

# The Fusion and Construction Strategy of Smart Sports and Traditional Sports Teaching Mode in College and Universities

Honglian Qin\*

Department of Physical Education, College of Arts and Sciences, Shanghai Maritime University, Shanghai, 201306, China

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## ABSTRACT

Use expert interviews, literature and other methods to summarize and analyze the pros and cons of smart sports and traditional sports, combine traditional sports with smart education, and create a more scientific and effective smart education model for colleges and universities, so as to promote the joint participation or supervision of schools, teachers, parents, and students to improve the quality of physical education, so as to achieve physical education for students and enhance the time and intensity of students' physical fitness.

## 1. Introduction

In the fight against the spread of the "COVID" epidemic, colleges and universities insisted on "continuously running schools", combining traditional sports with smart sports, and implementing online education, which can not only meet the needs of epidemic prevention work, but also ensure adequate physical exercise; the "smart sports" classroom can also integrate the traditional mode of individual education, bad weather, avoid insufficient physical space, insufficient feedback on teaching effects, etc., and will cooperate with traditional sports for a long time<sup>[1]</sup>.

## 2. The Overview and Advantage Analysis of Smart Sports

### 2.1 The Overview of Smart Sports

Smart sport is a new sport concept with rich connota-

tion, distinctive features, and future-oriented. With sports "wisdom", continuous innovation and expansion on the basis of tradition, and the ability to quickly evaluate priorities, and make relevant decisions, is a new type of sports participation method, in order to meet the individual needs of athletes, enrich the sports experience, improve the quality of sports, and promote the sustainable development of sports. Domestic research on smart education is still in its infancy. Currently, it is mainly focused on concepts, preview or course settings. However, there is not much research on smart sports at home and abroad. How to combine traditional sports with smart sports is still very extensive.

Intelligent sports are gradually entering colleges and universities sports teaching. The use of intelligent teaching methods in physical education can not only effectively improve the initiative and enthusiasm of sports participants,

\*Corresponding Author:

Honglian Qin,

Department of Physical Education, College of Arts and Sciences, Shanghai Maritime University, Shanghai, 201306, China;

Email: hlqin@shmtu.edu.cn

but also help students discover their own athletic ability. Through new technologies and new methods, students can better participate in sports activities, provide reliable data for the development of smart sports, establish a good big data analysis system for students, and help students participate in sports activities scientifically and effectively.

## **2.2 The Advantage Analysis of Smart Sports**

### **2.2.1 Smart Sports is Highly Integrated with a New Generation of Information Technology**

Smart sports break the limitations of the traditional sports environment and combines the organic space of sports with the digital space of sports behavior. Through the ubiquitous information network, comprehensive measurement, monitoring and analysis of sports behavior. The system realizes the overall perception of sports behavior through various sensors, facilitates the monitoring and management of school sports courses, and provides a theoretical basis for sports managers to make management decisions, cloud computing and other intelligent processing technologies, which is used to process and analyze the quality of perceptual information, use more accurate data and scientific methods to help students participate in various sports activities, at the same time, there are a lot of opportunities to learn high-quality videos, which can improve the aesthetic ability of primary school students, prevent students from simply imitating the teacher's role in learning, and form relatively standardized technical measures.

### **2.2.2 Smart Sports Integrates Multiple Resources**

The integration of intelligent sports with education, medical care, tourism, culture, etc., can quantify and train students' willingness to train actively, reduce the risk of accidents, exercise scientifically, and build a digital, networked and intelligent sports space, sports fashion and sports ecology. "In the Internet age, network resources are abundant, and various standardized activities can be implemented through the network to promote safe, healthy, and safe sports for students. "Offline" is to integrate various resources, realize the optimal allocation and full utilization of sports resources, increase the time and possibility of physical exercise, better complete sports tasks, and enhance students' physical fitness.

### **2.2.3 Smart Sports Meet the Diverse Sports Needs of Students in Colleges and Universities**

Smart sport is an advanced and systematic ecological project that can quickly meet people's different sports

needs. Modern students in colleges and universities have distinct personalities and different requirements for physical exercise. By providing students with more scientific fitness tracking training methods, so that students can master physical performance, autonomy, etc., they can drive different training programs according to the different needs of the population, realize the selectivity and democratization of students in colleges and universities, and stimulate students' interest in sports and achieve the goal of lifelong sports.

