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Research on the Application of Information Technology in College Physical Education

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Abstract. The rapid development of social economy and rapid changes in the information age have made competition for talents increasingly fierce. College students generally face greater pressure from competition in their studies, life, emotions and social development. These pressures make it more necessary to popularize leisure sports among college students. Different from the relatively boring model of traditional physical education, leisure sports emphasizes encouraging students to participate in learning independently, cultivating students' initiative and interest in sports and enhancing the fun of physical exercise. In the information age, the open and shared characteristics of the network make college physical education resources break the restrictions between schools and regions. Physical education in colleges and universities should make full use of information technology to integrate university video public classes, MOOC physical education courses, physical education videos on commercial websites and network shared physical education courses into physical education. Especially when teaching students some more complicated and difficult sports items, the online public courses can be effectively used. If there is a lack of corresponding teaching resources in the network, physical education teachers can use information technology to record corresponding video courses and integrate high-quality teaching resources. The abundant teaching resources in the information age can provide college physical education with rich content and diverse forms of online and offline multi-channel learning, realizing the sharing of teaching resources.

Keywords: Information Technology, Physical Education, Application

1. Introduction

Under the background of the information age, college physical education should be reformed in accordance with the development trend of informatization to improve the teaching effect. At present, colleges and universities should adhere to the interest-oriented and professional-based training of



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comprehensive quality talents in talent training and actively construct smart classrooms and smart campuses. Physical education in colleges and universities should not only cultivate students' professional sports skills, but also an important way to cultivate students' correct values and improve their personality. Therefore, the reform of physical education in colleges and universities must firstly reform the concept, enrich the connotation and extension of the physical education classroom, integrate the new spirit and new ideas of the new era into the classroom and enhance the educating function of college physical education^[1].

2. Overview of Information Technology

In the information age, students' cognitive level and knowledge acquisition ability have been significantly improved^[2]. As the main body of teaching, students' learning demands have been continuously improved, which puts forward higher requirements for physical education. Facing the constantly changing teaching environment, physical education teachers must update teaching content in time, improve teaching strategies and continuously improve the level of physical education with advanced information-based teaching methods. Traditional action demonstrations and classroom lectures are relatively boring and boring^[3]. Physical education teachers should make full use of information technology to enrich teaching methods, such as micro-classes, MOOCs, live broadcasts, etc., while enriching classroom content, broadening students' horizons and improving the art of physical education And fun. The technical solution is shown in the figure below.



Figure 1. Technical solution.

3. Analysis of problems in college physical education

3.1. Physical education concepts and teaching methods are backward

In the current situation of new teaching reforms, teaching ideas and concepts are also constantly developing, but the influence of traditional teaching concepts is still deeply rooted and these problems cannot be ignored. In the process of physical education, teaching and learning are included. In this process, the influence of teachers and students is mutual. However, our country's teaching concepts and teaching methods are backward and teachers blindly instill rigid knowledge into students and lack actual combat. Teachers have always been dominant in physical education. Students just blindly repeat the teacher's requirements and respond to various competitions. This is far from the innovative concept of college physical education^[4]. In spite of the continuous reforms in the past few years and the impact on this teaching model, the basic framework has not changed much and has not been able to get rid of it. Under this circumstance, students gradually lose their interest in physical education, which obviously goes against the requirements of modern physical education reform. The traditional physical education program must have its rationality, otherwise it will not exist for so long. But from the current point of view, the disadvantages outweigh the advantages and it is difficult to attract

students' interest. Students all attend classes together in the class and it is difficult to teach students in accordance with their aptitude and fail to notice the differences among students. The teacher's teaching methods are single and boring in class and the concept is relatively lagging, which seriously violates the needs of students.

3.2. The teaching team has poor teaching equipment

The most serious problem at present is that the level of teachers is not high enough to effectively teach students, which seriously affects the development of teaching. The low level of teachers is embodied in: inability to show standard movements for students; single teaching mode, which makes students lack of interest; outdated teaching concepts, unable to convey new sports knowledge to students in time; lack of basic knowledge and lack of practical experience. Teachers are severely polarized due to their own experience and differences in knowledge structure: experienced physical education teachers but lack theoretical knowledge, unable to provide guidance to students scientifically; teachers lack experience but sufficient theoretical knowledge, start the class with good points. But it cannot be used outdoors. Teachers with real experience and rich theoretical knowledge are rare and they are almost impossible to hire. Secondly, the teaching ability of physical education teachers is poor, which is specifically manifested as: unable to correctly express their own thoughts, not proceeding from reality, empty talk, without marginal lectures. In the actual operation process, the standard actions cannot be made correctly, resulting in the physical education class being just a formality and no practical significance. At present, many colleges and universities sports departments have insufficient funds to update equipment in time and many equipment are aging. The small area of the track and field is unable to carry out large-scale activities, which seriously restricts the development of large-scale activities such as football and basketball^[5].

