

On the Application of "Internet Plus" in the Reform of Physical Education and Health Curriculum in Colleges and Universities

Changwei Jin

Physical Education College of Changchun Normal University, Changchun, Jilin, China

Keywords: Component; Formatting; Style; Styling; Insert

Abstract: From perspective of "Internet plus" and based on research of literature and relevant policies, the paper first analyzes and summarizes the advanced experience and achievements in reform of integrating the "Internet plus" concept into the physical education and health curriculum in colleges and universities, meanwhile refines new ideas for carrying out the reform of "Internet plus" physical education and health curriculum and illustrates its leading role in the physical education in colleges and universities. Based on that, the paper outlines the practical path of "Internet plus" physical education and health curriculum and provides countermeasures as well as suggestions for implementing the "Internet plus" physical education and health curriculum in colleges and universities under new situation.

1. Introduction

As early as September 26 of 1950, the physical education and health curriculum in colleges and universities was listed in the "College Curriculum Draft" issued by the Ministry of Education and taken as references for all kinds of colleges and universities to draw up the curriculum, and now it belongs to one of the compulsory courses of colleges and universities.

In our country, the class teaching system prevails. Physical education only takes the basic knowledge, basic technology and basic skills of sports as its teaching goal, which overemphasizes the sports technology and takes student's mastery of sports technology as the measurable. While in foreign countries, physical education is mainly conducted in form of clubs. The purpose of setting up sports and health curriculum is to promote growth and development, acquire sports knowledge and skills, improve students' understanding of the basic principles of sports, enhance their health and social adaptabilities, improve the abilities to prevent diseases, increase social responsibilities and respect individual values and rights^[1]. The idea of physical education in German universities is that human can't live without physical education, sports can't be separated from physical education, and health also needs physical education. The United States adopts physical education as a way to make students become a well-rounded person with the physical education concept that one can live better and serve the society better with sound physical fitness. The physical education in Japanese Universities regards "Happy Sports" as the education concept, while the physical education concept in Canadian Universities is "people-oriented", which satisfies student's personal will, respects the individual values, dignity and rights, and provides qualified physical education instructors and excellent exercise environment.

In summary, our country's physical education and health curriculum should introduce foreign advanced education concepts and reforms, change the concepts of physical education, establish the guiding ideology of "health first", cultivate students' ability of 'all-round development', and help students set up the concept of "lifelong physical education".

2. Analysis and discussion

2.1 Selecting social function status of physical education and health curriculum in colleges and universities

Higher education has the function of serving the local society for a long time. Throughout the history of higher education development, especially since Humboldt founded Berlin University in the 19th century, teaching, scientific research and service has constituted the three major social functions of higher education, and played an increasingly important role in social politics, economy, and cultural education. Serving local society---reproduction of human resources, which has become inevitable, is an important mission of colleges and universities. It's pointed out in Healthy China 2030 Plan Outline that, "Health is the inevitable requirement of promoting human's all-round development, the basic condition of economic and social development, the realization of national health and longevity, an important symbol of national prosperity and national rejuvenation, and the common aspiration of the people of all ethnic groups in China."

Physical education and health curriculum in colleges and universities is an important platform to serve the society and implement the Healthy China 2030 Plan Outline. Based on this, this study proposes the theory and practice of "Internet plus" to reform the physical education and health curriculum in colleges and universities. With the internet technology, educators can be provided with equal emphasis on quality and efficiency of education, and solve the problem of who will teach, what to teach and how to teach.

2.2 Social function status of physical education and health curriculum in colleges and universities

Higher education has the function of serving the local society for a long time. Throughout the history of higher education development, especially since Humboldt founded Berlin University in the 19th century, teaching, scientific research and service has constituted the three major social functions of higher education, and played an increasingly important role in social politics, economy, and cultural education. Serving local society---reproduction of human resources, which has become inevitable, is an important mission of colleges and universities. It's pointed out in Healthy China 2030 Plan Outline that, "Health is the inevitable requirement of promoting human's all-round development, the basic condition of economic and social development, the realization of national health and longevity, an important symbol of national prosperity and national rejuvenation, and the common aspiration of the people of all ethnic groups in China."

Physical education and health curriculum in colleges and universities is an important platform to serve the society and implement the Healthy China 2030 Plan Outline. Based on this, this study proposes the theory and practice of "Internet plus" to reform the physical education and health curriculum in colleges and universities. With the internet technology, educators can be provided with equal emphasis on quality and efficiency of education, and solve the problem of who will teach, what to teach and how to teach.

