

# A Discussion on the Innovation of Physical Education in Colleges Under the New Media Environment

Chen Li\*

School of Physical Education and Health, Zhaoqing University, Zhaoqing 526061, Guangdong Province, China

\*Corresponding author: Chen Li, 806262908@qq.com

**Copyright:** © 2022 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** The social economy in China is undergoing a critical period of transformation and upgrading. New media technology is booming and is widely used in various fields. In the new media environment, the use of new media in the field of education has also garnered attention. With the popularization and dissemination of new media by modern college students, college physical education has ushered in not only new development opportunities, but also various challenges. In the new media environment, means such as flipped classroom will become an innovative trend, and teachers can further promote the innovative development of college physical education as well as improve the efficiency and quality of this kind of education through online education, short videos, social software, and other auxiliary methods <sup>[1]</sup>. Based on this, this paper makes a comprehensive analysis of the significance of using new media technology in college physical education and proposes corresponding strategies for the innovation of college physical education under the new media environment, in hope to provide some reference, improve the effectiveness of college physical education, and promote the concept of “lifelong physical education.”

**Keywords:** New media; Colleges and universities; Physical education; Innovation

**Online publication:** June 30, 2022

## 1. Introduction

With the rapid development of information technology, new media, such as TikTok, WeChat, and Kuaishou, as a new way of social interaction, has become an essential part of modern college students' lives. In the context of the new media environment, the channels to obtain information have been expanded, thus making it possible for students to learn and disseminate knowledge through new media platforms, which brings new innovation and development path to education and teaching in the new era <sup>[2]</sup>. For college physical education, with the support of new media platforms and technology, online theoretical learning can be carried out through new media platforms, and sports skills can be learned through short video broadcasts, all of which are of great significance to improving teaching quality and efficiency. Therefore, physical education teachers need to further develop the application channels of new media in Teaching and constantly promote the innovative development of physical education in colleges.

## 2. Significance of using new media in college physical education

### 2.1. Optimizes the teaching mode and improves the effectiveness of teaching

Before lessons, teachers can arrange learning tasks through QQ groups, WeChat groups, and other

platforms, as well as share educational resources through these platforms, so as to realize timely communication and interaction with students. Under the premise of such arrangement, students would have a preliminary understanding of certain sports before class, both in terms of theory and technical skills that must be acquired in class <sup>[3]</sup>. Especially with short videos and other resources, students can practice independently before class, which seriously reduces the need for teaching space in classrooms and provides students more time to explore and practice during lessons. New media platforms provide a space for communication and interaction between teachers and students, encourage communication between them, and effectively promote the use of flipped classroom as well as joint learning <sup>[4]</sup>. This mode of teaching will not only improve students' technical level, but also their autonomous learning ability, enthusiasm for practice, and cooperation skills, thus effectively improving the effectiveness of teaching.

## **2.2. Stimulates students' interest and cultivates lifelong sports consciousness**

Through new media platforms, physical education teachers can share contents that need to be learned in the form of videos or graphics. In that way, students may gain sports knowledge and learn essential technical skills through the explanations in these videos. Other than that, teachers can also share competition videos with their students, allowing them to experience the allure of competitive sports, so as to effectively stimulate their interest in sports, develop their intuitive concepts and feelings about sports-related projects, lay a good foundation for the smooth development of future teaching, and cultivate lifelong sports awareness among students <sup>[5]</sup>.

## **2.3. Promotes information-based teaching and enhances the pertinence of physical education**

With the rapid development of the internet, the use of new media has changed people's way of life, work, and learning. In traditional teaching, after explaining and demonstrating, most students imitate their teachers and practice from memory. In the new media environment, teachers can use new media platforms to provide rich teaching resources before lessons, so as to realized students' individualized hierarchical learning. Pre-class previews using new media platforms can make up for the lack of practice time during lessons and ensure that students have more time for group cooperation in classrooms and have a clearer understanding of the knowledge points taught <sup>[6]</sup>. Furthermore, teachers would be able to grasp the learning state of students at any time, whether before or after class, through the network environment, thus strengthening the pertinence in future teachings. Hence, the use of new media in teaching will not only improve the information literacy of both, teachers and students, but also promote information-based teaching in physical education.

