Research on the Innovative Development of College Physical Education Teaching Mode under the Environment of Computer Technology and Network

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Abstract. Under the current educational environment of constant reform, the PE (hereinafter referred to as PE) teaching mode (hereinafter referred to as TM) of colleges is also facing the need of reform. The rapid development of IT and computer technology provides a more powerful guarantee for the TM of PE. However, there are still many deficiencies in the current sports information-based TM in colleges. Therefore, relevant managers should take some actions to strengthen the PE teachers' awareness of using IT to carry out sports teaching, which can better promote the innovation of sports teaching as well as the transformation and upgrading of sports TM in colleges. Based on the current situation of information application, this paper discusses the path of innovation in order to provide innovative ideas for the following PE.

Keywords: Network Environment, College Physical Education, Teaching Mode, Innovation, Computing Technology

1. Introduction
PE, as a subject to improve students' physical quality and ability, has been widely carried out in colleges, especially under the condition of continuous reform of the quality [1]. In order to achieve innovative development of PE in colleges, it is necessary to reform the TM in combination with advanced IT. Many schools think that IT should be put more into the study of professional courses, so they ignore the input of information equipment in PE courses, which affects the innovation of PE TM and fails to improve the quality of PE in essence. Higher PE course is a subject involving a wide range of aspects [2]. It is not only the exercise in the traditional sense, but also includes the cultivation of sports quality and mental health. These qualities are conducive to cultivating students' cooperative consciousness and improving their comprehensive quality. In the process of education, teachers should actively make rational use of modern educational technology and improve students' enthusiasm to participate in physical exercise [3].
2. Innovative development path of college PE TM under network environment

2.1. Strengthen the construction of teaching resources of PE curriculum
With the support of Internet technology, the PE teaching in our universities will get better innovation. In this process, in order to better optimize the level of PE information, we need to build a huge teaching resource database so as to effectively solve the problems in education, and improve the quality of information teaching used in PE. In fact, with the help of advanced IT to integrate teaching resources, it can better reflect the superiority of PE curriculum. In constructing the college PE curriculum teaching resource database, we should improve the content of the teaching resource database so as to provide guarantee for the subsequent teaching. At the same time, we should enhance the interaction and sharing of resources so that they can play a greater educational value. Secondly, in construction, learning resources should be collected effectively through network technology to realize the teaching objectives. Moreover, in the construction of physical training hardware and software, we should set up courses according to the actual needs of college sports so as to improve the quality of teaching services and the sharing of high-quality teaching resources on the information platform. In fact, the innovative development of college PE TM is more conducive to improving the effectiveness of PE teaching.

2.2. Give full play to the role of modern information teaching technology in promoting PE TM
The introduction of IT into PE can enhance the image of teaching to a greater extent and achieve better teaching results. Therefore, in the process of college PE TM innovation, we should use modern information teaching technology to reform the teaching method through multimedia to teach students PE knowledge that is supplemented by video and pictures to stimulate students' visual perception, which can improve the actual effect of PE teaching. Secondly, PE teachers should also adopt diversified teaching methods to educate students. For example, sports competitions and online PE knowledge assessment should be carried out to deepen students' cognition of PE courses so as to better promote the transformation and upgrading of the TM of PE courses. The following figure is a schematic diagram of the utilization of technical information, as shown in figure 1.

![Diagram of Technical Information Utilization](image)

**Figure 1.** Utilization of technical information.

2.3. Improve the information utilization ability of college PE teachers
In order to better realize the informationization of PE in colleges, teachers and students should not only develop the awareness of IT application, but also improve their ability to use IT so as to improve the overall quality of PE. The informationization level of college PE teachers will have a direct impact on the teaching quality. Therefore, we should train teachers to improve their ability to use IT. In the
current social development process, the IT changes with each passing day. Therefore, the importance of information-based teaching should be fully understood in daily PE teaching, and the convenience of PE should be improved through IT. Secondly, in order to improve the informationization ability of teachers and students in colleges, schools can carry out relevant teaching and training. Through the effective combination of sports teaching and modern multimedia technology, teachers can teach with higher efficiency and quality so as to improve the information level of PE and promote the reform of PE model. Nowadays, qualified PE teachers in colleges should not only have professional PE basic knowledge, but also improve their ability to apply modern technology so that students can experience higher quality online teaching and improve the innovation of PE courses. In addition, in order to improve the enthusiasm of PE teachers in learning IT, we can also establish a corresponding reward and punishment system to improve their comprehensive quality and promote the information of PE.

2.4. Improve and increase the information equipment configuration of college PE teaching resources

In order to better apply IT to PE, we should configure the information equipment of PE in colleges so as to better meet the needs of PE information teaching. For example, multimedia and other teaching equipment should be configured according to the application frequency and actual situation of colleges to ensure the normal development of sports information teaching. Through multimedia network teaching, teachers can show relevant video pictures to deepen the explanation and better improve the actual effect of PE. The following figure is the enhanced information strategy method diagram, as shown in Table 1.

| Enhance information strategy         |
|--------------------------------------|
| Improve teachers’ IT application ability |
| Improve the information equipment    |
| Sports exchange platform is established |

Table 1. Enhance information strategy.

At the same time, we have to ensure the number of advanced teaching equipment such as computers to meet the needs of students to use multimedia equipment. Secondly, in the software installation and upgrade, we should ensure to meet the needs of PE teaching so that the overall level of information teaching is guaranteed. In addition, colleges are still short of capital investment in information equipment. In order to better ensure the effectiveness of equipment configuration, they can apply for special funds to increase the amount of resource reserves and provide students with better teaching services.

3. Conclusion

In a word, under the background of computer technology and informationization, PE TM often needs to follow the trend of social development to innovate. PE courses in colleges are characterized by comprehensive knowledge. Therefore, in the process of teaching, PE teachers should introduce IT according to the intensity and characteristics of sports, improve students' enthusiasm in learning PE courses, and enhance the teaching quality of PE courses better. Although the introduction of IT in many universities is insufficient, the TM will be better developed with the strengthening of consciousness. In this process, the most important part is to strengthen the reservation of IT talents. We should improve the PE teachers' ability to use IT, better introduce IT into the classroom and strengthen the actual teaching effect of PE courses.

References

[1] Chang Chao. Application analysis of modern IT in college PE [J]. Journal of Chifeng College (natural science), 2016, 26(05): 161-162.

[2] Li Yanan. The theoretical research on optimizing PE teaching in colleges with modern educational technology [J]. Sports Science and Technology Literature Bulletin, 2018, 19(07): 153-154.
[3] Liu Fei. Research on the application value of smartphone sports App software in college PE [J]. Modern Economic Information, 2017(08): 113-114.