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The Construction of "Wisdom Classroom" Teaching Model of Public Physical Education in Colleges and Universities from the Perspective of "Internet +"

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Abstract

In recent years, the reform of higher education has been in full swing. The Minister of Education emphasized at the National Education Conference that universities should actively promote the integration of information technology and teaching in various disciplines, and accelerate the construction of education informationization and wisdom. Public physical education in colleges and universities is a major way to improve the physical fitness of college students. However, there are many problems in traditional public physical education in colleges and universities, and the physical fitness of college students needs to be improved. The development of modern information technology has promoted the advent of the "Internet +" era. In this context, creating a "smart classroom" for public physical education in colleges and universities has a positive effect on improving the physical fitness of college students and building a "powerful country in sports." Based on this, this article first investigates the development of public physical education in our school, and then puts forward the construction goals and basic framework of "smart classroom" teaching of public physical education in colleges and universities under the background of "Internet +", and proposes implementation strategies.

Keywords

Public physical education, smart classroom,"Internet +"; strategy.

1. Introduction

At present, the reform of physical education in China's colleges and universities has entered a "climax". The teaching content, teaching methods, and methods of public physical education in universities are significantly different from those in the past. However, judging from the results of the survey of adolescents' physical health, the adolescents' physical fitness level in China has dropped significantly[1]. This result also reflects the severe situation of developing sports and enhancing adolescents' physical fitness. The "Thirteenth Five-Year Plan for Education" clearly proposes to promote the integration of information technology and education, to speed up the reform of teaching methods, and to deepen education reform by means of information technology. The development of information technologies such as mobile Internet, big data, and cloud computing provides new opportunities for the reform of public physical education in colleges and universities. Based on this, this article explores the construction of the "smart classroom" teaching model of public physical education in colleges and universities, with a view to improving the quality of public physical education in colleges and universities.

2. Current Situation of Public Physical Education in Universities

According to the needs of the research, the author randomly distributed a questionnaire to 80 students in our school. A total of 80 student questionnaires were distributed and 80 were

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recovered. According to the results of the questionnaire survey, the data was sorted and analyzed by excel.

With the reform of the overall education environment, university students have more and more time for autonomous learning. The results of 80 valid questionnaires randomly selected for our sophomore and sophomore students are as follows (shown in Table 1). From the data in Table 1, most of the students are satisfied with the current public physical education teaching, but most of the students are general about the organizational form, teaching level, and effect of public physical education. The overall evaluation given is more partial than the content low.

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Table 1. Status of students' awareness of public physical education

Content	Very good	Well	General	Bad
Teaching content settings	12	23	43	2
Teaching organization	11	29	29	11
Teacher teaching level	18	34	18	10
Teaching effect	8	22	33	17

The author investigated the form of students' participation in public physical education in our school, and the data compiled is shown in Figure 1. It can be seen from Figure 1 that most students are more enthusiastic about participating in public physical education, and 48 students choose courses independently. Another 24 students were helped by their classmates to choose which sports to participate in, and held an indifferent attitude towards public physical education. Most of the remaining students were unable to choose the sports they wanted to participate in for various reasons and had to choose other courses. Some students did not choose to succeed.

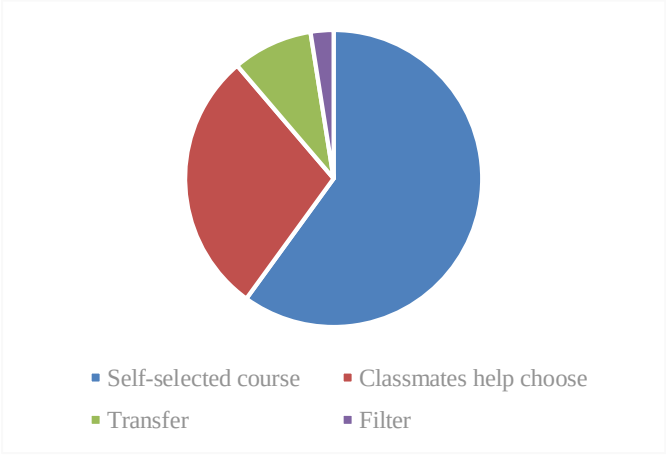

Figure 1. Students' participation in public physical education

In addition, the author investigated the attendance of students in our school in public physical education classes. The results are shown in Table 2. According to the data in Table 2, about 60% of the students indicated that they can guarantee full attendance, and students with a negative attitude also accounted for a large proportion. On the reason that full attendance cannot be guaranteed, most students stated that it was because the course teaching was boring, and some students did not go because of academic pressure. It can be seen that most students can

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guarantee full participation in public physical education classes, but some students are not active in learning.