## **3. The Status Quo of Traditional Physical Education Teaching Model in Colleges and Universities**

### **3.1 Poor Physical Fitness of Students**

The influence of physical education class determines the physical and mental health of students in colleges and universities to a certain extent, but the physical condition of students in colleges and universities is not optimistic. Bad habits, such as playing online games, endanger the health of students. In recent years, the results of the students in colleges and universities physical health survey show that the overall status of the physical health of students in colleges and universities such as vitality, the country and some provinces and cities have also introduced measures to strengthen school sports activities in order to achieve the purpose of improving students' physical fitness.

### **3.2 The Concept of Physical Education Needs to be Improved**

A reasonable teaching concept is the guarantee for smooth teaching. At present, the education and training of students' motor skills and the evaluation of sports level are of great significance. In order to obtain high scores, students do boring and mechanical physical exercises, which are incompatible with the educational goals of quality education. In order to successfully complete the teaching task, teachers do not have time to consider individual differences, it is difficult to teach students in accordance with their aptitude, and to cultivate students' sports awareness, which leads to passive learning of students. This traditional method of physical education that "suppresses" students' learning is not only difficult to guarantee the quality of physical education, but also is not conducive to students' love of sports, and it is difficult to form the habit of "lifelong sports".

### **3.3 Single Method of Physical Education**

At present, the physical education of colleges and uni-

versities mainly adopts traditional administrative teaching or club teaching, where teachers and students are taught in teams, which cannot adjust the physical education curriculum and teaching tasks flexibly. The mastery and standardization of students in colleges and universities has become the standard of physical education evaluation. Its scientificity and effectiveness directly affect the efficiency and quality of teaching. The course uses demonstration, explanation, imitation, etc., and has high requirements for teacher qualifications and behavioral norms. If teachers do not systematically grasp the needs of students' daily activities, the teaching effect is difficult to guarantee.

### **3.4 Real Interpersonal Communication**

Traditional educational concepts are outdated and have some defects. However, the traditional teaching method, that is, face-to-face teaching, has an irreplaceable side. Face-to-face teaching is practical and provides in-depth emotional communication between teachers and students. The feedback to students, teaching effects and other information is more intuitive and timelier, which is conducive to improving students' competitiveness. Some students will fall in love with sports because of the teacher's personality. This is the advantage of traditional physical education.

## **4. Situation Analysis of the Involvement of Smart Sports Teaching in the Traditional Sports Teaching Mode in Colleges and Universities**

### **4.1 Smart Sports Teaching Equipment Begins to Take Shape**

Smart sport is the product of technologies such as cloud computing, big data, and the Internet of Things. Modern sports will continue to integrate with advanced technology, create new technologies, new concepts, highlight the value of data, realize the normalization of intelligent innovation, and have strong vitality. Cloud, Internet of Things, and virtual reality have begun to take shape. In addition, smart phones are becoming more and more widely used among students, and smart bracelets are becoming more and more popular, providing basic equipment for real-time smart sports teaching mode.

### **4.2 Students are Willing to Accept**

The intelligent sports information perception network has a wide coverage, is conducive to the integration of resources, and has a positive impact on athletes and athletes themselves. Smart sports resources can expand participants' cognitive space of their own sports status, choose

appropriate sports methods, venues, and intensity, and manage and respond to the individual needs of sports participants in a timely manner.

Modern students in colleges and universities have distinct personalities, diversified needs, pursue a life of learning efficiency, and are more willing to accept new things. Contemporary students in colleges and universities will be more popular among students in colleges and universities.

### **4.3 Teachers Have Sufficient Professional Skills**

Colleges and universities pay more and more attention to the construction of school spirit, and actively participate in physical education teacher qualification competitions and functional teaching competitions, so that physical education teachers as intellectuals continue to innovate in teaching concepts, teaching methods, and teaching resources. Improve the level of physical education through scientific and technological means, improve the quality of education, and become the dissemination and promotion of smart sports, with the ability to lead intellectuals in learning smart sports.

In summary, colleges and universities have launched smart teaching tools. The psychological and professional level of teachers and students have also prepared for smart teaching. The field of physical education of colleges and universities needs to be expanded. As a useful supplement to traditional physical teaching methods, it is necessary to intervene in smart teaching of physical education.

## **5. The Construction of the Model of the Integration of Smart Sports and Traditional Sports Teaching**

### **5.1 Build a Smart Sports Platform**

The intelligent sports platform is an interactive platform for resource integration and information sharing. It is an informationized process. The key to building a smart sports platform in colleges and universities is:

(1) Introduce smart sports equipment to make sports videos for students. The sports bracelet is an ordinary and easy-to-accept smart exercise equipment. Through the establishment of a related chat platform, it can monitor the exercise status of students such as exercise density, heart rate, and calorie consumption, automatically record various data indicators during school exercise, monitor the frequency, duration and suitability of students' exercise in school, compile students' exercise records, and facilitate students, teachers and parents to access sports files.