1) Physical education in colleges and universities is an important way to implement the Healthy China 2030 Plan Outline

Colleges and universities are the new force in the construction of China, and college physical education undertakes the task to promote the construction of healthy China. It's an important foundation for building a moderately prosperous society in an all-round way and basically realizing socialist modernization, a major responsibility to comprehensively improve the health quality of the whole nation, realize the coordinated development of people's health and economic society, actively participate in global health governance, and fulfill the international commitments of 2030 sustainable development agenda.

2) Physical education in colleges and universities is the main way to reproduce healthy human resources.

Reproduction of human resources, on the one hand, means that the number of human resources has increased compared with the previous period, which is an extension development; on the other hand, it refers to the improvement of the quality of human resources, including health level, cultural

level, labor skills, labor experience, scientific and technological knowledge and so on^[2]. It can be seen that higher education undertakes the responsibility of quality control and optimization of human resources. As an important platform for scientific literacy and health concept of talents, physical education is an important and realistic way for the reproduction of health human resources.

3) Public physical education in colleges and universities is the guarantee of the quality of human resources reproduction

In order to ensure the quality of human resources reproduction, the public physical education in colleges and universities should take students as the main body, take health as the main line, take the emotional teaching theory as the basis, and take physical fitness as the habit as the goal, and construct a new public physical education curriculum innovation system which is in line with the requirements of college students' cognitive level, physical and mental development characteristics and comprehensive promotion of quality education, with the scientific integration of humanistic sports, healthy sports and sports habits. We should cultivate high-quality and all-round development talents who carry forward sports humanistic spirit, improve college students' lifelong sports ability, and promote their physiological, psychological and social adaptability^[3].

4) Physical education in colleges and universities is the engine to promote the development of local social economy

The 21st century is an era of knowledge-based economy. The competition for high-tech and high-quality talents has become the main competition among countries. One of the functions of higher education is to cultivate high-quality comprehensive talents for the society and provide applicable talents for the country or region. Therefore, physical education has the compelling responsibility to serve the local economic development.

2.3 Integration of theory and practice of “Internet plus” physical education and health curriculum reform in colleges and universities

First, introduce the concept of “Internet plus” into the teaching of physical education and health curriculum in colleges and universities, so as to make the curriculum mobile, visualized, scientific and original and better achieve the transformation of traditional teaching progress, form and content with the help of Internet platform.

1) The relevant persons in charge and implementers of physical education in colleges and universities transform their ideas in teaching with introduction of "Internet Plus"

The introduction of "Internet plus" renovates antiquated teaching methods, regards all-round development of human as starting point and social demand as orientation. Meanwhile, it explores a couple of scientific and effective teaching method for physical and health education, which can contribute to constructing curriculum, reforming classroom teaching, extracurricular sports activities and competitions, optimizing teaching resources, implementing effective teaching evaluation system and improving management system. Besides, it can realize the simultaneous development of "four educations" in the physical classroom teaching^[4]. To all students, it is able to combine physical education together with mental education, moral education as well as intellectual education, which promotes the overall development of university student's comprehensive quality. In addition, it is conducive to carry out the healthy education view in full scale, improve the quality of personnel training, complete the key links of human resources reproduction and train qualified senior talents to better service the local society.

2) Information technology support: "cloud platform" and "cloud classroom"

Information technology support: "cloud platform" and "cloud classroom". In the class, students are required to wear a bracelet that can collect the data of heart rate and exercise steps. Teachers need to wear a mobile termination that can receive and display the exercise data of students. And then, it is necessary to establish a database and form the sports archives for physical class in order to make process evaluation on students in the future. The use of data in the normal physical education class can help teachers understand the students' sports status in time, realize the personalized guidance for students and enable the teaching of physical education and health curriculum to be applicable to each student. To train talent with all-round development: (1) human perspective - full-

scale health view; (2) humanism perspective - focus on the personalized development of students, experience the fun of sports and develop the interest in sports; (3) education perspective - return to the essence of education, form the sports habits and construct a healthy lifestyle.

3) Correctly handle the relationship between exercise load and exercise intensity

When doing exercises, students need to handle the relationship between exercise load and exercise intensity: maximum heart rate=220-age; high-intensity exercise: heart rate reaches above 80% of the maximum; moderate-intensity exercise: heart rate reaches between 60%-80% of the maximum; low-intensity exercise: heart rate reaches below 60% of the maximum.

According to the "cloud platform", "cloud classroom", students can be guided to adjust to take appropriate amount of physical exercise: (1) When the load intensity is large, the load should be reduced and vice versa. (2) It is to be noted that exercise with high, moderate and low intensity should be combined and taken alternately. (3) High intensity exercise should not be done more than twice a week. (4) During the exercise, the load and rest should be arranged alternately and reasonably.

