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# **Analysis on the Application of Network Information Technology in College Public Sports Basketball Teaching**

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Abstract. The 21st century is a society with rapid development of information technology. The popularization of network information technology has laid the foundation for social development and brought great convenience to teaching. The application of network teaching technology in physical education in colleges and universities is mainly to carry out basic course teaching according to the physical education resources of the campus website, and to turn the network teaching mode into a supplement and extension of the course teaching content, which plays a role in guiding the physical education task in the process of spreading the physical education class curriculum. The application of network technology in college public sports basketball teaching enriches the teaching form of college physical education, speeds up the information development of college public sports basketball teaching content and teaching form more adapt to the development of information society. From the application of network technology in college public sports basketball teaching as the starting point, this paper analyzes the current situation of physical education teaching, and puts forward effective countermeasures.

Keywords: Information Technology, Physical Education, Basketball

#### 1. Introduction

Network technology originated in the mid-1990s. After only 20 years' development, network technology has been integrated into various industries, and management methods such as government affairs informationization, management informationization and trade informationization have emerged [1]. The progress of network information technology has had a great impact on the development of people and society, and has profoundly changed all aspects of people and social life. With the rapid development of science and technology, TV programs are rich and varied, and network information transmission is fast and convenient, which broadens the channels for students to learn knowledge and

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impacts the traditional teaching methods [2]. The application of network teaching technology in physical education in colleges and universities is mainly to carry out basic course teaching according to the physical education resources of the campus's own website, and turn the network teaching mode into a supplement and extension of the course teaching content, which plays a role in guiding the physical education task in the process of spreading the physical education class curriculum [3]. With the popularization of quality education, the country and society pay more and more attention to physical education. As an important way to develop national sports and improve modern students's physical fitness, physical education has received more social attention. The application of network technology in college physical education enriches the teaching forms of college physical education, accelerates the informatization development of college physical education, and makes the contents and forms of physical education more suitable for the development of information society [4].

Modern network information technology has become one of the fastest-growing and most dynamic high-tech technologies in the world. Network information technology has a great influence on people, which has changed people's life style, enriched social trade content and improved management efficiency [5]. With the development of quality education, colleges and universities attach great importance to physical education. In order to improve the teaching quality and scientificity, it has become an inevitable trend for the development of physical education to apply network technology to physical education classes [6]. The application of network technology in higher physical education is mainly reflected in two aspects, one is education and teaching, the other is teaching management. The application of network technology will further improve the effectiveness and management efficiency of higher physical education [7]. As a teacher, the main task is to develop people's potential and make smart people smarter, and the diversity of network culture provides the possibility for us to cultivate and develop students' multiple intelligence [8]. Teaching in the new era should not stay in the traditional teaching mode. The teaching method is single and boring. Therefore, using the network teaching platform for basketball teaching experiment research is in line with the needs of educational reform and development in the new era. On the basis of traditional physical education and with the help of network information technology, we should cultivate students' interest in learning basketball and improve their sports operation ability [9]. Starting from the application of network technology in college public sports basketball teaching, this paper analyzes the present situation of physical education teaching and puts forward effective corresponding measures.

## 2. Present situation of the application of network technology in college physical education

Teaching mode is to impart teaching content to students according to certain rules, which is a necessary link in the whole teaching process. At present, most physical education teachers in colleges and universities in China still teach according to the traditional teaching mode, and every class is passively accepted from the introduction of the beginning part, the warm-up of the preparation part, the teaching of the basic part, and the finishing of the end part. In order to enrich students' life content, universities have gradually increased their investment in sports construction, and sports venues have become standard supporting facilities on campus. In the field of physical education, more sports equipment has been used in physical education courses, and teachers' teaching methods and teaching contents have also been enriched. Teaching content is the transmission channel of teaching thoughts, so a single teaching content will narrow the transmission channel of education and teaching thoughts, reduce the transmission effect of education and teaching thoughts, and bind students' thoughts.

