Analysis on the Combination Mode of Sports Training and Competitive Sports Training under MOOC Background

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Abstract: Based on the background of internet plus, how to reform the traditional physical education (PE) in universities in order to better adapt to the new demands of the network era is a problem that the PE major in universities must actively explore. The introduction of MOOC instructional mode has made great changes in China's PE teaching concept and instructional mode. As the core component of PE in universities, the quality of PE has a direct impact on the overall teaching effect in universities. Judging from the present situation of higher education, the previous instructional mode has the characteristics of stereotype and tradition, and it doesn't pay much attention to the development of students' physical quality. In order to improve the practicality and teaching efficiency of PE in universities, this paper expounds the concepts of PE pedagogy and sports training, and analyzes the combination mode of sports training and competitive sports training under the background of MOOC. Through the organic combination of school sports and competitive sports, it can enhance the correlation between training and teaching and improve the effectiveness of PE.

1. Introduction

Reform and development are the two major themes in the current world. At present, the school PE in China is carrying out an unprecedented innovation in teaching methods and contents. School sports and competitive sports belong to the scope of sports, and they are interrelated. MOOC belongs to an information-based instructional mode, which mainly introduces information technology as support, and optimizes and improves the instructional mode pertinently based on students' individual characteristics and learning development needs in teaching [1]. School physical training has long been a compulsory course in teaching, and it is an important guarantee to keep fit. School sports training and competitive sports training both belong to the category of training and are branches of sports, and there is a close relationship between them [2]. Reasonable application of MOOC, a brand-new teaching technology, can not only stimulate students' learning enthusiasm, but also further improve students' comprehensive ability, and promote students' final learning effect. School sports training and competitive sports training complement each other and have the same characteristics. In order to maximize the overall level of competitive sports in China, school sports must participate in it, and organically combine the training methods, training contents and training means of the two, so as to meet the new requirements of the development and changes of the times [3].

Sports is a form of exercise with competition as its main purpose. If you want to get good results in the competition, you need to carry out long-term and all-round training, and school sports training can just meet this essential point, and the high intensity of competitive sports training can be regarded as a supplement to school sports [4]. Maybe we are no strangers to school sports and competitive sports, because schools can be seen in the areas where we live, so school sports are closer to our life. Many university stadiums are open to the outside world, so we can better understand the sport of school sports training [5]. Information technology has become a necessary condition for carrying out PE activities. With the support of the Internet, we should enrich PE resources, innovate PE teaching methods and focus on optimizing PE practice activities. College PE is a part of school PE, while sports training is an important part of competitive sports, and school PE and competitive sports are interrelated [6]. Exploring and studying school PE and competitive

sports is conducive to promoting their reform and development. This paper mainly expounds the significance of the combination of school PE and competitive sports training and the present situation of modern information technology used in PE and teaching, and analyzes the combination mode of PE and competitive sports training under the background of MOOC.

2. The significance of combining school sports training with competitive sports training

2.1. Significance to school PE

Schools are crowded places with a large number of people. Students are the successors of the country's future construction, and their physical health has always been the focus of attention from all walks of life. School PE is an important part of education, and it is a planned, purposeful and organized PE activity process. School PE can not only improve students' physical quality, but also better develop students' intelligence. Scientific practice has proved that regular participation in sports and constant exercise can improve the intensity, balance and flexibility of activities of cerebral cortex cells [7]. Integrating competitive sports into school physical training plays a very important role in improving teaching efficiency. In the past, most of the school PE adopted a single instructional mode, and the students' interest in learning and the school quality could not be improved. Teachers' teaching methods are not flexible enough, classroom teaching content is monotonous and boring, and some PE class are reduced to superficial engineering. Introducing competitive sports training methods into school sports training can enrich teaching methods and attract students' attention. Under the background of information technology, higher education has also begun to follow the development of science and technology, and has made a transition towards internationalization and popularization.

