

# Research on the Integration and Innovation Development of College Physical Education and Aesthetic Curriculum under the Background of Digital Transformation

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**Abstract:** Under the background of “five education integration,” the integration of sports and aesthetic education in colleges and universities not only meets the requirements of education reform but also is an important fitting point to cultivate students’ comprehensive quality and promote the development of students’ physical and mental health. Under the digital background, the rapid development of information fusion for physical education and aesthetic education in colleges and universities has brought new opportunities. Work in colleges and universities should actively promote educational reform, innovating teaching modes, and optimizing the campus sports culture. Therefore, colleges and universities should combine the characteristics of national policy, education, and student demands to actively explore aesthetic education in sports teaching, improve the university sports teaching quality, and enhance students’ quality.

**Keywords:** College sports aesthetic education teaching; Education reform; Digital background

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## 1. Introduction

Amid ongoing educational reforms, colleges and universities increasingly emphasize students’ overall educational quality. Unlike traditional educational concepts, focusing on cultivating students’ comprehensive skills aligns with the demands of the digital age. Within this context, integrating physical education with aesthetic education in college curricula not only supports institutional educational goals but also meets societal needs. Physical education primarily aims to enhance students’ physical fitness, while aesthetic education focuses on developing students’ aesthetic awareness and sensitivity. These areas are interrelated and mutually reinforcing. In college sports instruction, teachers should blend physical and aesthetic

education, introducing diverse content and teaching methods to foster students' comprehensive development.

## **2. The relationship between college physical and aesthetic education in the context of digitalization**

Guided by the “education and” concept, merging college physical education and aesthetic education can meet society's demand for well-rounded talent in the digital age. This integration also reflects the evolving standards and content of a modern educational system <sup>[1]</sup>. With the rapid development of society, sports culture is experiencing a period of significant growth. In college sports curricula, teachers should focus on enhancing students' physical fitness and strengthening their athletic abilities. To achieve this, educators should consider students' age, educational characteristics, and individual needs to develop well-rounded educational goals and introduce innovative teaching methods. This approach will help to deepen the integration of physical education and aesthetic education. Additionally, in terms of activity type, sports not only strengthen students' physical fitness but also serve as a vehicle for moral and aesthetic education. Integrating these aspects can highlight the distinctiveness of this approach compared to traditional sports teaching methods, showcasing the unique value of combining physical education with aesthetic education <sup>[2]</sup>. Through the integration of sports and aesthetic education, college teachers can effectively improve students' physical fitness, improve their aesthetic sentiment, and realize their all-round development.

## **3. Digital aesthetic education and the integration of innovation and development in college sports curricula**

### **3.1. Supporting the concept of five-education integration in higher education**

Amid the era of digital transformation, sports education in colleges and universities has entered a stage of high-quality development. Physical education has evolved from traditional methods to focus on cultivating well-rounded talents in morality, intelligence, physical fitness, and the arts. Physical and aesthetic education, as essential parts of college curricula, play a crucial role in developing students' comprehensive skills. Sports, as a form of physical and mental activity, not only enhance students' physical fitness but also foster willpower and teamwork. Aesthetic education, through exposure to art and cultural activities, effectively enhances students' cultural understanding and values <sup>[3]</sup>. The integration of these two disciplines allows them to complement each other, promoting students' holistic physical and mental growth and achieving a balanced approach to moral, intellectual, physical, and aesthetic education.

### **3.2. Facilitating the deepening of physical education reform**

In 2021, the Ministry of Education issued the Sports and Health Teaching Reform Guidelines (Trial), which highlight the need for colleges and universities to further reform teaching by developing a scientific, reasonable, and effective model for physical education curricula. These guidelines encourage students to appreciate the appeal of sports, experience the enjoyment, and build physical fitness, resilience, and a healthy personality. In the digital transformation era, the goal of university sports education has shifted from simply enhancing physical fitness to cultivating students' overall qualities. This transformation reflects the integration of sports and aesthetics, supporting the deeper reform of physical education in higher education institutions <sup>[4]</sup>.