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The application of network technology in college physical education provides technical support and guarantee for changing the traditional mode of college physical education, and also brings better opportunities for college physical education workers in the future development of information-based teaching. Although the traditional teaching in colleges and universities mainly follows the principle of taking teachers as the leading factor and students as the main body, in the process of teaching specific teaching contents, the teaching of motor skills is mainly taught by teachers. Good network technology platform environment of college physical education is the foundation of building modern college physical education, which includes standardized network technology facilities and systematic teaching software. In class, PE teachers basically combine theoretical and practical teaching, and do not spend a lot of time explaining the main points of theoretical knowledge [10]. This will cause students to learn only for the sake of learning motor skills, which will make them gradually lack interest and motivation in learning, and is not conducive to the inheritance and development of sports culture. The application of network technology in college physical education management can effectively promote the efficiency of college physical education management, and provide a better teaching and research environment and a more convenient way of communication between college physical education teachers and students.

#### 3. Factors affecting the application of network technology in physical education

## 3.1. School factors

With the development of quality education, both parents and schools pay more and more attention to the development of physical education. In physical education, teachers let students experience the fun of sports through sports activities, and let every student participate in sports activities. Although the society, parents, students and schools have realized the importance of physical education and the application of network technology for teaching, the application of network technology requires necessary network equipment and software. Network information technology is not widely used in physical education, but only in the training of elite athletes and professional teams. The development of information technology and its application in education provide strong support for the modernization of education. In order to improve the quality of physical education, some colleges and universities integrate network technology into physical education. However, the application of network technology requires the purchase of corresponding hardware and software equipment, which requires a lot of investment. After the establishment of the network technology platform, professional network technology application talents are needed. Faced with this situation, many colleges and universities hold a conservative attitude towards the application of network technology in physical education [11]. At present, some colleges and universities still lack financial strength, and have no idle funds for purchasing equipment and introducing talents, so that network technology can not be deeply applied to physical education. However, some PE teachers are not professional and skilled in mastering and applying network technology. Teachers use multimedia technology to carry out multimedia teaching, so that students' thirst for knowledge is stimulated, attention is attracted by pictures and animations, and students are in a happy state of mind and enter a good learning environment, so as to promote the overall improvement of students' quality.

## 3.2. Teacher factor

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The application of network technology in physical education in colleges and universities has changed the concepts and methods of physical education in the traditional mode. Teachers are the main body of physical education, and their professional level determines the quality of physical education. In physical education courses, teachers should pay attention to students' psychological counseling while guiding students' competitive skills. Teachers of higher physical education are generally of professional background, so there is not much problem in their professional level of physical education. However, most teachers can only master some simple network technology, so the application of network technology is not sufficient. College P.E. teachers are the guiders and practitioners in the process of college P.E. teaching. Whether college P.E. teachers have modern teaching technology application concept directly affects their own teaching behavior. Applying network technology to physical education requires professional technical team, but teachers are the main body of physical education, and network technology has become one of the necessary teaching skills of physical education teachers. However, many college teachers lack network application technology, which has a corresponding impact on physical education.

College PE teachers need to break through the shackles of traditional PE teaching ideas by using network technology to assist teaching, and constantly promote the promotion of college PE teachers' PE teaching ideas, which is conducive to the improvement of college PE teachers' professional skills in network teaching technology. College students have obvious differences in physical quality, personality characteristics and hobbies, and their sports ability and learning interests are also different. Teachers can use network technology to set up personal learning files for students, manage students' data, and use some computer computing technology to analyze each student's training time, training intensity and students' physical fitness data. In college physical education, physical education teachers should have accurate guidance on the specific role of network technology in college physical education, so as to improve the efficiency of college physical education, effectively guarantee the quality of college physical education and realize modern teaching in college physical education.

## 4. Application of network information technology in college public sports basketball teaching

### 4.1. Cultivate students' interest in learning

Colleges and universities can develop sports teaching software with campus characteristics according to their own sports teaching needs in the future. Teaching software records the teaching content and students' reflection, and finally transmits it to the computer. Teachers adjust their teaching contents and teaching methods according to the collected student data. For public sports basketball teaching, teachers need to cultivate students' interest in learning, which can generate a strong driving force. The application of network information technology in public sports basketball teaching has vivid pictures, vivid images, rich animations and beautiful music. Students can quickly enter the learning situation and realize the charm of basketball [12]. In tactical teaching, simple passing and cooperation or the use of modern information technology can not only meet the psychological characteristics of teenagers' thirst for knowledge and innovation, but also create better situations and emotional experiences, which can arouse and maintain students' attention and interest, thus arousing students' enthusiasm for learning and arousing their enthusiasm for learning.