2.2. Significance to competitive sports

Through competitive sports training, students' sports ability can be fully developed. Sports are dominated by competition. Introducing competition into school teaching is helpful to improve students' awareness of competition. Part of the application of the high-intensity method of sports training in school sports training teaching can achieve the goal of physical exercise and physical fitness, thus improving students' sports level in all aspects [8]. The normal operation of the whole system of competitive sports system needs competitive sports resources to provide conditions and guarantees. Sociality, regulation, generation, limitation and integrity are the characteristics of competitive sports resources. The concept of competitive sports resources plays a direct guiding role in the sustainable development planning and resource regulation of competitive sports. Introducing MOOC into higher education, and making use of its own advantages of openness, transparency and convenience, to build an equal and stable learning platform for all students around the world [9]. With the emergence of MOOC, academic exchanges among countries have become faster and resources have been shared. School PE teachers can introduce physical endurance training, physical fitness training, flexibility training and other contents of competitive sports into the classroom, and impart competitive ideas to students, so that students can enhance the interest of learning on the basis of full physical training, and really enhance the effectiveness of campus physical training.

3. Present situation of modern information technology used in PE training and teaching

There are competitions in school sports now, but they are mainly for entertainment, and the same competitive sports rarely show the shadow of school sports. For a long time, due to the lack of understanding and practice of physical training, some athletes' basic physical fitness and special physical fitness are weak, and some sports in China are in a backward state for a long time. This situation obviously exists objectively. At present, it is a common problem that department coaches lack the theoretical basis of sports science. Especially the coaches of some grass-roots sports schools or sports training institutions, and some have not studied specialized physical training knowledge [10]. At present, some schools have improved the orientation of school PE, and some

have even greatly highlighted its competitiveness and utility, which makes some students' bodies unbearable, which is very unfavorable to students' development. The application of information technology in PE teaching and training has become the main trend, but the quality of the application of information technology in PE teaching and training needs to be improved. On the one hand, the informatization mode of PE needs to be personalized, and it is also necessary to develop rich micro-course resources according to students' interests. On the other hand, PE teachers should provide the ability of network communication between teachers and students under the new information environment, and realize the targeted interconnection communication between PE teachers and students in PE training under the tutorial system, so as to give full play to teachers' guiding role to students.

4. Measures of modern information technology used in sports training

4.1. Constructing information teaching mechanism

To give full play to the role of information technology in guiding students' physical training, modern information collection system should be used to form the center of data collection and processing, and information technology should be used to realize full monitoring of students' training in the increasingly complex environment of physical training. The introduction of MOOC has greatly changed the traditional instructional mode of college courses, and at the same time, it has caused great impact and challenges to the future employment and development of college students. MOOC can make use of the sharing and immediacy of network resources, re-plan and combine various teaching resources, and use the way of survival of the fittest to help more people who want to receive higher education and provide them with a fair and stable learning platform. The overall architecture of intelligent sports system is shown in Figure 1.
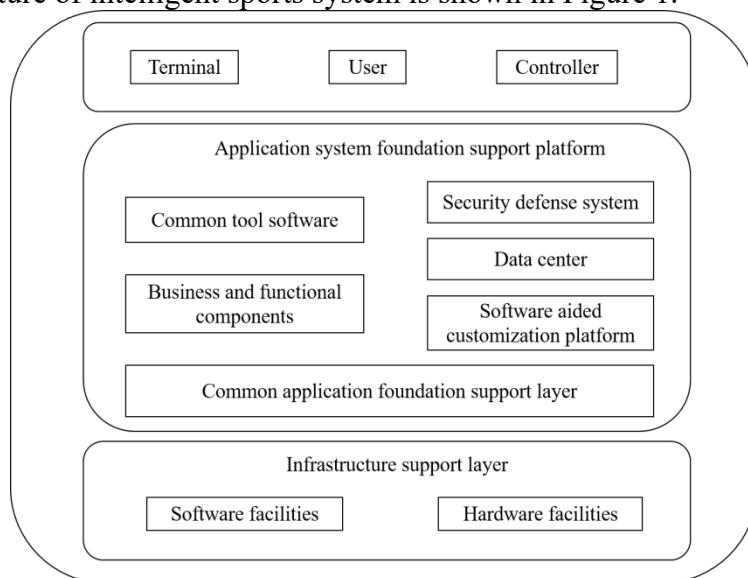

Figure 1 Overall architecture of intelligent sports system

Although MOOC has provided an important boost to the development and popularization of education, it is also an opportunity and pressure for college students, and indirectly strengthens their viability and professional level. On the basis of data collection, collection, processing, analysis and application of PE training, we can better meet the goal of guiding and optimizing PE training activities. For example, in shot put training, it is necessary to collect all-round information about athletes' back strength, and comprehensively calculate and analyze the throwing direction, wind direction and strength of athletes, so as to guide mobilization and carry out targeted training.