Table 2. Students' attitude towards participation in public physical education

Content	Absolutely okay	Definitely can	Basically can	Cannot
Guarantee full participation in classroom teaching	23	18	7	32

To sum up, the current problems in the teaching methods, teacher level, teaching effect, student participation, and teaching ideology of public physical education in universities are serious. In terms of teaching methods and effects, some teachers still use more traditional teaching methods such as preaching, teacher demonstrations, and student exercises. It is difficult to mobilize students' interest. This also makes students question the attitude of some teachers and affects their teaching. Teaching effect. In terms of teaching guidance, some teachers do not recognize that students are the main body of teaching in physical education. The teaching link is not designed according to the learning needs and physical fitness of the students. The classroom teaching is still based on teacher explanation and demonstration.

3. Guiding Ideas and Objectives of the Teaching Construction of "Smart Classroom" for College Public Physical Education Courses under "Internet +"

Table 3. Teaching Construction Goals of "Smart Classroom"

Aims	Secondary goal	Content
Course targets		Through public physical education, students' physical fitness, intelligence, and perseverance will be strengthened, their wills will be hone, and their mental health will be improved; students' fitness awareness will be strengthened, and students' interest in studying and exploring natural and environmental resources and network resources will be enhanced, and students will be strengthened Social adaptability, develop the habit of lifelong sports thinking and lifelong exercise
Learning area goals	Theoretical knowledge goals	1. Study the characteristics, values and functions of sports 2. Learn sports technology theory, sports injuries and treatment methods 3. Sports competition rules
	Skill area goals	1.Master the use of sports equipment 2. Master directional sports injuries and treatment methods
	Physical fitness goals	1. Enhance students' physical qualities such as strength, speed, endurance, and sensitivity 2. Develop students' running ability and ability to judge direction
	Mental domain goals	1. Improve students' psychological state, overcome sports psychological obstacles, and improve environmental adaptability 2. Cultivate teamwork among students

(1) Guiding ideology

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"Internet +" is an upgrade of the traditional Internet, which has a larger amount of information and more resources, and can better meet the information acquisition needs of people at different levels[2-3]. Using "Internet +" to create "smart classrooms" can use the resources on the Internet to enable students to better and more conveniently and efficiently learn the skills and techniques of sports such as football, and achieve more effective teaching results. Therefore, the "Smart Classroom" teaching construction of public physical education courses under the "Internet +" is based on the guiding ideology of student-oriented and promoting the development of online education for public sports courses.

(2) Construction goals

Curriculum construction combines the current teaching framework of public physical education, combines the characteristics of "Internet +" and teaching advantages, and proposes the construction goals shown in Table 3 according to the above guiding ideology.

4. The Path of "Smart Classroom" Teaching Construction in University Public Physical Education

(1) Construction of classroom information service platform

The "smart classroom" teaching model of public physical education in colleges and universities must adhere to the student-centered approach. Teachers should strengthen their study of pedagogy and educational psychology, better grasp the students 'cognitive laws, and adhere to the students' dominant position in teaching. At the same time, under the guidance of this idea, schools should also work with the information technology department to actively build and improve the information service platform for public physical education, and use big data, cloud computing and other technologies to manage smart terminals (mobile phone apps, computer applications) and on-site sports stadiums[4]. The platform and the educational administration system are connected to combine students, teachers, parents, terminal equipment, and stadiums to provide an informatized and integrated service environment for public physical education teaching, as shown in Figure 2. Among them, the intelligent terminal equipment mainly includes a teacher's terminal, a student's terminal, a parent's terminal, etc. The terminal equipment can be described as an electronic time attendance machine, a performance entry system, a smart phone APP, a sports wearable device, and the like. The main function of the intelligent terminal device is to collect relevant information and data, and upload the collected data to the data platform. Students can understand their physical fitness, learning conditions and deficiencies based on these data. Teachers can carry out targeted sports based on this. teaching. The R & D school of the intelligent terminal platform can be outsourced to qualified and experienced technology companies for development and design, and feedback the construction requirements and ideas to the outsourcing company[5]. Qualified universities can also independently develop smart terminals based on existing equipment, or upgrade existing physical education hardware and terminals.

