

## Research on the innovation of Physical Education long-distance mixed classroom teaching mode under the condition of home isolation

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**Abstract:** In order to overcome the shortcoming that physical education can not be carried out under the special condition of home isolation during the epidemic situation, long-distance classroom teaching was adopted. Using wechat public platform, QQ communication group, related APP applications and new media online tools such as MOOCs, micro classes, youku video, etc, the intelligent integration editing is integrated into the teaching process of physical education. According to the current situation of college students cognition of different elective courses of physical education and combined with students objective of elective courses, a long-distance and intelligent mixed teaching mode suitable for the characteristics of elective courses of physical education is established. The research results of this paper will provide scientific guidance for students physical exercise, improve students enthusiasm to participate in physical exercise, improve students physical quality, enhance their immunity, and build a solid bulwark against epidemic situation.

### 1. Introduction

With the advent of the Internet age, instant communication technology and mobile intelligent terminal equipment are becoming more and more popular among students, and long-distance online education has become the mainstream trend of global education development, it has a great impact on the traditional teaching mode in colleges and universities. As early as 2010, China promulgated the outline of the national medium-and long-term education reform and development plan 2010 -- 2020 (hereinafter referred to as "outline" points out: the Education Informatization into the overall national informatization development strategy, ahead of the deployment of Education Informatization Network [1]. Under the guidance of the planning outline, new changes have also been made in the educational model of colleges and universities [2]. The integration of new media and traditional teaching forms has aroused the great attention of experts and scholars, among them, the exploration of the mixed teaching mode of online course and application of APP has become a hot issue in the research of teaching reform [3-5]. In the case of extreme natural disasters such as epidemics, smog and typhoons, in order to prevent the spread of the epidemic and human exposure to the outside world from causing diseases and casualties, the state calls on all people to prevent epidemics in their homes and stop going out in extreme situations[6-8]. The classroom teaching in the school was only forced to stop. In order not to delay the progress of school teaching and to meet the needs of students, this study intends to optimize the long-distance online teaching model, create intelligent mixed classroom, better realize the long-distance physical education teaching, to achieve the desired teaching objectives.

### 2. The significance of long-distance online classroom teaching

#### 2.1 Long-distance online classroom teaching is an urgent need of the development of education in The Times

With the popularization and development of the Internet, mobile terminals and APP applications

have replaced the traditional learning process to a certain extent. Online teaching of courses should follow up in time to meet students' learning needs, this is the inevitable trend of the development of contemporary education and teaching [9, 10]. In the special period, teachers and students are isolated from each other at home, so it is urgent to replace the traditional face-to-face teaching with an optimized distance teaching model.

## **2.2 Important role of distance online teaching model in teaching practice**

The long-distance mixed teaching mode breaks the traditional teaching concept of curriculum, and abandons the disadvantages of participation-based traditional classroom teaching which is not suitable for online education [11]. This topic designs many kinds of mixed teaching channels, expanded the teaching path and the form, supplemented the traditional classroom teaching face-to-face spatial dependence, enhanced the teaching flexibility and effectively stimulated student's study motive and the classroom participation degree. The pre-class and after-class real-time feedback link is added to form the integration of in-class and out-of-class, which provides full protection for students learning and application of knowledge.

## **2.3 Online teaching model is an extension and supplement of the traditional teaching method**

Online teaching mode overcomes the traditional face-to-face, one-to-many, classroom teaching is generalized, more personalized to complement, so that the learning process is more flexible without restrictions.

## **3. The current situation and problems of distance online education**

### **3.1 Related policies and development of distance online teaching model**

With the development of network, the convenience of mobile terminal equipment is more and more obvious. As early as 2010, China promulgated the outline of the national medium-and long-term education reform and development plan 2010 – 2020. Under the guidance of the outline, there have been MOOCs, micro courses, online courses and gold courses deployed by the Ministry of Education, which have played a great role in promoting online education [12, 13]. At the same time, the commercial paid online classes, all kinds of online video, audio APP website free sharing resources, has become an important online learning resources. At the same time, the commercial paid online classes, all kinds of online video and audio teaching, and the APP providing free shared resources have also become an important part of online education.

### **3.2 Current status of teaching resources**

With regard to the supply of Internet resources, on January 29, 2020, China's Ministry of Education announced that it would launch a "national online cloud classroom [www.eduyun.cn](http://www.eduyun.cn) " on February 17, based on the ministry's compilation of teaching materials and versions of teaching materials widely used in various places, provision of on-demand courses from the first grade of primary to the third grade of Senior Secondary [2]. And on February 5, China's Ministry of Education issued a notice on "doing a good job in organizing and managing online teaching in colleges and universities during epidemic prevention and control. " Universities are required to make full use of online MOOCs and high-quality online course resources and platforms at the provincial and university levels to actively carry out online teaching and learning, and open more than 24,000 free online open courses for universities nationwide, to ensure the substantial equivalence between online teaching and offline teaching. In the special period of the outbreak of the epidemic, in addition to the national uniform and open online course resources, colleges and various commercial sex education and training institutions as well as related apps have also opened some online courses and related resources to the public, examples include Chinese University MOOCs, school online, good university online, Change, KEEP, Huawei Sports, and more. In terms of online teaching, a number of colleges and universities have launched online teaching programs, mainly suggesting the use of MOOC, SPOC and other teaching methods, at the same time, the establishment of students to answer questions, supporting courses offered, the rain class and tencent's online class use relatively

more.