## **3. Innovative strategies for physical education in colleges under the new media environment**

### **3.1. Understanding students' needs and improving teaching pertinence**

Students are the focus of physical education. It is only through understanding students' learning needs and improving the accuracy and pertinence of teaching that students' learning can be improved effectively. To begin with, teachers can conduct questionnaire surveys and individual interviews through new media platforms in conjunction with group feedback and on-site tests, so as to understand students' sports interests, learning state, physical qualities, personalities, language skills, and organizational skills. On this basis, they can allocate students to different learning groups according to their characteristics, so as to enhance the cooperation level in each learning group. Secondly, teachers should grasp the learning state of each student, so as to screen and produce refined pre-class video resources based on the key points and difficulties in the teaching content <sup>[7]</sup>. There are variances in the common and individual demands in education because different students learn differently. When designing teaching video resources, it is necessary to take into account the common needs and meet individualized development needs at the same time. Therefore, the

selection and production of teaching videos should clearly explain the basic skills and meet the basic development needs of the majority of students through basic demonstration and online guidance. According to students' development requirements, videos with challenging contents can be shared with students of an advanced level. On the other hand, the learning of sports technology should comply with the basic principles of generalization, differentiation, and automatic movement learning. When selecting teaching videos, students should be guided to learn according to the basic laws of learning movements. It is crucial to strengthen targeted teaching for students who have problems in learning; additionally, they should be encouraged to prevent them from giving up in view of the difficulties encountered.

### **3.2. Making full use of the advantages of flipped classroom based on traditional teaching**

Based on the new media environment, flipped curriculum has been widely used in physical education. It has its own advantages and disadvantages compared with traditional teaching. For college physical education teachers, it is necessary to make full use of the advantages of the two modes, comprehensively understand the integration of flipped classroom and traditional teaching, as well as optimize the use of new media in physical education <sup>[8]</sup>.

Firstly, physical education teachers should study and research the latest teaching theories, practical experiences, teaching principles, and basic methods of flipped classroom, fully grasp the internal theoretical support and law of the integration of flipped classroom and traditional teaching, and understand the specific operation requirements in actual practice, so as to better provide theoretical and technical support for practical integration. Secondly, teachers should actively carry out actual teaching practices and make full use of the advantages of the two teaching modes based on these practices. At present, the implementation of flipped classroom in college physical education is still in its infancy. In addition to various teaching achievements, there are many teaching errors. It is imperative to look at the problems existing in the teaching practice in a comprehensive manner, analyze the weak points existing in the teaching practice with a serious attitude, and then form targeted suggestions. Based on successful teaching experiences, reproducible teaching principles and methods should be established, so as to improve the teaching effect in the future. In addition, it is also important to strengthen in-depth exchange and learning of basic ideas, methods, and achievements of the implementation, gather various experiences, understand the implementation of flipped classroom and new media technology in physical education by other colleges, and selectively consider various teaching references based on the schools' actual situation, so as to enhance one's teaching practice.

### **3.3. Improving teachers' ability and ensuring the application effect of new media**

In the new media environment, in order to promote the use of new media in physical education, it is mandatory to further improve the ability of physical education teachers in using new media and information technology. First, it is necessary to consolidate teachers' physical education theory and skills as well as improve their innovative teaching ability <sup>[9]</sup>. This requires physical education teachers to deeply understand the theory and technical contents of physical education. Teachers must have the ability to digest and transfer knowledge and skills, design physical education contents and forms in an innovative way based on the actual needs of students using new media platforms, stimulate students' interests, and highlight teaching priorities, so as to achieve a satisfactory online learning effect. Taking the teaching of "physical exercise" as an example, teachers should not only focus on the physiological structure, force sequence, and injuries from error prone movements in dynamic warm-up movements, but also emphasize on the specifications and internal skills of its technical movements. Other than that, they also can make videos based on students' interests and their own teaching strategies, highlighting demonstration, explanation, and other contents. In the new media environment, students can preliminarily digest the basic contents of certain topics in physical