### **3.3. Promoting development in the new era**

In the context of the digital age and accelerating economic globalization, society and the market place higher demands on the talent cultivated by colleges and universities. Traditional teaching methods in aesthetic and physical education can no longer fully meet the evolving needs of the times and industry changes. Therefore, universities must adopt a scientific, comprehensive approach in talent development suited to the current era <sup>[5]</sup>. As key institutions in modern education, universities not only bear the responsibility of providing professional talent to society but also play a pivotal role in advancing educational progress. In the new educational landscape, there is growing attention from the state and society to sports education. Universities uphold the concept of “heart” physical education, guiding students to master fundamental sports knowledge and skills while enhancing their overall abilities and qualities <sup>[6]</sup>.

## **4. Challenges in integrating aesthetic and physical education curricula in colleges and universities**

### **4.1. Lack of comprehensive educational concept**

Historically, colleges and universities have focused on “strengthening physical fitness and promoting health” as the primary goal of physical education to develop talent. However, as educational reforms continue, quality education has become the core focus for schools. Quality education not only aims to cultivate students’ comprehensive skills but also emphasizes the development of their moral, physical, and psychological well-being. Physical education, as a course that enhances physical fitness and sports skills, is rich in educational value and closely linked to aesthetic education. Yet, due to outdated educational concepts, some institutions do not fully recognize the importance of integrating sports with aesthetic education, making it difficult to fully realize the aesthetic value within college sports programs <sup>[7]</sup>.

### **4.2. Insufficient teacher competency**

Teachers play a critical role in executing the integration of sports and aesthetic education, and their educational level directly impacts the effectiveness and quality of this integration. To successfully teach sports and aesthetic education, teachers need four essential qualities: excellent professional skills, high professional standards, profound theoretical knowledge, and strong forward-thinking awareness <sup>[8]</sup>. These factors are crucial for enhancing students’ overall abilities and quality. However, in the traditional teaching system, some teachers have followed a standardized teaching approach without focusing on improving their abilities and fostering innovative thinking. This has negatively impacted both teaching quality and outcomes.

### **4.3. Incomplete course system**

Under the guidance of the concept of quality education, some universities have gradually recognized the importance of aesthetic education in sports teaching. However, the existing course system still has significant shortcomings. Firstly, the content of the sports and aesthetic education curriculum lacks clarity. Currently, aesthetic elements are often incorporated into sports teaching without aligning them with the characteristics of the era or conducting case analysis and exploration. As a result, students struggle to understand the fusion of sports and aesthetics, making it difficult to achieve the goal of comprehensive education <sup>[9]</sup>. Secondly, the teaching design is not sufficiently well-structured. In sports and aesthetic education, teachers should not only focus on improving students’ physical fitness but also enhance their aesthetic awareness and understanding

during physical activity. This requires teachers to design teaching content, methods, and objectives in a scientifically sound and reasonable manner.

#### **4.3.1. Optimize the teaching staff and improve integration quality**

Firstly, it is essential to improve teachers' internet literacy. With the rapid advancement of digital transformation and the increasing application of Internet technology in classroom teaching, teachers must enhance their digital skills. In addition to optimizing the teaching staff, universities should focus on guiding teachers to continually update their teaching ideas and innovate their teaching methods to improve both teaching quality and effectiveness.

To achieve this, colleges and universities should align with the times and address student needs by cultivating teachers' internet thinking <sup>[10]</sup>. This approach will help teachers keep pace with the rapid developments in education. For instance, universities could organize training sessions and seminars centered around "Internet Thinking," encouraging teachers to participate. This would allow them to fully understand the profound changes brought about by Internet technology and its significance for educational and teaching practices, particularly in physical education. Through such training, teachers can shift their traditional teaching mindset, enhance their understanding of Internet technology, and better utilize it to integrate aesthetic education into sports teaching.

Secondly, enhancing teachers' aesthetic literacy is essential. Teachers are the key figures in teaching sports and aesthetic education in colleges and universities and serve as guides for students' learning. Physical education (PE) teachers not only need to impart knowledge and develop students' sports abilities but also nurture their aesthetic and artistic cognitive skills. Teachers' aesthetic qualities play a crucial role in promoting students' overall development.