### **3.3 Problems of online resources and educational resources related to self-media**

Through the investigation of individual colleges and universities, it is found that the most enthusiastic students of physical education courses are not the official courses recommended by the state. The data showed that students were most likely to use various functional APPS, as well as Wechat and sports-related posts and individual video media websites. But in the process of learning, the students are blind to the collection and retrieval of network resources [14]. As a basic course in colleges and universities, physical education is an important part of college education, which plays an important role in the overall development of students' physical quality and mental health. In sports-related online course resources, there are some non-authoritative open video websites, personal blogs, home pages and other self-media. In order to increase click rates, the Internet resources are not strictly controlled, resulting in uneven quality of resources, even many of the materials are clearly wrong for teaching and presentation. These problems lead to students being misled in the learning process, wasting time and energy, affecting the effect of exercise and even causing sports injury.

### **3.4 One-sidedness, arbitrariness and exaggeration of network sports resources**

Due to the lack of regulation in cyberspace, in the course of actual operation, regardless of whether it is reprinted or uploaded freely, at present, most web censors only emphasize non-pornographic violence, violation of political principles and legal requirements of the resources can be uploaded to share. Most of the unofficial resources are not professional enough, resources are basically one-sided, upload and share the casual boast, exaggerated fitness function effect and so on. At present, the more popular APP Douyin software, and this software is also deeply loved by young people. Almost as soon as people open the APP, they will send out such exaggerated propaganda as "easy three movements 60 times a day, 7 days to lose belly, 10 days to lose whole body", plus the uploader's body shape is close to that of a model, so similar media sources can be hugely misleading to the viewer. As for the relative standardization of the sports and exercise resources of APPS like KEEP and Gudong, students can not fully develop when they choose the exercise content, resulting in the uneven development of the basic human qualities, if you do this for a long period of time, you are bound to develop injuries or deformities.

## **4. The construction of the innovative model of the 3-distance online hybrid classroom**

In order to overcome the shortcomings and shortcomings of the above-mentioned online teaching, the teachers in charge of the course select and combine all kinds of physical education teaching resources, and provide students with reliable and comprehensive physical education teaching resources and incentive mechanism, it can avoid the misleading of the network resources to the students physical training, so the establishment of the long-distance online mixed classroom teaching model has important practical effect and significance.

### **4.1 Collate, screen and push rich and high-quality course teaching resources for students.**

Through the public platform of Wechat, the group of QQ communication and related application software AAP, as well as new media means such as MOOCs, micro classes, Youku and watermelon videos, to enrich the teaching materials, online resources such as teaching video, pictures, text and animation are integrated into the courseware and teaching. Finally achieving the goal of distance learning to meet the needs of students, and complete the curriculum teaching plan.

### **4.2 Overcoming the time and space limitation of the traditional classroom teaching mode.**

Teachers take the network class as the carrier, sifts the conformity each kind of high quality resources, achieves the system as far as possible, the comprehensive and the science. Based on the multi-channel courses such as MOOCs, micro-courses and online teaching courseware, the second integration and optimization development is carried out to expand the teaching path and form of

sports elective courses. It avoids the face-to-face time and region dependence of traditional classroom teaching, overcomes the unrepeatable defect of classroom teaching, improves the flexibility of teaching, and solves the final problem that classroom teaching can not be carried out under special conditions.

#### **4.3 The network resources for scientific screening, for the pre-class students and after-class practice gatekeeper.**

At present, there are many good and bad network resources, many network teaching resources are uploaded independently by individuals, video courseware and other contents lack of theoretical basis, have fragment and incompleteness, and even appear obvious errors. Therefore, the teacher selects and combs, carries on the wisdom hybrid teaching to the curriculum content, by the teacher on-line study video, the text, the picture, the animation and so on carries on the push and guides the student to carry on the exercise, transforms own Intrinsic Knowledge Reserve. It has put an end to students' blindness and lack of judgment in online retrieval.

#### **4.4 To improve the efficiency and quality of curriculum teaching, and to stimulate the initiative of students to participate in the curriculum.**

By creating WeChat and QQ groups, teachers share relevant APP application software content with students, organize video viewing of pre-class teaching content, and post-class pushing of course key content, audio, video and text to students, on-line after-class questions and knowledge points to strengthen the consolidation, so that the teaching content in a simple way, to enhance students' internal motivation to participate in curriculum learning.

#### **4.5 Overcome the lag in answering questions after class.**

In order to improve the timeliness of solving students' puzzles in the process of exercise, the forms of group chat groups, micro-cloud sharing and discussion groups are established to strengthen the after-class communication and communication between students and teachers, and students can also help each other, in this way, we can overcome the lag of the traditional mail and the form of answering questions after class, solve the students' doubts in the learning process in time, and improve the students' satisfaction with the course, so as to enhance the students' enthusiasm of exercising.

#### **4.6 improving the scientificity of teaching effect evaluation.**

The intelligent mixed teaching model adds quantitative "indicators" of process evaluation to the evaluation of teaching effect by means of the following indexes: exercises after class, questions, answers, checking of courseware and reading time, for the final assessment of the implementation process, to provide a more rich indicator system, improve the scientific evaluation.

### **5. Conclusion**

Under the influence of the new coronavirus epidemic, colleges and universities and primary and secondary schools all over the country are in a state of suspension. In order to control the spread of the epidemic and not affect the progress of higher education, the government has put forward the policy of online teaching. As a basic course of school education, Physical Education has an important role and significance. Teenagers are the future successors and builders of the country. A healthy body is not only the basis of learning, but also a solid bulwark against the new coronavirus. Through reasonable physical exercise, people's immunity can be effectively improved, for the fight against the epidemic also has a vital significance. Therefore, the rational use of network resources, the effective development of online physical education curriculum teaching, guiding students to actively participate in physical exercise, improve physical fitness is an important measure to fight against the epidemic, serve the motherland.

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