in order to cultivate artistic talents with innovative spirit and creativity.

(2) Enhance students' cultural literacy and aesthetic ability. Art education is not only about skill education, but more importantly, it cultivates students' cultural literacy and aesthetic ability. By introducing diverse cultures, art history, art criticism, and other content, we aim to help students develop comprehensive artistic literacy.

(3) Strengthen students' practical abilities and social adaptability. Art education should be closely integrated with social practice, by participating in activities such as social practice and art projects, to enhance students' practical and social adaptation abilities.

## **2.2 Cultivating practical abilities of college students**

Practice is the only criterion for testing truth, and it is also an important way to cultivate students' practical ability and innovative spirit. Applied art universities should strengthen practical teaching to provide students with more practical opportunities and resources. Specifically, the following measures can be taken:

- (1) Establish practical bases both on and off campus. Cooperate with enterprises, institutions, cultural and artistic institutions, etc., establish stable practical bases, and provide students with opportunities for internships, practical training, etc.
- (2) Carry out a variety of artistic practice activities. Encourage students to participate in various art competitions, exhibitions, performances, and other activities to enhance their organizational, planning, and implementation abilities.
- (3) Strengthen the management and evaluation of practical teaching. Develop a practical teaching outline and evaluation standards, strengthen supervision and management of practical teaching processes, and ensure the quality and effectiveness of practical teaching.

## **2.3 Promoting Education Reform in the New Era**

Applied art universities should adapt to the trend of educational reform in the new era and actively promote the deepening of educational reform. This includes:

- (1) Improve talent training programs. Adjust and improve talent training programs in a timely manner according to the changing demand for artistic talents in society, ensuring the pertinence and effectiveness of talent training.
- (2) Strengthen the construction of teaching staff. Introduce and cultivate a group of excellent teachers with high-level artistic literacy and educational abilities, and build a high-quality teaching staff.
- (3) Deepen industry university research cooperation. Strengthen connections and cooperation with the industry, promote deep integration of industry, academia, and research, and achieve sharing of educational resources and complementary advantages.
- (4) Promote the informatization and internationalization of education. Utilize modern information technology to promote the process of educational informatization; Strengthen exchanges and cooperation with international art education, and enhance the international influence of applied art universities.

## **3. Thoughts on Promoting the Construction of a Collaborative Education System for Science and Education Integration in Applied Art Universities**

### **3.1 Interdisciplinary Science and Education Integration Collaborative Education**

In the current context of new liberal arts, applied art universities urgently need to break through traditional disciplinary boundaries and achieve interdisciplinary knowledge integration and innovation. With the rapid development of AI and multimedia technology, we can build a more open and diverse learning environment for students.

#### **3.1.1 Using AI and multimedia technology to break down disciplinary barriers**

By introducing intelligent teaching systems and interactive multimedia tools, students can be exposed to knowledge from other disciplines such as computer science, psychology, sociology, etc. while learning art. This interdisciplinary learning method not only enriches the connotation of artistic creation, but also cultivates students' diverse thinking and problem-solving abilities.

#### **3.1.2 Design and implementation of interdisciplinary innovation courses and projects**

Universities should design a series of interdisciplinary innovative courses and projects to encourage students to explore art from different disciplinary perspectives. For example, a course on the integration of art and technology can be offered, allowing students to practice how to apply AI technology to artistic creation while learning art theory. In addition, organizing interdisciplinary practical activities and competitions can further stimulate students' innovative spirit and teamwork awareness.

### **3.2 Cross disciplinary Science and Education Integration Collaborative Education**

In the current context of new liberal arts, applied art universities are facing new challenges in cultivating versatile talents. Cross disciplinary integration of science and education and collaborative education has become one of the important directions of educational reform.

