

Research on University Physical Education from the Perspective of Educational Ecology

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Abstract

Sports education ecology is an interdisciplinary field that has gradually emerged in recent years with the deepening and development of educational concepts. It draws on the basic principles of ecology and aims to explore the interaction and balance mechanisms between various elements in the sports education system. Educational ecology emphasizes that educational activities are not just a one-way transmission process between teachers and students, but a complex and dynamic interactive system that includes multiple components such as teachers, students, teaching content, and teaching environment. By understanding and applying the concepts of physical education ecology, we can more effectively promote the comprehensive development of students, improve teaching effectiveness, and also bring new perspectives and methodologies to the field of physical education. In this context, in-depth exploration of educational research and practice from the perspective of physical education ecology has become an important topic in the current field of physical education.

Keywords

Educational ecology, college sports, education

1. Introduction

The key issue of university physical education based on ecological education, adhering to the core concept of sustainable development, is how to integrate educational ecology, make reasonable use of teaching methods, and establish scientific teaching and learning concepts. Therefore, in order to conduct research on university physical education from the perspective of educational ecology, it is necessary to first conduct relevant analysis of ecological education.

2. Analysis of the basic content of university education ecology

Educational ecology focuses on the in-depth analysis of various phenomena and problems in the education stage, striving to comprehensively understand the basic laws and future trends of educational development from the organic unity of ecological balance, system structure, and function. Educational ecology regards education as a complex and intricate system, vividly depicting the close connection and mutual influence between education and its environment, including society, nature, norms, psychology, physiology, etc. In this framework, education is not only the core of the ecological environment but also the stage for interaction between various elements, presented in the form of balance and imbalance, unity and contradiction, reflecting the inherent dynamism of the education ecosystem. From the perspective of educational ecology, we realize that the development and balance of the educational ecosystem depend on the interaction and influence of various elements, revealing the intricate network of relationships between education and the surrounding environment. Through a comprehensive and macroscopic examination, not only does it provide a new perspective for

understanding educational phenomena, but it also provides scientific guidance for educational practice and policy formulation. It emphasizes that in a dynamic and changing environment, the adaptation and development of the education system require delicate observation and in-depth understanding, which can guide us to find balance in the constantly changing education ecosystem and promote the healthy development of the education system.

3. Ecological perspective analysis of university physical education

3.1 Ecological environment of college physical education

The realization of the ecological environment in university physical education relies on the unique organizational structure, behavioral patterns, values, and material conditions of universities, jointly shaping the environmental system of physical education. There is an undeniable internal connection between the allocation and functional utilization of various resources within the system, indicating the necessity of resource integration and structural optimization. By scientifically integrating sports resources and finely adjusting the structure of physical education, the ecological environment of university physical education can be optimized, thereby enhancing its functionality and promoting the development of school physical education towards ecological direction. In this process, the integration of disciplinary resources is particularly crucial, requiring universities to adjust their professional levels or structures through strategies such as mergers and reorganizations to ensure that the development of sports disciplines is closely linked to the school's social positioning and characteristics. The deep integration of university sports resources and structure not only optimizes the internal environment of sports education but also provides a solid foundation for the sustainable development of university sports education, highlighting the practical value of the ecological perspective of education in promoting the modernization process of sports education.

3.2 Ecological relationship within the internal environment of university physical education

In the process of exploring the ecological relationship within the internal environment of university physical education, the focus is on understanding and achieving a harmonious balance between the internal and external environment of the university. This is reflected in the fact that while universities follow their internal laws and values, they actively seek coordination and balance between the internal and external environment and its constituent elements, further promoting the opening of universities to society and the world, and achieving the globalization and integration of education. Universities are located in a broader social environment, and their development direction needs to be adapted and coordinated with social needs, through this adaptation, they can gain widespread recognition from society, thereby promoting their continuous progress. This process requires universities to accurately position themselves and handle the relationships between talent cultivation and social needs, between government and schools, between society and schools, and between schools. The internationalization of university physical education has pushed balance to a new height. Through global thinking and an international perspective, not only have they grasped the global dynamics of physical education reform and development, but they also use international standards as an important measure of their own reform and development. University physical education not only develops synchronously with the world but also constantly updates its methods and strategies in a timely and effective manner to ensure its educational quality is in line with international standards, demonstrating a positive attitude of universities seeking development and balance in the global education ecosystem.

