Research on the Reform of Sports and Aesthetic Education in Colleges and Universities under the Background of "Internet +"

Li Ying[1], Wu Hongyu[2], E Yan[3]

[1]Qingdao University of Science and Technology, Qingdao, Shandong, China
[2]Hubei Province, Yunyang District No.1 Middle School, Hubei, Shiyan, China
[3]Qingdao Badminton and Swimming Sports Management Center, Qingdao, Shandong, China

Abstract: *Against the backdrop of rapid advancements in internet technology, traditional models of higher education sports and aesthetics face numerous challenges and urgently require reform and innovation through "Internet+". Currently, the educational resources for higher education sports and aesthetics are limited, the teaching content is monotonous, student engagement is low, and the teaching effectiveness is unsatisfactory, severely constraining the enhancement of students' overall quality. This article analyzes the application of "Internet+" in education and proposes reform strategies for innovative teaching models in sports and aesthetics education based on internet technology, diversified integration and sharing of teaching resources, enhancement of faculty development and training, and promotion of student engagement and interest. Research indicates that the introduction of internet technology not only enriches the educational resources and forms of sports and aesthetics education but also stimulates students' interest in learning, improves teaching effectiveness, and promotes comprehensive development in higher education sports and aesthetics. This reform will inject new vitality into higher education, propel sports and aesthetics education towards greater diversity, intelligence, and personalization, thereby enhancing students' overall quality and competitiveness.*

Keywords: "Internet+"; higher education sports; reform studies

1. Introduction

The rapid advancement of internet technology has profoundly impacted various industries, particularly in the realm of education. Collegiate physical education and aesthetics, crucial for nurturing students' physical and mental well-being, are revealing the limitations of traditional teaching methods and urgently require comprehensive reform through the integration of "Internet+." In recent years, challenges such as limited resources, monotonous content, and low student engagement have hindered the adaptation of collegiate physical education and aesthetics to modern educational needs. The application of internet technology offers abundant teaching resources and novel methods, thereby enhancing the flexibility, interactivity, and personalization of educational models. Through "Internet+," it becomes feasible to transcend the temporal and spatial constraints of traditional teaching, achieve efficient utilization and sharing of educational resources, and promote the enhancement of teaching quality and equity in education. This paper aims to explore effective reforms in collegiate physical education and aesthetics under the backdrop of "Internet+," aiming to provide valuable insights and references for the educational sector. The study employs methods such as literature analysis, case studies, and surveys to analyze the current issues in collegiate physical education and aesthetics comprehensively. Corresponding reform strategies are proposed, aiming to enhance teaching effectiveness and students' comprehensive qualities through the application of internet technology.

2. The concept of "Internet+" and its application in education

The concept of "Internet+" as a developmental ideology of the new era refers to the deep integration of internet technologies across various industries, driving industrial transformation and innovation, thereby enhancing efficiency and creating new value. In the realm of education, "Internet+" represents not only the introduction of technological means but also a revolutionary educational philosophy aimed at breaking traditional educational boundaries and fostering a more open and flexible learning environment. Its application in education entails more than just digitizing educational content; it

comprehensively enhances the interactivity and personalization of teaching. The rise of online educational platforms enables the widespread dissemination of high-quality educational resources, transcending the constraints of time and space. Students can access knowledge anytime and anywhere via the internet, engaging in autonomous learning, significantly enhancing the convenience and flexibility of education. This transformation not only promotes equity and accessibility of educational resources but also caters to the individualized learning needs of diverse learners. Specifically within the realm of higher education in sports and arts education, the application of "Internet+" has brought profound changes to teaching models. Traditional approaches to sports and arts education primarily rely on classroom-based instruction, with relatively limited diversity in teaching content and methods, thus struggling to stimulate students' learning interests and engagement [1]. In contrast, the introduction of "Internet+" has enriched sports and arts education through virtual classrooms, online interactions, and data analysis. Virtual reality technologies simulate realistic sports and artistic environments, allowing students to immerse themselves in experiential learning, thereby enhancing the effectiveness of teaching. The use of big data enables precise analysis of students' learning situations, offering personalized teaching recommendations and feedback, further elevating teaching quality. Moreover, internet technologies facilitate the integration and sharing of educational resources. By establishing platforms for sharing sports and arts educational resources, teachers and students can easily access and distribute a variety of high-quality teaching materials, thereby improving resource utilization and diversifying teaching content. Concurrently, the interactive features of online educational platforms foster more frequent and profound communication between teachers and students, breaking away from the traditional unidirectional teaching mode and constructing a more egalitarian and open learning environment.