The development of physical education can not be separated from high-quality teaching resources, and the teaching network contains a large number of physical education courseware and campus

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materials, which not only enriches the contents of physical education, but also provides scientific theoretical guidance for the ways and methods of physical education. By establishing a network information platform, PE teachers upload courseware, technical analysis, learning materials, etc. to the platform, which is convenient for students to learn independently before and after class, and give full play to the value of resources, instead of being limited to learning resources and methods such as text materials and face-to-face communication. In the maintenance of teaching network resources, colleges and universities should update regularly, but updating does not mean that the traditional teaching methods and teaching concepts are abolished, but rather that they should carry out information management and build their own teaching resources database. The function of multimedia itself is interesting. Based on this, it can improve students' learning motivation and stimulate students' learning enthusiasm. The advantages provided by multimedia teaching exceed ordinary teaching methods.

# 4.2. Form students' sports skills

In colleges and universities, the main task of public sports basketball teaching is to let students learn the skills of basketball, and on this basis, continue to innovate. The application of modern network information technology should meet the requirements of rich content and diverse forms of physical education, and conform to the characteristics of physical education theory and practice teaching. At the same time, we should also use technical means to set up background monitoring to ensure that students concentrate on studying physical education courses and flexibly use resources such as platforms to jointly promote the effective and rational integration and benign development of modern network information technology and college physical education [13]. If students want to form movements, they need teachers to constantly explain and demonstrate, and students can only perceive the movement process of basketball skills by constantly practicing. Teachers' explanation of knowledge and demonstration of movements are the main sources for students to learn movements. According to network information technology, audio-visual representation is established to promote students to form sports skills. In basketball, there are many sports techniques which are not only complex in structure and need to be completed instantly, but also some abnormal movements. If modern information technology is used, complex technology can be gradually displayed in front of students in slow motion or freeze frame by various means, and teachers can explain the essentials of each decomposition action, demonstrate the whole process of the whole action, and then grasp the key part of the action.

# 4.3. Cultivate students' aesthetic ability

For college students, the task of learning is heavy, and there are few opportunities to find time to enjoy basketball games. In order to improve students' appreciation ability, we must guide students to watch the game, study seriously and know the knowledge of basketball. The application of network information technology in college physical education needs the support of hardware and software. For example, network information equipment, network security guarantee, the establishment of physical education resource pool and so on. In college public sports basketball teaching, with the help of network information technology, students can be shown more basketball games, and teachers can guide and explain them, so that students can improve their appreciation of basketball games. In order to meet the needs of network technology in physical education, colleges and universities can train physical education teachers on the application of network technology, so that physical education

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teachers have certain ability of network data processing and analysis. If modern information technology is used in public sports basketball teaching in colleges and universities, students will be shown more games, and the teacher will guide and explain, and students will get a very effective improvement in viewing ability. With the improvement of students' viewing level, they will consciously imitate and correct their technical movements and tactical combinations among their classmates, so as to effectively improve students' sports skills and sports level.

## 5. Conclusion

With the development of network era, network technology has been widely used in college teaching, which promotes the development of modernization of college physical education, and also promotes the constant updating of college physical education teaching mode. Modern network information technology has the characteristics of quickness, high efficiency and multiple resources in teaching application, which makes it gradually become an inevitable trend. The application of network technology to physical education in colleges and universities not only promotes the development needs of modern physical education in colleges and universities, but also broadens the channels of physical education through the network platform of physical education, providing technical support for the realization of lifelong physical education. College physical education teachers should not only understand information technology, but also be able to develop and use network information technology flexibly in teaching. Teachers should pay attention to increasing the application level of network technology in higher physical education, adopt reasonable application methods, avoid overreliance, give full play to its technical advantages, and eliminate or weaken its application disadvantages. Network information technology adds vitality to public sports basketball teaching in colleges and universities, promotes students to master basketball skills and tactics, understands the rules of basketball games, arouses students' learning enthusiasm and improves students' appreciation ability.

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