#### **3.2.1 Cross disciplinary teaching practice based on AI and multimedia technology**

The cross disciplinary teaching practice based on AI and multimedia technology not only breaks the barriers between traditional disciplines, but also provides students with a diversified learning platform. Through this practice, students can freely shuttle between different professional fields, seek inspiration and creativity, and thus cultivate more comprehensive and in-depth artistic literacy.

#### **3.2.2 Construction of cross professional cooperative education platform**

At the same time, the construction of a cross disciplinary collaborative education platform is also crucial. This platform can gather high-quality teaching resources from various majors, achieve resource sharing and complementary advantages. Project cooperation

and course exchange activities on the platform can not only promote the comprehensive development of students, but also strengthen communication and collaboration between different majors, forming a closer educational community.

### **3.3 Cross disciplinary Science and Education Integration Collaborative Education**

In today's era, education in applied art universities is no longer limited to traditional art fields, but actively integrates with other fields to cultivate more outstanding talents with cross-border innovation capabilities. Cross disciplinary integration of science and education and collaborative education is an important educational strategy in this context.

#### **3.3.1 Combining AI and multimedia technology to introduce cutting-edge industry knowledge**

By combining AI and multimedia technology, universities can introduce cutting-edge knowledge from various industries, allowing students to understand the development trends and innovation points of other fields while learning art. This cross-border integration of education methods not only helps to broaden students' horizons, but also stimulates their innovative thinking and cultivates talents with diverse abilities.

#### **3.3.2 School enterprise cooperation to achieve deep integration of education and industry**

School enterprise cooperation is also an effective way to achieve cross disciplinary integration of science and education and collaborative education. Through deep cooperation with related industries, universities can more accurately grasp market demand, adjust education direction, and cultivate applied talents that better meet social needs. At the same time, students can also gain a deeper understanding of industry operations through practice, improving their practical abilities and professional qualities.

## **4. Conclusion**

In the context of the construction of new liberal arts, applied art universities are facing unprecedented opportunities and challenges. This study focuses on the integration of science and education and collaborative education, exploring new directions and practical paths for applied art universities in educational reform. By setting new goals for classroom teaching, cultivating practical abilities of college students, and promoting educational reform in the new era, universities can gradually build a cross disciplinary, cross professional, and cross disciplinary integrated education system.

By utilizing AI and multimedia technology, we can break down disciplinary barriers, promote the implementation of innovative courses and projects, and enable students to gain more comprehensive ability development in interdisciplinary learning. At the same time, cross disciplinary integration of science and education promotes communication and cooperation among students and cultivates their teamwork skills through teaching practice and the construction of educational platforms. Cross disciplinary integration of science and education deeply integrates education and industry, by introducing cutting-edge industry knowledge, achieving school enterprise cooperation, and laying a solid foundation for students' future career development.

## **References:**

- [1] Han Zhen. Research on the Teaching Reform of Environmental Art and Design Majors in Applied Universities and the Collaborative Education Model of Government, Industry, University and Research under the Background of New Liberal Arts [J]. Leather Production and Environmental Protection Technology, 2021, 2 (8): 2
- [2] Tan Qianjin, Liu Guangdong, Qi Xue. Research on the Training Model of Applied Talents in Economics and Management Based on Multivariate Collaboration in the Context of New Liberal Arts [J]. University: Teaching and Education, 2023 (6): 185-188
- [3] Jiang Fangyuan, Wu Chunlei. Research on the Training Model of Applied Talents in Art Majors Based on the Integration of Industry and Education and Collaborative Education [J]. Modern Commerce and Industry [2024-03-27]
- [4] Liu Yuzhe. Exploration of Teaching Reform in the Course of Art and Design in Applied Universities under the Background of New Liberal Arts Construction -- Taking Illustration Design as an Example [J]. Hebei Pictorial, 2021, 000 (024): P.236-238
- [5] Zhang Nan Research on the Talent Training Model of "Integration of Art and Design" in Applied Universities under the Background of "New Liberal Arts" [J]. Hunan Packaging, 2021, 36 (5): 164-166