4.2. Innovative virtual training environment

To improve the effectiveness of physical training in modern information environment, we should also carry out physical training activities in virtual situations, and pay attention to using modern

biomechanical technology and computer technology to simulate visual effects. This can improve the training efficiency, improve the pertinence of physical training, and conduct effective training evaluation. The functional departments in charge of education should conduct more training related to MOOC courses, including MOOC design, production, material collection and so on. Training can not only improve the quality and level of teachers' MOOCs, but also improve the teaching effect of the integration mode of MOOCs and PE in universities, and promote the in-depth reform of PE. The structure of the effectiveness evaluation system of PE MOOC teaching is shown in Figure 2.
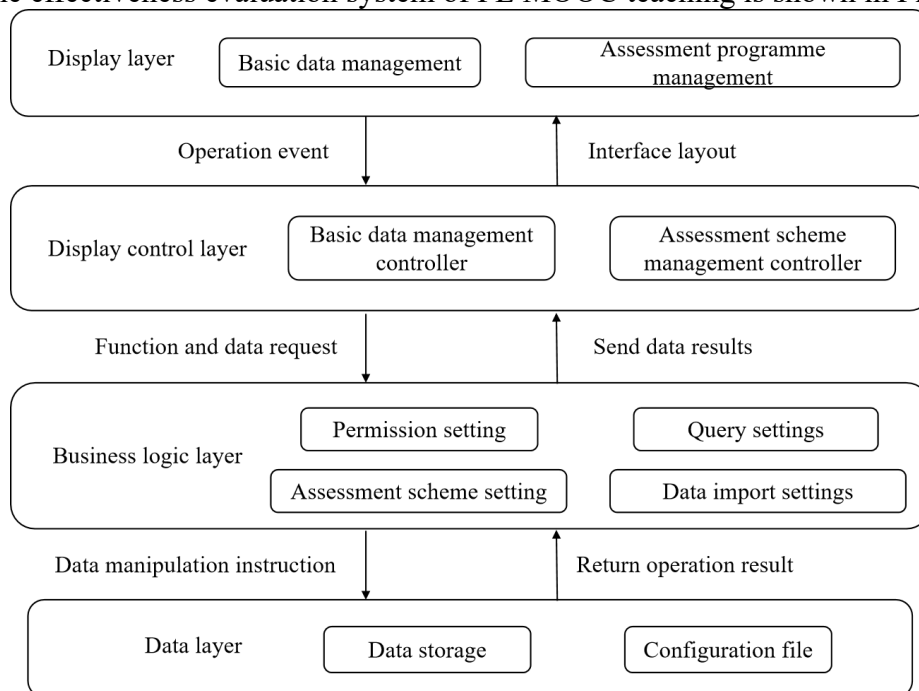

Figure 2 Effectiveness evaluation system of sports MOOC teaching

In order to give full play to the comparison and guidance of DATA information, it is also necessary to store athletes' related data. Under the combination of video, digital and text information, data access technology can be further used to realize the combination of data and DAO, and the functions of various digital video and image data can be brought into play, providing conditions for extracting and applying information. In the course of learning MOOC, learners can ask questions to teachers at any time with the help of the platform or in the discussion area if they don't understand. After teachers answer their questions, they need to communicate with learners. At the same time, teachers should constantly reflect and innovate to continuously improve their MOOC production level.

5. Conclusions

MOOC is a new instructional mode, and its importance is becoming increasingly prominent. Universities should firmly grasp the development opportunities brought by the Internet age and further promote the reform of college PE major. In PE classroom teaching, competitiveness can not be ignored, and it is also a means to guide students' attention and learning enthusiasm. Teaching through the introduction of sports events can not only achieve the purpose of healthy exercise, but also make students break away from passive learning methods, make them like PE class more, establish good physical exercise habits and improve their physical literacy. In the past, there were drawbacks in school PE and competitive sports training. Realizing the organic combination of the two can not only make up for these problems, but also maximize their effects and give full play to their advantages. The application of modern information technology in physical training can help students to take an active part in physical training activities, improve PE teaching, and have important value for promoting students' innovative development. Under the background of internet plus, the integration of MOOC and PE in universities complement each other, which is very helpful

to the optimization of PE instructional mode in universities and the improvement of the utilization rate of teaching resources of PE majors, and further promotes the in-depth reform of PE in universities.

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