3.3 The performance of the internal environment in university physical education

The performance of the internal environment of university physical education is deeply reflected in the professional quality of the teaching staff, the completeness of teaching conditions, and the comprehensive allocation of software and hardware resources. The reasonable allocation of these elements is based on the stable foundation of various work relationships within the school, especially the deep integration of scientific research direction in physical education teaching and practical activities. At the same time, the ecological internal environment is also reflected in the active participation of students and parents in the teaching process, which not only promotes the effective implementation of teaching activities but also highlights the mission of universities in cultivating and shaping talents. Through the joint influence of the organizational structure, educational conditions, behavioral patterns, and spiritual culture of universities, a learning environment that promotes the comprehensive development of students has been formed, which not only affects their behavioral habits but also gradually shapes their learning attitudes. Over time, the environment and its changes have had a profound impact on the psychological and physiological development of individual and even group students. In the ecosystem of university physical education, the interaction between various elements continuously promotes the systematic coordination and development of physical education, while also providing students with a stage for comprehensive growth, demonstrating

the key role of the internal environment of university physical education in promoting the improvement of education quality and efficiency.

4. Basic principles for achieving the ecological transformation of university physical education

4.1 The principle of wholeness

University sports educators need to have a global perspective and examine and solve problems from a holistic perspective, in order to maintain the coordination and balance of the school and its sports education ecosystem. Due to various internal and external factors, especially human intervention, may cause imbalances in the ecosystem, leading to low educational efficiency and hindering the effectiveness of education (Li Hui, 2023). In response to this challenge, the key is to comprehensively understand and solve the problem, while paying special attention to the role of local factors, recognizing that local factors may have a decisive impact on the whole in specific situations. Therefore, university teachers and school management must carefully plan and implement resource allocation, policy formulation, organizational structure adjustment, etc., to ensure that the activities of various departments and fields of the school can operate within the framework of overall coordination and balance, involving the formulation and implementation of specific policy measures, including the establishment of corresponding systems and supervision institutions, to ensure the smooth progress of ecological sports education in universities.

4.2 The principle of control

The principle of control plays a crucial role in the ecological transformation of university physical education, inspiring us to draw on the self-regulation and self-sustaining capabilities of natural ecosystems to guide and manage the development of university physical education. The natural ecosystem can maintain coordination through state transfer when it exceeds its carrying capacity. Similarly, the university sports education ecosystem also needs to follow this evolutionary law, adjust and enhance its carrying capacity through internal mechanisms, and avoid imbalances due to rapid development. We are required to follow the development laws of university physical education, make reasonable adjustments, and avoid disrupting the ecological balance while maintaining the stability of the internal environment of the system. Through scientific regulation and control, university physical education can achieve synchronous improvement in quality and level, maintain the healthy operation of the system, and explore new equilibrium states on this basis.

4.3 The principle of dynamism

The ecosystem of university physical education is a living and constantly changing entity, and its changes are constrained by multiple internal and external conditions of the system. The characteristic of an ecosystem is its ability to adapt and change according to time, location, and the varying levels of effort of participants, in order to maintain its openness and interactivity with the external environment. To achieve this, it is necessary to ensure that the system can effectively link with external systems at the information, material, and energy levels, thereby promoting its evolution in a positive direction. We are required to closely follow the basic laws of social development, respect the value of university physical education itself, and closely monitor the development trends and dynamics of its ecosystem while promoting the development of university physical education. By adopting a forward-looking perspective, macro perspective, and keen observation, problems in the physical education ecosystem can be identified and solved in a timely manner, ensuring its effectiveness, coordination, and stability, thereby creating a healthier and more conducive physical education environment for students.

5. Research on university physical education from the perspective of educational ecology

5.1 System education research

System education research regards university physical education as a whole from the perspective of educational ecology, emphasizing the examination and improvement of teaching effectiveness from the perspective of system development. The system education method requires schools to recognize the internal connections between different elements and establish a complete, scientifically reasonable education system based on these connections. By paying attention to the development and changes within the system, schools can promote the harmony and unity of the education system, ensuring that physical education not only systematizes in structure, but also operates efficiently and orderly in practice. Systematic education research not only helps to improve the quality of physical education in universities but also creates a more diverse and conducive learning environment for students to develop comprehensively.

5.2 Control education research

University physical education should draw on the self-control and regulation mechanisms of ecosystems, strengthen the fine management of the educational environment, including strict control of the construction of the internal environment of the school, ensure its stability, and improve teaching quality through the regulation of internal and external environments. In addition, controlling education also focuses on controlling and innovating the ecological environment of physical education, aiming to develop a new equilibrium state in the education ecosystem. The study emphasizes that through scientific control and management strategies, the stable development of the university physical education system can be promoted, while stimulating the innovative potential of the physical education environment, providing new ideas for building a harmonious and sustainable education ecosystem (Chen Juan, 2022).

5.3 Dynamic education research

With social progress, the educational environment in schools, both internally and externally, is constantly evolving. The changes in the environment require that university physical education adopt the principle of dynamism, that is, to comply with the universal laws of social development, and to promote its stable development by continuously adjusting educational teaching methods, policies, and management measures. Adhering to this principle can ensure that university physical education maintains vitality in the face of changes in the times, effectively promoting the comprehensive growth of students, and ensuring that the quality and efficiency of educational activities are synchronously improved, thus shaping a vibrant learning environment for students to adapt to future challenges.