To address this, colleges and universities should improve teachers' aesthetic literacy through various methods and help them recognize the value and significance of integrating sports and aesthetic education. First, teachers should actively seek to accumulate knowledge related to aesthetic education theory, continuously enrich their own aesthetic experiences, and enhance their aesthetic abilities. They should challenge themselves to notice beauty in everyday life and improve their capacity for perception and expression, thereby elevating their aesthetic accomplishment <sup>[11]</sup>.

Second, universities can organize art-related activities, such as visits to art exhibitions and concerts, to spark teachers' interest in the arts and improve their aesthetic appreciation. Third, colleges and universities can create platforms for teachers to exchange ideas about aesthetic education. This would allow them to share teaching experiences and materials, learn from one another, and ultimately improve their overall level of aesthetic education.

#### **4.3.2. Improve the curriculum system and focus on teaching connections**

In the modern education system, society and industry are placing increasing emphasis on cultivating interdisciplinary talents. Against this backdrop, the concept and practice of interdisciplinary teaching have gained significant attention in the field of education <sup>[12]</sup>. In the process of aesthetic education in sports teaching, college instructors should refine the classroom system by setting clear educational goals and integrating interdisciplinary teaching methods. This will enhance various aspects of the teaching process.

The first approach involves using a "physical education and aesthetic education" teaching model.

A modular teaching approach not only ensures the effectiveness of sports education but also enables the integration of aesthetic education. For example, in a long-distance run test, teachers can incorporate fitness apps and tailor them to the student's needs by pairing different music with their activities. This helps students experience beauty through rhythm, appreciate beauty, and even create beauty. The second approach involves incorporating a variety of sports practices and including elements of dance. This can enrich the student's learning experience, blending movement and art to further enhance the aesthetic aspect of sports education <sup>[13]</sup>.

For example, teachers can guide students in creating sports dances and organizing a campus sports dance competition, where sports and dance art are closely integrated. This combination showcases the artistic and harmonious aspects of sports, helping students appreciate the charm of sports and further boosting their interest in learning. The third aspect, college teachers should fully utilize classroom evaluations. Specifically, teachers need to design a specific and scientific evaluation system based on the teaching objectives in physical education. Moreover, in practice, teachers should assess students' techniques, actions, and beauty as a whole <sup>[14]</sup>. For instance, teachers can encourage students to participate in sports club competitions and organize an online voting system where students and faculty select the "most beautiful players." This approach not only boosts students' confidence and sense of achievement but also nurtures their awareness of discovering and creating beauty. Integrating aesthetic education into physical education teaching can stimulate students' enthusiasm, enhance the appeal of sports, and encourage them to deepen their understanding and appreciation of art. This process improves their perception of beauty, both in sports and in their bodies.

#### **4.3.3. Innovation in the classroom teaching model for achieving comprehensive development**

In the context of digital transformation, the teaching model for college physical education is undergoing significant reform. With the rapid development of the internet and information technology, these tools have been widely applied in the field of education. On this basis, college teachers are making full use of information technology to establish online teaching platforms, guiding students to access online educational resources. This helps students acquire a broader range of physical education and aesthetic theory knowledge, ultimately enhancing their cognitive and comprehension abilities <sup>[15]</sup>.

At the same time, teachers can use the online learning system to create a platform for sports and aesthetic education, where they can upload previous course materials, learning resources, and explanatory videos. Students can then independently study these materials and complete the associated tasks. By integrating online platform teaching methods, teachers can access the latest sports knowledge and diverse approaches to integrating aesthetic education in sports. This also allows them to fully utilize various dynamic and rich teaching resources, guiding students to appreciate the charm and artistic beauty of physical education, ultimately boosting their enthusiasm for learning.

## **5. Conclusion**

In summary, in the context of digital transformation, colleges and universities offering sports and aesthetic education courses can meet society's demand for high-quality talents, while also reflecting the characteristics of the times. The integration of sports and aesthetic education not only enhances students' physical fitness but also improves their aesthetic taste and artistic character, thus promoting their overall development.

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