

Blended Learning in PE Teaching in China

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Abstract: In China, recent trends in the neglect of physical education (PE) by schools, society and families have led to a decline in the quality of physical education teaching. Students are also losing interest and opportunities to participate in physical exercise^[1]. This is not conducive to the overall development of Chinese students as well as their physical and mental health. To change the situation and improve the physical quality of Chinese students^[2], some researchers pointed out that higher education in China has begun to try to introduce the blended learning model in physical education^[3]. They mentioned that applying blended learning in PE could combine modern technology with traditional physical education (face-to-face instruction) so that it can enlarge teaching methods, greatly attract students' interest and improve students' learning effect in PE. Blended learning plays an essential role in promoting sufficient attention to physical education and is also a vital way to enhance the effect of physical education in higher education. Meanwhile, in the information age, as one learning method derived from the Internet, the teaching conceptions and models of blended learning fit the characteristics of contemporary learners^[4].

Keywords: Blended learning; Physical education teaching; Learning model

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1. Introduction

Firstly, the author has searched for the definition of “blended learning” in previous articles by Google Scholar. After figuring out the meaning and determining the subject of areas, the author used Google Scholar, the online library of the University of Manchester and CNKI to search for related sources specifically. The main keywords the author used during searching are shown below in **Table 1**. To make the article more critical, the author also searched for some contrastive words like “traditional teaching modes” and “traditional PE learning”.

Table1. The main keywords used during searching

Keywords	Blended learning	PE	Teaching in China
Related terms	blended instruction/ combining instructional methods	education/ sports/ physical exercise/ physical activities	teaching mode in China/ Chinese higher education/ Chinese universities

Finally, through the University of Manchester Library, Google Scholar and CNKI's database systems, the author found more than 40 sources and used 13 sources, including reliable journal articles and published books in this literature review.

According to the study of Han et al.^[5], the educational reform of Chinese universities is increasingly focusing on the new trend of applying blended learning in 2015. Based on this, the author mainly chose literature published in 2015 or after 2015. Besides, in order to study the educational situation in China, the author mostly selected literature by Chinese researchers.

2. The influence of blended learning in PE in Chinese universities

With the development of digital technologies, various forms of education have been upgraded, so Chinese universities have started to adopt blended learning in models of instruction. It also means that under the current education system, the teaching structure and methods are all impacted^[6]. In particular, Chinese universities are applying blended learning in PE to improve the bad physical condition in China. The influence will be analyzed concretely below, which is divided into three aspects: the current educational situation, teaching and learning in PE.

3. Impact on the present situation of PE: from seclusion to openness

In the past, the cognition of education was based on the traditional face-to-face learning in China, and all teaching activities were relatively closed and limited especially in PE^[7].

However, the emergence of blended learning has broken traditional education modes. Although Li^[8,9] found that, at present, the research results of blended learning mainly focused on basic education and blended learning was less used in the application of Chinese universities' PE curriculum. In addition, according to the research of Shi^[10], influenced by the practicality of PE, Chinese universities have not paid enough attention wherever in thoughts, action or policy. In fact, it is still argued that PE teaching in Chinese universities could be well integrated with blended learning both theoretically and technically, but it is necessary to explore effective methods to combine and implement them^[11]. Educational informatization and making the present situation of PE change from seclusion to openness is the inevitable trend of educational developments in the network age. Because blended learning is flexible and cost-effective to train small groups or even one-on-one coaching^[12]. Therefore, applying blended learning in higher education has practical significance, especially in PE, which can improve students' interest in doing exercise and build their bodies.

Currently, Chinese universities are actively carrying out specified research and reform of modern educational technology, especially in applying blended learning in PE. The applications of blended learning in PE will not be limited to traditional face-to-face teaching methods, but an open education that integrates online and offline, real and virtual^[13]. The applications mean that the educational form will be changed and that will inevitably lead to the change of PE educational situations from seclusion to openness.^[14] They found that with the support of the Internet, the barrier of "full presence" of PE is broken down, which echoed findings of Han et al., who reported that through the network, students could also receive PE courses' content, share sports experience and learn sports skills (through online PE courses) other than having offline PE classes in the semester. From then on, under applying blended learning, PE teaching activities move towards the situation of "integration of in-and-on class" and have more flexibility, availability and openness.

To sum up, in order to raise the level of quality of PE classes and students' health, Chinese higher education is applying blended learning in PE teaching to improve weaknesses of the present PE teaching methods, and the trend of PE teaching is from seclusion to openness. In addition, the development of the information age and the support of the network are all crucial motivations for adding blended learning to PE teaching. However, even though studies have shown that, for this topic, Chinese higher education still focuses less on PE, which will retard the process of using blended learning in PE.

4. Impact on the way of PE teaching: from infusion to interaction

Blended learning can help teachers to play a leading role in guiding, inspiring and monitoring the teaching process. The interaction between teachers and students has also combined face-to-face and online together.