3. The main problems and challenges of the current sports and aesthetic education in colleges and universities

3.1. Limited teaching resources and single teaching content

In the context of "Internet+," the reform of higher education sports and aesthetic education is gradually becoming a focal point of attention. However, currently, both fields face numerous challenges, with the issue of limited teaching resources and monotonous curriculum content particularly prominent. The scarcity of teaching resources is a widespread problem in current higher education sports and aesthetic education. Many universities struggle due to insufficient funding and outdated infrastructure, making it difficult to provide adequate sports equipment and aesthetic facilities. This not only restricts students' choices in sports activities but also hinders comprehensive development of aesthetic courses. The lack of equipment significantly diminishes students' practical experience, thereby failing to effectively enhance their sports skills and aesthetic appreciation abilities. Furthermore, a shortage of teaching staff poses a major bottleneck. The deficiency of specialized teachers in sports and aesthetic education not only hampers efficient curriculum delivery but also directly impacts teaching quality. Many instructors often need to handle multiple courses simultaneously, making it challenging to conduct in-depth teaching research and innovation, thus resulting in suboptimal learning outcomes for students.Similarly, the issue of monotonous curriculum content urgently needs addressing in the reform of higher education sports and aesthetic education. Sports courses predominantly focus on traditional activities such as basketball, soccer, and table tennis, lacking innovation and diversity [2]. This narrow curriculum fails to ignite students' interest and passion in sports, let alone meet the personalized needs of diverse learners. Likewise, aesthetic courses suffer from a similar problem of limited content diversity. Many universities' aesthetic programs often center on basic art appreciation and rudimentary skills training, neglecting the cultivation of students' creativity and imagination. The curriculum mostly revolves around traditional arts like painting and music, with minimal exposure to emerging fields such as modern art and digital arts. Such a singular curriculum structure fails to comprehensively elevate students' artistic refinement and overall quality. In today's rapidly advancing internet era, the constraints of limited teaching resources and monotonous content in higher education sports and aesthetic education are increasingly urgent and pressing. While internet technology offers new possibilities for resource sharing and enriching curriculum content, current realities reveal notable lag. This not only impedes overall improvement in higher education sports and aesthetic education but also somewhat hinders students' holistic development and character building. Therefore, universities must undertake profound reflection and effective reforms in resource allocation and curriculum design to achieve comprehensive progress and innovative development in sports and aesthetic education under the backdrop of "Internet+".

3.2. Low student participation and unsatisfactory teaching effect

One of the primary issues currently facing arts and physical education in higher education institutions is the low level of student engagement and suboptimal teaching effectiveness. This phenomenon stems from various underlying reasons. Many universities' arts and physical education curricula lack allure, characterized by monotonous content and rigid formats that fail to ignite student interest. Traditional teaching methods such as running, calisthenics, or basic music and art classes no longer resonate with the diverse and personalized learning experiences that today's students prefer. Contemporary students seek customized and diverse educational experiences rather than uniform training and lectures. Furthermore, universities generally do not prioritize arts and physical education sufficiently, resulting in inadequate resource allocation and a shortage of qualified faculty. Many institutions' limited investment in these areas hampers the improvement of curriculum quality. Outstanding arts and physical education instructors require not only professional skills but also innovative teaching methods and strong interactive abilities. However, due to issues related to compensation and career prospects, many excellent educators are reluctant to engage in long-term commitments to such teaching roles, leading to significant attrition of teaching talent. The evaluation mechanisms employed by universities for arts and physical education also present challenges. Currently, students' academic performance remains the primary criterion for assessing their overall performance, often marginalizing arts and physical education. Consequently, students tend to prioritize subjects that directly impact their grades when selecting courses and participating in activities, thus overlooking the intrinsic value of arts and physical education. Additionally, students' engagement in arts and physical education is influenced by their familial and social environments. Some parents and students misunderstand the value of arts and physical education courses, perceiving them as secondary subjects not worthy of significant time and effort. Moreover, societal attitudes toward arts and physical education are not sufficiently supportive, resulting in a lack of extracurricular activities and practical opportunities related to these disciplines.

4. Reform Strategy of Physical Education and Aesthetic Education in Colleges and Universities under the Background of "Internet+"