The so-called exercise load, also known as physiological load, refers to the physiological load borne by people when doing exercises. It includes the exercise amount and exercise intensity two aspects. In the process of exercising, only when the exercise load is appropriate, it is able to get a better effect exercise load being too small or too large will not work. If it is too small, then the effect for exercise cannot be achieved; if it is too large, then the load will go beyond the limit of human's body and mind, which is harmful to the people's physical and mental health and the completion of teaching tasks. Hence, students should learn to arrange and adjust the exercise load reasonably.

First, the practical proposals for "Internet plus" physical education and health curriculum reform in colleges and universities should be submitted so that relevant person in charge of university physical education and implementers of physical education teaching can have a detailed understanding of the overall work plan of teaching method with introduction of "Internet plus".

Next step is to ask for the support from relevant departments (labor and resources). The major part is the support of information technology: set up "cloud platform" and "cloud classroom". In the class, students are required to wear a bracelet that can collect the data of heart rate and exercise steps. Based on monitoring of heart rate, the device can measure the appropriate exercise intensity for the student. Teacher needs to wear a mobile termination that can receive and display the exercise data of students^[5]. And a database should be established and therefore the sports archives for physical class can be formed to make process evaluation on students in the future. For teachers, the new teaching method can help teachers encourage students to be more positive and active, enabling students to get more involved into the physical education class and allowing teachers to monitor and evaluate the activities of students in a more objective way. For students, the customized training and guidance can help students set up a more healthy and active lifestyle. When they know their status of exercises, they will get more encouraged. When provided with customized physical education curriculum, students can train themselves at their suitable stages and participate in the physical exercises spontaneously.

The use of data in the normal physical education class can help teachers understand the students' sports status in time, realize the personalized guidance for students and enable the teaching of physical education and health curriculum to be applicable to each student. Every physical education class should set an appropriate exercise load^[6]. It is recommended that the exercise density of each class (i.e. the ratio of exercise time of students in one physical education class to the total time of class) shall be above 75%; and exercise intensity shall be between 125-160 beats/min (heart rate), which means, above the moderate intensity. Such innovative teaching method both faces all students and focuses on the individual, but also can guide students to learn to manage their own health status through data monitoring, and further achieve the goal of "I am in charge of my own health" as well as "I am in charge of my classroom".

3. Conclusion

As the process of modernization moves forward, the teaching and study modes of physical education and health curriculum teaching have begun to change. With the help of internet platforms, it is able to reasonably apply auxiliary means to support physical education, improve the teaching efficiency and effect and promote the student's consciousness of lifelong sports. The purpose is to introduce the internet into classroom, enrich the teaching contents by means of network and bring more sports ideas, knowledge and abilities to students. In the meantime, it can optimize the teaching resources, cultivate talents with brand new health concepts and better interpret "physical education", which is beneficial to the development of lifelong sports philosophy. Seeing from other aspects, it can also implement a diversified teaching effect evaluation system, construct a reasonable curriculum assessment structure and diversify the assessment methods. Facing all the students and considering from differences of students' sports foundations, the new teaching method will reflect the changes of student's learning in both quantity and quality and give evaluations on students based on their daily efforts, attitudes and progress ranges. Furthermore, it can normalize the extracurricular sports activities and enable students to select and participate in their preferential projects according to the interests and specialties of students, with extensive coverage and high involvement, which has achieved the normalization of extracurricular activities. All in all, "Internet plus" physical education and health curriculum reform in colleges and universities puts forward the new educational concept, returns the ultimate goal of education and aims to cultivate the talents with all-round development.

References

- [1] Liu Xiong. On the Reform of Physical Course Teaching in Shandong First Medical University[D]. Beijing Sport University, 2016.
- [2] Healthy China Lies in Action[J]. Moderate Prosperity, 2019, (22): 2.
- [3] Zheng Ying'An. The Influence of the Health First Guidance Ideology on the Basic Tasks of Physical Education[J]. Shaanxi Education (Higher Education Press), 2009, (03): 103.
- [4] Feng Min. How to Monitor and Regulate the Exercise Load of Students in the Physical Education Classroom Teaching[J]. China School Physical Education, 2016, (10): 20-22.
- [5] Gao Juan, Zhou Wenlai. Thinking of Physical Quality Education in Colleges and Universities Under Ideology of Sports Power in the New Era[J]. Journal of PLA Institute of Physical Education, 2019, 38(03): 49-52+98.
- [6] Print Journalist, Implement Moral Education and Personnel Training, Practicing Core Accomplishment-2018 Seminar of "China Health and Physical Education Curriculum Mode"[J]. Physical Education, 2018, 38(07): 14-15.