education through extracurricular preparations using new media platforms and carry out practice during lessons for improvement. At present, the content of certain learning materials is inconsistent with the actual needs of teaching because some PE teachers lack the ability to design flexibly learning materials, while some are “following doctrines.” In addition, the teaching resources designed by some teachers are unable to stimulate students’ interest in learning or produce effective learning outcomes. Hence, teachers should enroll themselves in online courses on multimedia platforms to learn some cutting-edge technical contents and skills in editing or creating audios and videos. At the same time, teachers should select appropriate teaching materials, such as pictures, animations, micro videos, and theoretical analyses related to sports, set up a material library to provide guarantee for courseware production, ensure the application effect of new media in the teaching of sports, engage in the innovation of sports teaching in the new era, and use these interesting materials to stimulate students’ interest in learning sports, so that they can be actively involved in sports and acquire sports skills, while improving their physical fitness level, experiencing the fun of sports, and cultivating healthy behavior and sports habits <sup>[10]</sup>.

#### **4. Conclusion**

In the new media environment, the means and mode of teaching in college physical education have been optimized, which serves as a notion for college physical education to keep pace with the times. New media not only stimulates students’ interest in sports, but also helps to promote information-based teaching in physical education. Therefore, physical education teachers in colleges should make full use of the advantages of new media in teaching by understanding the needs of students, constantly improving their own skills, strengthening targeted teaching, improving the effectiveness of teaching, and ensuring the efficient use of new media in physical education.

#### **Funding**

Achievements of Higher Education Research on Youth in the 14th Five Year Plan of Guangdong Higher Education Society in 2021 (Grant Number: 21GQN92)

2020 Discipline Co Construction Project of the 13th Five Year Plan for Philosophy and Social Sciences in Guangdong Province (Project Number: GD20XTY10)

#### **Disclosure statement**

The author declares no conflict of interest.

#### **References**

- [1] Zhang J, 2020, Proceedings of the State Sports General Administration Sports Culture Development Center Conference, November 14, 2020: Sorting out and Solving the Difficulties in the Development of Campus Sports Culture in the Era of New Media. 2020 Sports History Annual Conference Paper Abstract Collection, Yunnan, 142–143. <https://kns.cnki.net/kcms/detail/detail.aspx?doi=10.26914/c.cnkihy.2020.052643&dbcode=CPFD>
- [2] Villis ND, 2020, Research on PE Teaching Reform in Colleges and Universities in the Era of New Media Information. *East, West, North and South*, 2020(15): 140–141.
- [3] Wang L, 2018, Exploration of “Douyin Short Video” Teaching of Sports Performance Under the Background of “New Audio-Visual Media”. *Journal of Shangqiu Normal University*, 34(12): 100–102.

- [4] Li C, 2017, Research on the Influence of WeChat Platform on the Development of College Physical Education Curriculum. *Sichuan Sports Science*, 36(04): 128–131.
- [5] Chen L, 2021, Research on Innovation of Physical Education in Colleges and Universities from the Perspective of Internet New Media. *Sports Fashion*, 2021(10): 183–184.
- [6] Chen Y, 2021, Necessity and Measures of Innovation in College Physical Education Teaching. *Wudang*, 2021(09): 99–100.
- [7] Guo W, Ji J, Yang Q, et al., 2021, Innovative Exploration of Physical Education Teaching in Colleges and Universities Under the Background of National Health. *Food Research and Development*, 42(14): 242–243.
- [8] Li Y, 2021, Establishment and Exploration of College PE Teaching Innovation System. *Contemporary Sports Science and Technology*, 11(17): 92–94.
- [9] Zhang L, 2021, Discussion on the Construction Measures of College PE Teaching Innovation System in the New Era. *Contemporary Sports Science and Technology*, 11(01): 88–90.
- [10] Tan X, 2020, Ways to Construct Innovative Mode of College Physical Education Teaching. *Journal of Jiamusi Vocational College*, 36(07): 143–144.

**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.