4.1. Innovation of Physical Education and Aesthetic Education Teaching Mode Based on "Internet +"

Under the backdrop of the "Internet+" era, innovation in the instructional models of university sports and arts education has emerged as a pivotal direction for reform. Conventional teaching approaches, hampered by their lack of interactivity and diversity, struggle to meet the modern students' learning demands. Conversely, the innovation in instructional models driven by "Internet+" has ushered in unprecedented transformations and opportunities for sports and arts education. The integration of Virtual Reality (VR) and Augmented Reality (AR) technologies has significantly expanded the teaching space and experiential dimension of sports and arts education. Through VR technology, students can immerse themselves in various athletic activities and artistic scenes, heightening both the immersive learning experience and engagement. For instance, in sports education, students can undergo skill training and simulated matches in virtual sports settings, free from the constraints of physical venues and weather conditions. Similarly, in arts education, AR technology enables students to closely observe and analyze masterpieces such as paintings and sculptures, enriching their appreciation and understanding of art [3]. The rise of online education platforms has facilitated the widespread dissemination and sharing of high-quality educational resources. Teachers can deliver sports and arts education courses through live streaming or recorded sessions, transcending the limitations of time and space while enabling broader resource sharing. Students can access courses taught by renowned instructors via online platforms, participate in discussions, and engage in interactive sessions, thereby significantly enhancing their proactive learning involvement. This instructional model not only promotes equitable distribution of educational resources but also provides students with more opportunities for personalized learning. The introduction of Big Data and Artificial Intelligence (AI) technologies has made sports and arts education more scientific and precise. Through comprehensive data analysis, educators can gain insights into students' learning situations and preferences, tailoring personalized teaching plans accordingly. For example, data analysis can reveal students' strengths and weaknesses in specific sports or artistic forms, enabling targeted guidance and training. The application of AI technology facilitates intelligent recommendations of teaching content and real-time feedback on learning outcomes, thereby improving the efficiency and quality of education. Innovations in

instructional models under the "Internet+" framework have also fostered communication and collaboration among students. Through online platforms and social media, students can engage in cross-campus, cross-regional, and even international exchanges and collaborations, sharing learning experiences and achievements. This not only enriches students' learning experiences but also cultivates their teamwork and cross-cultural communication skills. In conclusion, the innovation in sports and arts education instructional models based on "Internet+" has injected new vitality and momentum into higher education. By leveraging technological advancements, these innovations not only enrich teaching content and methodologies but also enhance teaching effectiveness, promote resource sharing, and comprehensively elevate students' overall competencies. Such innovative models are poised to play an increasingly crucial role in the future development of education, propelling university sports and arts education to greater heights.

4.2. Integration and Sharing of Diversified Teaching Resources

Under the backdrop of the "Internet+" era, within the reform strategies of higher education sports and aesthetic education, the integration and sharing of diversified teaching resources emerge as pivotal concerns. Traditional educational resources, constrained by factors such as geography, economics, and equipment, often struggle to comprehensively meet the diverse needs of all students. This leads to disparities in educational resources and differentiated learning experiences among students. However, through the application of Internet technology, this situation has been effectively ameliorated. The integration of diversified teaching resources consolidates scattered and previously inaccessible high-quality resources onto unified platforms. Universities can upload their outstanding sports and aesthetic education courses to shared platforms, maximizing resource utilization. For instance, one institution's exemplary arts program can be accessed by students from other schools, thus breaking monopolies on resources and geographical barriers. This not only enhances the efficiency of resource utilization but also enables more students to access high-quality education, narrowing educational disparities. The establishment of shared platforms fosters exchanges and collaborations among educators. Through Internet platforms, teachers can share teaching experiences, curriculum designs, and instructional methodologies, mutually benefiting and enhancing a conducive atmosphere for educational research. Such inter-school and cross-regional cooperation not only enhances teachers' professional standards but also optimizes educational resource allocation, benefiting every student. Internet technology further diversifies and personalizes educational resources. By integrating high-quality educational resources from domestic and international sources, students gain exposure to sports and aesthetic education courses with diverse cultural backgrounds and educational philosophies, thereby broadening their perspectives and enriching their knowledge structures. The introduction of online courses, virtual laboratories, digital libraries, and personalized recommendation systems facilitates flexible and diverse learning approaches tailored to students' interests and learning needs [4]. Resource sharing also promotes students' autonomy and lifelong learning. Through Internet platforms, students can learn anytime and anywhere, unrestricted by time and space. Whether it's previewing before class, reviewing afterward, or expanding personal interests, students can access necessary knowledge and skills via shared resources. Such convenience and autonomy stimulate students' enthusiasm and motivation for learning, fostering habits of autonomous and lifelong learning. The integration and sharing of diversified teaching resources also offer new perspectives for educational assessment and feedback. Through big data analysis, precise records of students' learning behaviors and outcomes can aid teachers in adjusting teaching strategies promptly, enhancing teaching effectiveness and targeting. Students can also conveniently conduct self-assessment and feedback through the platform, improving learning outcomes. In summary, the integration and sharing of diversified teaching resources have brought profound transformations to higher education sports and aesthetic education. Through the application of Internet technology, barriers in traditional education have been dismantled, achieving efficient resource utilization and sharing, providing students with richer and more diverse learning experiences, and promoting equity and quality in education. This model is poised to play an increasingly crucial role in future educational development, guiding higher education sports and aesthetic education towards a more open and diversified era.