(2) Promote important general information and knowledge.

Based on this platform, on this platform, according to

students' learning interests and course content, real-time promotion of event information and theoretical knowledge on this platform, including sports news, sports training, sports rehabilitation, nutrition, sports anatomy, sports health, etc., through reading and continuous reading, arouse students' desire for health and fitness and cultivate good exercise habits.

(3) Assign teachers. Use the smart sports platform to arrange homework corrections, check student participation rates, approve vacations, communicate with teachers and students, answer questions in a timely manner, and solve problems.

(4) Compile a learning webpage guide. Through the smart sports platform, students can browse related activity information, high-quality learning videos, write homework, communicate with teachers frequently, and have holidays.

(5) Parents can participate. Parents can use the platform to check school guides, review homework, understand the teacher's feedback to the teacher at the end of the homework, and put forward corresponding opinions and suggestions. If the network demonstration platform is successfully established, it is due to the online and offline behaviors of colleges and universities sports activities, the information exchange between families, schools, and families, and the realization of intelligent education for teachers and students.

## 5.2 Push Sports Clock-in Scheme

The sports intelligence platform is developing towards computerization, functionalization and individualization. Through the benign interaction between platforms, policies, services, data, etc., promote the promotion and implementation of related work and policies, and put forward various sports suggestions according to the physical conditions and goals of students to enable students to actively choose and participate in the competition according to their physical condition and goal pursuit. Use safe and accurate teaching videos, including nuclear power training method, cardiopulmonary endurance training method, limb strength training method, etc., to carry out rehabilitation training for sports injuries in certain parts of the body, and use related relaxation and stretching methods to help students train and hit scientifically.

## 5.3 Use Relevant Equipment to Push Monitoring Information

The effective combination of physical activity monitoring and after-school exercise monitoring is of great significance for stimulating students' enthusiasm for sports,

and scientifically evaluating and guiding students' sports activities. Use relevant recording equipment in offline classrooms to demonstrate students' heart rate and energy consumption. Install weight scales and related easy-to-use health assessment equipment in sports facilities or dormitories. Promote simple health assessment and assessment methods. Provide temporary feedback on sports stunts, animations, subtitles, etc. to improve the average time of physical education, respond to students' feelings, and stimulate students' interest and willingness to participate<sup>[2]</sup>.

## 5.4 Implement "Online and Offline" Integrated Physical Education

Online and offline dual-pronged approach to maximize the value of school education. Pre-class (online) preview (theory and practice), check the preview effect in class (offline), and use smart monitoring equipment (sports bracelet) to set a personalized target heart rate in advance based on the students' situation discovered before the experiment. And according to the students' situation detected before the experiment, the intelligent monitoring device (sports bracelet) is used to set the personalized target heart rate in advance, and the target heart rate is set in advance through the video throughout the course.

## 5.5 Teachers Push Personalized Exercise Prescriptions

Make use of the convenient conditions provided by the intelligent sports platform, observe students' sports interests through reading, and formulate sports teaching content suitable for students' interests. Grasp the students' sports status, sports weaknesses and points of interest, make suggestions that are easy to be accepted by students, arrange preview content, realize personalized and accurate physical education, and help students establish a "health first" awareness, and take the completion of homework as the basis of usual performance, and encourage students to actively participate in sports activities.

## 5.6 The School and Parents Jointly Supervise the Teaching Situation

The intelligent sports platform is characterized by timely information and strong interaction. It can not only update a large amount of information resources in time, but also provide users with online services, so that users can experience diversified services. Using the intelligent sports platform, schools can monitor the development and implementation of sports teaching in colleges and universities, and help managers discover problems in time, optimize or formulate corresponding countermeasures.

Parents can check sports files through the smart sports platform, communicate with those in need in time, actively participate in sports activities, and make suggestions and opinions to the school to ensure that schools, teachers, and parents work together to promote the physical and mental health of students in colleges and universities.

## 6. Conclusions

Traditional sports and smart sports have their own advantages, which are worth learning from. Vary from person to person, time to place, and proceed from reality to implement “online and offline” integrated physical education, promote the integration of traditional sports and smart sports, and build scientific and effective new methods of physical education in colleges and universities.

Establish scientific and effective new methods of physical education in colleges and universities, improve the quality of physical education in schools, ensure the time and intensity of students’ exercise, and improve their physical fitness.

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