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The Value Orientation and Practical Path of University Physical Education Teaching under the Concept of Smart Teaching

Ying Tang*

School of Sports and Leisure, Sichuan Tourism University, Chengdu, Sichuan, 610100, China
**Corresponding author*

Abstract: *Under the guidance of the concept of smart teaching, university physical education teaching is facing new value orientations and practical paths. Smart teaching emphasizes student-centered approach, utilizing modern information technology to enhance teaching effectiveness and promote students' comprehensive development. This study explores the impact of smart teaching concepts on university physical education teaching, proposing that personalized needs, physical and mental health, and teamwork should be the main value orientations for learners. The research results indicate that the effective application of smart teaching concepts can improve students' participation and enthusiasm, promote the comprehensive improvement of their physical and mental qualities, and provide new ideas and directions for university physical education in the new era.*

Keywords: *smart teaching, physical education, value orientation*

1. Introduction

Against the backdrop of rapid development of information technology today, the education sector is undergoing profound changes. The proposal of the concept of smart teaching aims to improve the quality and effectiveness of education through modern technological means and innovative teaching methods [1]. As an important component of higher education, university physical education not only carries the cultivation of students' physical fitness, but also undertakes the multiple missions of promoting mental health, enhancing teamwork ability, and shaping lifelong learning awareness. However, the traditional physical education teaching model often has problems such as single content, fixed form, and lack of personalization, which are difficult to meet the needs of students in the new era.

The concept of smart teaching emphasizes student-centered approach, utilizing technologies such as big data and artificial intelligence to provide personalized learning experiences for students. This transformation not only enhances students' interest and participation in learning, but also encourages teachers to constantly explore innovative teaching methods. Therefore, under the guidance of the concept of smart teaching, university physical education teaching should re-examine its value orientation to meet the needs of students' comprehensive development.

This paper aims to explore the value orientation and practical path of university physical education teaching under the concept of smart teaching. By analyzing the core concept of smart teaching and the intrinsic value of university physical education teaching, clarifying the integration point of the two, and proposing practical and feasible practical plans, we aim to provide reference for promoting the reform of university physical education. I hope that through this research, we can contribute to the realization of a more efficient and humane university physical education teaching model.

2. Overview of smart teaching philosophy

2.1 Definition and characteristics of smart teaching

Smart teaching refers to a new educational concept that uses modern information technology, data analysis, and artificial intelligence tools in the educational process to improve teaching effectiveness and student learning experience [2]. It emphasizes student-centered approach, pays attention to individual differences of students, and achieves more efficient learning through personalized and interactive methods. Smart teaching is not limited to classroom teaching activities, but also includes

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various forms such as online learning, collaborative learning, and self-directed learning, making learning no longer limited by time and space.

The main difference between smart teaching and traditional teaching lies in methods and concepts. Traditional teaching is teacher centered, emphasizing knowledge transmission and indoctrination, and the curriculum content is relatively fixed and lacks flexibility; Smart teaching emphasizes students' active participation and encourages them to explore and discover knowledge through practical operations. Specifically, smart teaching enhances interaction between teachers, students, and students through smart devices and online platforms, while traditional teaching is mostly one-way communication with less interaction. In addition, smart teaching can be personalized according to students' learning styles, interests, and abilities, while traditional teaching often adopts a "one size fits all" approach, which is difficult to meet the needs of every student. Smart teaching also utilizes data analysis to monitor students' learning progress in real-time and adjust teaching strategies in a timely manner, while traditional teaching feedback often relies on final exams or homework evaluations, resulting in delayed responses. In terms of learning methods, smart teaching advocates diverse approaches, such as flipped classrooms and project-based learning, to promote students' active learning in different environments; In contrast, traditional teaching usually focuses on lecturing, emphasizing memorization and retelling.

2.2 Theoretical basis of smart teaching

The theoretical basis of smart teaching stems from the evolution of various educational theories, especially the emphasis on learner centeredness and constructivism in recent years. Teaching theory has undergone a development process from behaviorism to cognitivism, and then to constructivism. Behaviorism emphasizes external stimuli and responses, and focuses on the transmission and memory of knowledge. Although it has a positive impact on early education, it is insufficient when facing complex learning tasks. Cognitivism focuses on learners' thinking processes, emphasizing understanding and application, providing an important foundation for smart teaching, especially in data analysis and learning strategy design [3]. Constructivism advocates active participation of learners in knowledge construction, emphasizing the importance of practical experience. Smart teaching is based on this theory and values students' learning experiences in social and practical settings.

The implementation of smart teaching cannot be separated from the support of educational technology, especially in the context of rapid development of information technology. Various tools and platforms continue to emerge, providing rich resources for smart teaching. Online learning platforms such as MOOCs (Massive Open Online Courses) allow students to access learning resources anytime, anywhere, promoting self-directed learning and flexible scheduling of study time. Data analysis tools collect students' learning data through a Learning Management System (LMS) and use data analysis techniques to provide teachers with real-time feedback on student performance, helping to improve teaching strategies. In addition, artificial intelligence technology can design personalized learning paths, automatically adjust content and difficulty based on students' learning progress and performance, thereby improving learning efficiency. Virtual reality and augmented reality technology provide immersive learning experiences, allowing students to practice in simulated environments and enhance their understanding and application abilities.