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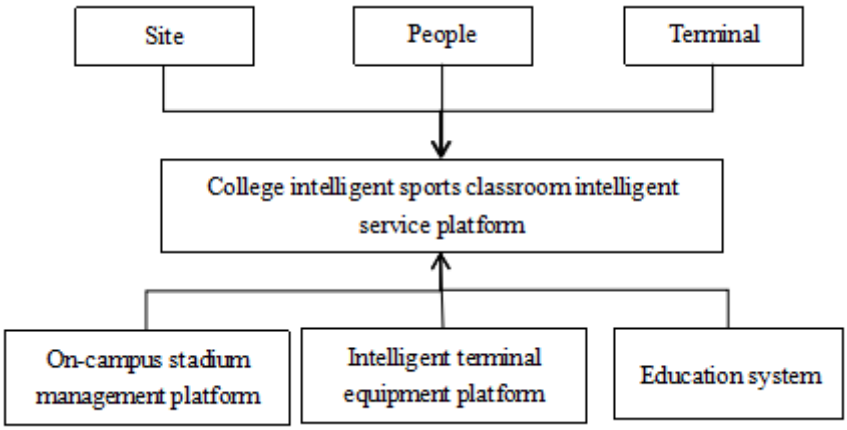

Figure 2. Information service platform for smart sports classrooms in universities

(2) Optimize classroom teaching process and organizational form

The "smart classroom" of public physical education is obviously different from the traditional physical education. It uses information technology and means to promote teaching through learning, allowing students to independently preview and evaluate before class, answer questions and supervise in the classroom, and consolidate the application after class. Middle school insists on the student's subject status. Under the "smart classroom" teaching mode, students can better exert their subjective initiative, and physical education can be taught according to their aptitude.

Before class, teachers must perform academic analysis before preparing lessons, and academic analysis can enable teachers to better grasp students' physical condition and learning attitude through massive data in the data center. Based on this, a micro-lecture will be produced. After the production is completed, the micro-lecture and other materials will be published on the student's smart terminal. The smart terminal will push the information to the student in time. Tasks, and the student end dynamically records the student's learning data and feeds the results back to the students and teachers. At the same time, students can also use smart terminal devices to communicate with other students and teachers about problems encountered in the preview process, which greatly mobilizes the initiative of students and is also conducive to fostering students' autonomous learning and inquiry consciousness. Based on this, teachers make targeted teaching designs, such as teaching difficulties and processes.

In the classroom, the teaching of public physical education emphasizes students' independent cooperative exploration and learning, and introduces the theme of this lesson through question introduction or creating life situations, etc., to focus students' attention and improve students' classroom participation[6]. In the process of student cooperative learning, teachers can use terminal devices to send action flip charts and videos to students. Students learn motor skills and standardize movements in cooperative communication, and complete learning under the guidance of teachers. The physical function data generated by students during the cooperative learning process can also be fed back to the teacher through the terminal. For example, through wearable devices that monitor heart rate, students and teachers can learn about changes in student heart rate, so that teachers can better grasp the students' exercise intensity. To reduce sports injuries. After the cooperative practice, students can basically master motor skills, can conduct assessments and feedback, and teachers can perform record-based monitoring and diagnosis, and implement process evaluations accordingly.

After class, teachers still need to guide students' after-school sports activities, so that students can better digest classroom knowledge, improve physical fitness, and also improve the teaching effect of public physical education. Teachers push targeted after-school exercise tasks through

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smart terminal devices based on different students' grasp of course content, and provide guidance and evaluation based on information data fed back from student terminals. Students can also extend learning according to their interests while completing post-class exercise tasks, and communicate with PE teachers online to jointly promote the construction of smart sports classrooms.

5. Conclusion

Under the background of "Internet +", it is a general trend for universities to build "smart classrooms" for public physical education. According to the situation investigated by the author, the current problems in the teaching methods, teacher level, teaching effect, student participation, and teaching ideology of public physical education in universities are serious. Therefore, this research puts forward the guiding ideology and goals of construction, and on this basis, explores the construction path of "smart classroom" teaching of public physical education in colleges and universities, with the purpose of bringing out the true value of "Internet +" in physical education.

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