4.3. Strengthening the construction and training of teachers

Under the backdrop of the "Internet+" era, enhancing faculty development and training is pivotal in reforming collegiate sports and arts education strategies. Currently, some universities face disparities in the professional levels of their sports and arts education faculties, coupled with outdated teaching philosophies, hindering improvements in educational quality. Traditional teaching methods often rely

on individual experiences and knowledge reservoirs, lacking systematic professional training and skill enhancement to meet diverse and personalized student learning needs. Moreover, some educators exhibit unfamiliarity with internet technologies and display low receptivity towards emerging teaching tools and methods, thus failing to leverage the internet's advantages effectively during teaching, thereby impacting instructional efficacy. Modern education necessitates educators who not only possess solid expertise but also command advanced teaching technologies and methods to adapt to the demands of the "Internet+" era. However, many educators are inadequately trained in these aspects, struggling to keep pace with technological advancements, resulting in monotonous teaching methods and suboptimal student learning experiences. Structural issues within faculty composition also warrant attention; aging demographics and limited disciplinary backgrounds among sports and arts educators in some institutions hinder the vitality and innovation of teaching. While younger educators demonstrate keenness in embracing new ideas, their lack of experience and systematic training leads to inconsistent teaching quality. Conversely, experienced educators, due to lower acceptance of new technologies and methods, find it challenging to conduct effective teaching under the "Internet+" context. Restricted career development opportunities further dampen educators' enthusiasm and initiative, as many lack avenues for continuing education and promotion, thereby undermining both teaching quality and student interest cultivation. The incomplete framework for in-service training and career development impedes educators' ability to continuously update their knowledge and skills in line with societal developments. In the "Internet+" era, educators must not only impart knowledge but also guide learning and proficiently employ technology. Insufficient faculty development and training directly hinder the depth and breadth of educational reforms. Achieving comprehensive development in collegiate sports and arts education necessitates addressing faculty challenges by bolstering training initiatives and elevating teachers' professional competence to deliver superior educational services. This endeavor demands not only investment in time and resources but also societal respect and support for the teaching profession to foster sustained advancements in education [5].

4.4. Enhancement of Students' Participation and Interest

Under the backdrop of the "Internet+" initiative, reform strategies in higher education sports and arts education must urgently address the pivotal issue of enhancing student engagement and interest. Traditional teaching models often center around instructors, fostering passive knowledge absorption among students, thereby dampening enthusiasm and involvement. While the introduction of internet technologies has enriched educational resources and diversified learning methods, effectively stimulating student interest remains a formidable challenge. Many students exhibit limited enthusiasm for physical education and arts education courses due to monotonous content lacking interactivity and innovation. Modern students, nurtured in a digital environment, find traditional classroom methods uninspiring and favor interactive, content-rich learning experiences. Yet, many physical education and arts education courses persist with conventional teaching approaches, failing to meet student expectations and consequently limiting their engagement. Despite the convenience of learning tools and platforms offered by internet technologies, students often succumb to distractions from entertainment content, compromising their learning efficiency. Guiding students to maintain focus amidst abundant online resources demands thoughtful consideration. Furthermore, students' self-directed learning abilities and self-management skills significantly influence their learning outcomes. Educators encounter substantial challenges in fostering student engagement: designing captivating, appealing instructional activities while addressing individual differences to provide personalized guidance and support. However, many educators possess limited experience and capabilities in this regard, resulting in suboptimal teaching outcomes. Elevating student engagement and interest not only impacts teaching effectiveness but also shapes students' comprehensive development and holistic competence cultivation. Learning lacking in interest and participation fails to stimulate creativity and initiative in students, impeding their development in physical education and arts education. Effectively realizing reforms in higher education sports and arts education under the "Internet+" framework necessitates identifying efficacious pathways to enhance student engagement and interest, enabling them to derive joy and a sense of accomplishment from their learning experiences.

5. Conclusion

The rapid advancement of internet technology presents unprecedented opportunities and means for reforming higher education sports and arts education. Through the approach of "Internet+", it is

possible to effectively address current challenges in higher education sports and arts education, such as scarce resources, limited content diversity, and low student engagement. Specific reform measures include innovating teaching models in sports and arts education, integrating diverse teaching resources, enhancing faculty development and training, and increasing student participation and interest. The implementation of these measures will enrich the teaching content of sports and arts education, enhance teaching interactivity and personalization, boost student interest and engagement, thereby improving teaching effectiveness and students' comprehensive qualities. Looking ahead, universities should continuously explore and innovate, keeping pace with the development of internet technology, continually optimizing and refining teaching models and content in sports and arts education. This will propel higher education sports and arts education towards a more diversified, intelligent, and personalized direction, providing solid support for the comprehensive development of students. Ultimately, through ongoing reform and innovation, higher education sports and arts education will harness new vitality and vigor with the assistance of the internet, contributing to the cultivation of high-quality talents with moral, intellectual, physical, aesthetic, and labor competencies.

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