5.4 Research on holistic education

In the research of holistic education from the perspective of educational ecology, it is emphasized that university physical education teachers should embrace the concept of holism and plan and implement physical education teaching as a unified whole. The insufficient effectiveness of university education and teaching often stems from the lack of coordination among multiple factors, including the lack of coherence in internal teaching, the lack of integration of internal and external resources, and the lack of synergy in the educational environment, which collectively affects the overall effectiveness of teaching. This phenomenon reflects that the current physical education workers in Chinese universities have not fully utilized the principle of integrity in building an efficient education and teaching system (Chen Dongxiao, 2022). To improve this situation, the key is to encourage educators to deepen their understanding and application of the principle of wholeness. By comprehensively considering all relevant elements of educational activities and their interrelationships, education and teaching strategies can be optimized, ultimately achieving a comprehensive improvement in the quality of university physical education.

6. Measures to cultivate students' interest in sports learning from the perspective of sports education ecology

6.1 Strengthening the professional level of physical education ecology for teachers

The professional ability and teaching methods of teachers are directly related to the enthusiasm and participation of students in sports activities. High-quality physical education teachers can effectively narrow the distance between themselves and students, stimulate their interest in sports, and enhance their confidence in participating in sports through professional skill demonstrations, motivational language, and collective interactive training. With the deepening development of education reform, new curriculum reform plans and the concept of physical education ecology are increasingly emphasizing the cultivation of students' comprehensive qualities, which puts forward higher requirements for physical education teachers. Teachers need to continuously improve their professional skills and literacy, timely understand and learn the latest teaching policies and concepts, actively integrate new educational concepts into teaching practice, better guide students to develop their love for sports under the support of the new curriculum standards, and create a good environment in the sports education ecosystem to promote students' comprehensive development and enhance their interest in sports learning.

6.2 Innovate teaching methods to attract student interest

Within the framework of sports education ecology, innovation is based on a deep understanding of student needs and close follow-up to teaching policy updates, with the aim of enhancing the attractiveness and effectiveness of teaching by introducing innovative teaching elements and methods. Physical education teachers need to design teaching activities that are both creative and interesting, taking into account the unique needs of students and the changing times. For example,

incorporating elements such as cheerleading performances and music incentives, and using team competitions to consolidate learning outcomes, can greatly enhance students' interest and participation in learning (Wang Jing, Rao Juan, & Xiong Shaobo, 2021). In addition, immediate feedback and summary after the competition can also help students understand their own shortcomings in a timely manner and make improvements in future learning. Innovative teaching strategies can stimulate students' interest in sports activities and encourage them to constantly explore and challenge themselves in sports learning, ultimately cultivating a strong interest and love for the ecology of sports education.

6.3 Creating a good sports learning environment and atmosphere

When schools are equipped with well-equipped sports facilities and venues, students are more likely to engage in sports activities in their spare time. Teachers can deepen students' understanding of sports knowledge and, more importantly, stimulate their motivation to challenge themselves and pursue excellence by introducing innovative teaching methods, such as watching sports competitions and analyzing professional movements through video playback techniques. Considering the inherent competitive consciousness of college students, regularly organizing sports competitions and establishing reward mechanisms can further promote healthy competition among students and form a positive and upward sports learning atmosphere. In addition, setting up a sports column on campus media and publishing information related to the ecology of sports education, not only expands the influence of sports education, but it also deepens students' understanding and interest in the field of sports through participating in the collection and organization of relevant information. Students independently participate in the production of sports related bulletin boards, further enhancing their initiative and enthusiasm for sports learning.

6.4 Understanding student needs and valuing student differences

In the field of sports education ecology, understanding the needs of students and valuing their differences is a key strategy to enhance their interest in sports learning. Teachers need to enhance their professional skills, deeply explore the personalized needs of each student, and achieve personalized teaching. Integrating students' interests and needs closely with daily teaching requires teachers and students to establish an equal and harmonious teacher-student relationship, and stimulate students' enthusiasm and confidence in physical education learning (Wang Hongbao, 2017). Considering the individual differences in physical fitness and interests among students, teachers should carefully understand the specific situation of each student, especially giving more attention and support to students with weaker physical fitness, to ensure that every student in the classroom can feel respected and valued.

7. Conclusion

In summary, through in-depth exploration of university physical education research and practical strategies from the perspective of sports education ecology, we can recognize the importance of building a harmonious, dynamic, and diverse sports education ecosystem that can meet the diverse needs of students. Through the in-depth application of educational ecology, it can stimulate students' enthusiasm for physical education learning, promote their comprehensive development, and shape a dynamic and inclusive physical education ecological environment for students, promote the development of university physical education towards more ecological and personalized development, and lay a solid foundation for the improvement of students' physical and mental health and comprehensive quality.

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