4. Application of information technology in college physical education

4.1. Innovative working mechanism

In a certain dimension, sports management serves the development of sports teaching and its fundamental point lies in the healthy growth of students. The construction of college sports management under the guidance of the "student-oriented" concept should in-depth study of students to understand their personal characteristics and hobbies in an all-round way and use this as a starting point to improve the basic supporting environment and raise funds for development through multiple channels. Appropriately increase the investment of related resources to ensure that students actively and safely participate in the experience. At the same time, strengthen the daily management of sports venues and equipment, organize special personnel to conduct inspections, repairs or replacements, always ensure the performance of various sports equipment and reduce safety risk factors, so as to further achieve the goal of talent cultivation. In addition, focus on the management of physical education, innovate the whole set of working mechanisms, actively practice the concept of "student-oriented", create an integrated teaching classroom of theory and practice, guide students to essentially understand the relationship between physical education and personal development and cultivate them correctly. The pursuit of values, strengthen the quality of its sportsmanship and pave the foundation for the path of growth. For physical education teachers, strive to create a good sports culture atmosphere, give full play to their own teaching leading functions, scientifically design physical education projects according to the development needs of students at different growth stages and participate in student learning activities as teachers and friends and enhance them Positive psychological experience^[6]. The working mechanism is shown in the figure below.

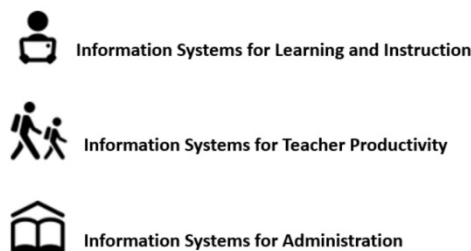


Figure 2. Working Mechanism.

4.2. Relying on modern technology

In the era of knowledge economy, scientific and technological progress is the constant driving force of social development and as a result, people's production and lifestyles have been changed, bringing unprecedented convenience and service experience. In the information age, based on the application of cutting-edge technology such as computers and the Internet, college sports management has also ushered in huge opportunities. In the new era, colleges and universities should further strengthen the construction of sports management information and gradually penetrate into sports data management, sports teaching and research management, sports curriculum management, sports assessment management, etc. and establish corresponding digital files to update the series of work development trends in time. Relying on big data analysis technology, is good at discovering the shortcomings, summing up successful experience and promoting the re-optimization of the sports management system. Taking the intelligentization of stadiums as an example, through data analysis and summary of the usage frequency, number of people, items, etc. of the stadiums, we can accurately locate students' physical exercise needs, timely adjust the use of stadiums and redesign and optimize the layout of the stadiums to maximize Improve the utilization rate of stadiums. Especially with the popularization of higher education and the rapid increase in the number of students, college sports resources are stretched to a certain extent. It is essential to realize the efficient allocation and application of limited resources and the informatization of sports management provides new solutions. It has achieved remarkable results and is worthy of widespread promotion. The management plan is shown in the figure below.

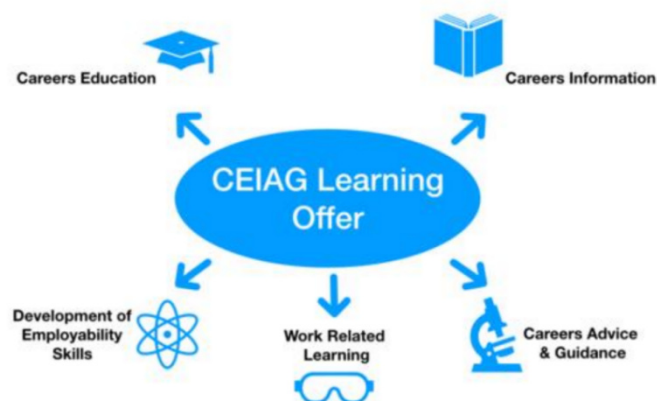


Figure 3. GManagement plan.

5. Conclusion

When arranging and designing physical education teaching, we must first have an in-depth understanding of students' relevant information. Teachers can use QQ, WeChat and other instant messaging software to understand students' interests and hobbies and combine students' professional characteristics to arrange and design physical education to ensure the rationality and scientific nature

of physical education and to teach students in accordance with their aptitude. Secondly, at the end of the semester of physical education courses, students' opinions or suggestions can be widely collected through online evaluations or questionnaires and students can also vote for courses they like and publish them through the campus website. Through the analysis of questionnaires or voting results, further adjust and standardize the structure of physical education courses and promote the development of college physical education reform.

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