In short, as an emerging educational concept, smart teaching not only promotes innovation in teaching methods, but also provides theoretical basis and technical support for the personalization, interactivity, and flexibility of education. The promotion and implementation of this concept will greatly enhance students' learning experience and effectiveness, opening up new directions for the future development of education.

3. Value orientation of university physical education teaching

3.1 Comprehensive development of body and mind

In university physical education teaching, the comprehensiveness of physical and mental development is particularly important. There is a close relationship between physical fitness and mental health. Research has shown that good physical fitness can not only enhance immunity and improve learning efficiency, but also effectively relieve stress and improve psychological state. Through systematic physical exercise, students can develop strong physical fitness, thereby enhancing their confidence and self-efficacy. In addition, exercise can also release endorphins, bringing a sense of

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pleasure and helping students better cope with academic and life challenges. Therefore, university physical education teaching should focus on the comprehensive development of students and promote their physical health and psychological balance through diverse sports activities.

3.2 Lifelong learning and health awareness

University physical education teaching is not only aimed at cultivating students' sports skills, but more importantly, at fostering their lifelong learning and health awareness. Through physical education courses, students can recognize the importance of a healthy lifestyle, master basic exercise knowledge and skills, and continue to maintain good exercise habits after graduation. Schools can stimulate students' interest in healthy living, encourage them to actively participate in various sports activities, and form a positive attitude towards life by organizing health knowledge lectures, sports camps, and other activities. This educational philosophy not only helps students maintain physical health during their school years, but also lays a solid foundation for their future lives.

3.3 Teamwork and social communication skills

Sports activities provide a good platform to promote students' teamwork and social skills. When participating in collective sports, students need to cooperate, communicate, and collaborate with each other. This interaction not only enhances their team spirit, but also improves their interpersonal communication skills. In competitions and training, students learn how to face setbacks, maintain a positive attitude in competition, and respect others. These experiences not only enriched their social skills, but also laid the foundation for their future careers. Through physical education teaching, students can establish deep friendships, expand their social networks, and provide support for their personal growth and social adaptability.

In summary, the value orientation of university physical education teaching is not only reflected in promoting students' physical and mental health, but also in cultivating their lifelong learning awareness and social communication skills. The realization of these values will help students develop more comprehensively in their future lives.

4. Practical path of smart teaching in university physical education teaching

4.1 Application of modern technology

4.1.1 Online courses and virtual reality technology

Online courses provide flexibility and convenience for university physical education teaching. Students can study according to their own schedule and access teaching resources anytime, anywhere. In addition, the introduction of virtual reality (VR) technology has enriched the physical education teaching experience. By simulating real sports scenes, students can engage in technical exercises in a safe environment, enhancing their awareness and skills in sports. For example, using VR technology for tactical simulation of ball sports can help students better understand the strategy and coordination of the game.

4.1.2 Data analysis and personalized teaching

Data analysis techniques can effectively track students' athletic performance and progress. By collecting and analyzing students' exercise data, such as heart rate, exercise duration, and skill mastery, teachers can develop personalized training plans for each student. This data-driven teaching approach not only improves the pertinence of teaching, but also motivates students to continuously progress towards clear goals. At the same time, teachers can also use data analysis to identify problems that students have during exercise, and adjust teaching strategies in a timely manner to improve overall teaching effectiveness.

4.2 Innovations in teaching methods

4.2.1 Project oriented learning and situational simulation

Project oriented learning emphasizes students' learning through practical problems, promoting active participation and deep understanding by solving specific sports project challenges. This learning method not only focuses on imparting knowledge, but also pays more attention to students' experience

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accumulation and ability improvement in practice. During this process, teachers can design various situational simulation activities to allow students to practice in real or near real environments. For example, a student self-management competition can be organized, which not only stimulates students' interest but also allows them to exercise various abilities in practical situations.

In the preparation stage of the competition, students need to have sufficient discussions and plans to determine the rules, venue arrangements, time management, and other details of the competition. This process has cultivated their organizational skills, enabling them to learn how to divide labor and cooperate, make reasonable use of resources, and respond to various emergencies in a timely manner. During the competition, students not only need to actively participate, but also need to flexibly respond to their opponents' strategies, which further enhances their teamwork spirit and competitive awareness. In addition, after the competition, teachers can guide students to reflect and summarize their experiences and lessons learned. This feedback loop enables students to recognize their own shortcomings and find ways to improve through collective discussions, thereby exercising their problem-solving abilities. By integrating theory and practice, project-based learning not only improves students' physical skills, but also comprehensively enhances their qualities in teamwork, communication and coordination, and adaptability, laying a solid foundation for their future learning and life.

4.2.2 Reverse classroom and self-directed learning

Reverse classroom is an innovative method that subverts traditional teaching models, aimed at improving learning outcomes and student engagement. In this mode, students self-study theoretical knowledge before class by watching instructional videos, reading relevant materials, and conducting independent research. This process encourages students to learn at their own pace, enabling them to fully grasp basic concepts and core content. When classroom time comes, the role of the teacher shifts to that of a guide and supporter. They are no longer simply knowledge transmitters, but help students gain a deeper understanding of the theories they are learning through questioning, guiding discussions, and promoting interaction. Classroom activities may include group discussions, case studies, role-playing, etc., allowing students to apply their learned knowledge in practice, enhance their thinking abilities, and problem-solving skills. This self-directed learning approach not only enhances students' learning motivation, but also strengthens their sense of responsibility and self-management ability. Students need to proactively plan their learning progress, set learning goals, and take responsibility for their learning outcomes. This model cultivates their independent thinking ability, enabling them to actively seek help or find solutions when faced with difficulties. In addition, reversing the classroom also promotes cooperation and communication among peers, allowing students to share knowledge and experience in mutual learning, thus forming a deeper level of understanding.

Overall, reversing the classroom has brought a new perspective to education, creating a more interactive and participatory learning environment that not only enhances students' academic performance but also lays a solid foundation for their future development. This method makes learning no longer a one-way knowledge acquisition, but a dynamic and vibrant process that stimulates students' creativity and exploratory spirit.

4.3 Optimization of evaluation and feedback mechanism

4.3.1 Diversified evaluation methods

In traditional physical education teaching, evaluation often relies solely on exam scores or competition performance, which appears relatively narrow and lacks comprehensiveness and depth. Such an evaluation system may not only fail to truly reflect students' comprehensive qualities, but may also lead to students only focusing on their athletic performance and neglecting other important abilities and qualities. Therefore, in order to better evaluate the overall development of students, teachers can adopt diversified evaluation methods to comprehensively understand the growth and progress of each student.

Process evaluation is an assessment method that focuses on the learning process of students. It emphasizes observation and recording at various stages of learning, and teachers can provide timely feedback based on students' performance in training, practice, and daily activities. This approach can help teachers identify students' progress in skill mastery, teamwork, and individual effort, and adjust teaching strategies to meet the needs of different students. Peer evaluation is also an effective means of assessment. By encouraging students to evaluate each other, it not only enhances their communication and interaction, but also cultivates their critical thinking and self reflection abilities. In the process of

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evaluating peers, students will have a deeper understanding of the knowledge they have learned, and at the same time, they will be motivated to continuously pursue progress in their own performance. In addition, self-evaluation cannot be ignored. Guide students to engage in self reflection, enabling them to evaluate their athletic performance, learning attitude, and emotional management, and help them build confidence and a sense of responsibility. This process of self-awareness not only helps them discover their strengths, but also identifies areas that need improvement, thereby promoting the comprehensive development of individuals.

By combining theoretical knowledge, practical skills, and psychological assessments, teachers can gain a more comprehensive understanding of students' growth trajectories. This diversified evaluation method not only focuses on students' performance in sports activities, but also covers their psychological state, social skills, and teamwork spirit. This will greatly promote the development of students in various aspects, enabling them to not only achieve success in the field of sports, but also demonstrate a positive attitude and ability in other areas of life. Ultimately, this comprehensive assessment system will lay a more solid foundation for students' future development.

4.3.2 Real time feedback and self reflection

Timely feedback is crucial for students' learning. Teachers should establish a real-time feedback mechanism and use technological means such as sports monitoring equipment to quickly collect students' sports data and provide corresponding guidance. At the same time, encourage students to engage in self reflection, record their learning process and experiences. This two-way feedback not only helps students recognize their own strengths and weaknesses, but also serves as an important way to promote self-improvement and create a positive learning atmosphere.

5. Conclusion

Under the guidance of the concept of intelligent teaching, university physical education has ushered in new opportunities and challenges for development. By integrating modern technological means, innovating teaching methods, and optimizing evaluation mechanisms, smart teaching not only improves the teaching quality of physical education courses, but also provides strong support for students' comprehensive development. Firstly, smart teaching emphasizes student-centered approach, pays attention to individual differences and needs, and promotes students' active participation and self-management abilities. Through data analysis and personalized teaching, teachers can tailor training plans for each student, thereby stimulating their learning interest and potential. Secondly, the application of new teaching methods such as project-based learning and reverse classroom has enhanced students' practical abilities and teamwork spirit, enabling them to better master sports skills and tactical thinking in real situations. This situational simulation and practical experience cultivate students' social adaptability and lay a solid foundation for their future development. Finally, through diversified evaluation methods and real-time feedback mechanisms, teachers can comprehensively understand students' learning processes and psychological states, promoting their self reflection and growth. This positive feedback loop not only enhances students' confidence, but also creates a healthy learning atmosphere.

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