In traditional instruction, teachers, as knowledge transmitters, have absolute authority over knowledge, while the student is the passive receiving object. reported that teaching approaches were characterized by the infusion from teachers to students in the present PE teaching situation, which would lead to losing interest in learning^[15]. But under the influence of the Internet, this one-way educational infusion cannot be beneficial to students' learning at all and blended learning has emerged, which can increase the interaction between teachers and students. In particular, for teachers, said using blended learning in teaching could not only reduce the pressure of teaching but also improve the quality of teaching. In contrast, those studies by Han et al. pointed out that the theoretical research, application design and practice of blended education were all in an imperfect stage. More specifically, the study by Xue investigated the application of blended learning in Chinese universities' PE teaching. More than 50% of universities in China have not yet applied blended learning in teaching, and there were not many college PE teachers involved in the use of blended teaching methods. In addition, the lack of online resources was the bottleneck of blended learning in college PE teaching.

However, based on the powerful and open nature of the Internet, blended learning makes massive information resources open to the public, thus eliminating the inherent cognition of the one-way infusion from teachers. typically pointed out that blended learning brings a multi-channel teaching approach that means teachers do not have to depend on teaching in classes to impart knowledge and applying blended learning in PE can help students to learn proactively, which echoed study again. Meanwhile, according to the new relationship of teaching and learning, the key point of instructing is generally changing from teaching to learning, and teaching methods are also increasingly focusing on the interaction between teachers and students instead of teachers' one-way infusion.

To sum up, using blended learning in teaching PE can improve the interaction between teachers and students so that teachers can improve the quality of PE, and students can increase their interest in learning PE. However, applying blended learning in PE teaching still needs further optimization, and the practice of using blended learning needs to be intensified.

5. Impact on the learning style of PE: from being unitary to multiple

The change in teaching modes can also influence students' learning styles. The channels for students to acquire PE knowledge have become multiple, and the learning content has become rich by using blended learning.

Although the trouble with blended learning for students has always been the motivation for learning PE. found that students would not be willing to attend online PE courses or drop courses due to blended learning combined online and offline educational environments, which would cause less supervision from teachers and loneliness in online learning. However, for learners, using blended learning in PE is more good than harm. Firstly, blended learning makes learning ways become multiple, which helps students learn PE more conveniently and available. Under the traditional education model, PE learning is restricted to the offline classroom, and PE learning is the process that students imitate teachers' teaching contents. While blended learning breaks through this limitation, and provides multiple learning methods. With the abundance and convenience of network resources, learning in the classroom is no longer the only channel for students to obtain knowledge. Therefore, PE learning can occur both in the classroom and online (websites, applications on smartphones, etc.). When PE classes become something that can happen anytime and anywhere, students' learning styles will also change. In particular, in China, the popularization of mobile terminal devices represented by mobile phones and the comprehensive coverage of Wi-Fi make learning at any time and place possible. As a representative of this new learning style, blended learning is becoming the mainstream for college students to acquire and update knowledge in China.

On the other hand, the multiple of blended learning can promote students' initiative, positivity and creativity in PE. Used meta-analysis to study whether blended learning was more conducive to improving students' learning effect. The results proved that after using blended learning methods, students' learning results were better than online learning only

and face-to-face learning. The reason for this is that blended courses offer more flexibility and variety, which results in promoting students' learning motivation. In other words, using blended learning can increase students' interest in learning PE.

To sum up, using blended learning can make students' learning styles multiple, which is embodied in a variety of learning ways (online and offline), convenient and available learning environments (unlimited learning time and space), and the promotion of initiative, positivity and creativity in PE. Most important of all, multiple learning styles can help students increase their interest in learning PE and get involved in sports so that they can build their bodies. However, it is undeniable that less supervision and loneliness would reduce the blended learning quality of PE.

6. Conclusion

In conclusion, according to the previous research, Chinese universities are increasingly applying blended learning to improve the quality of PE, enhance students' learning motivation and bring profound effect on the impact and transformation of PE in Chinese higher education. Most of these research results are based on live case studies, surveys and questionnaires from teachers and students in different Chinese universities. Besides, researchers also use various research methods such as meta-analysis and interviews to analyze the effect of applying blended learning in PE. So some results in these previous pieces of literature are reliable. However, some articles' authors just focus on one university in China. That means results may not be generalizable. In addition, based on their findings, over half of the Chinese universities still did not use blended learning in PE, but there was not enough explanation for this phenomenon.

For research gaps, firstly, although pointed out that the number of digital educational resources was increasing in the information age. Further research should pay more attention to teacher training for using blended learning in PE. Secondly, IT Services would influence the effect of applying blended learning in PE, which should also be a part of future research.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Tian G, 2022, Practice of Creating a Blended "Golden Course" in Physical Education under the Background of Artificial Intelligence: A Case Study of the Wushu Course at Shenzhen Polytechnic. *Journal of Shenzhen Polytechnic*, 21(2): 57-62.
- [2] Xiong G, 2024, Research on the Application of the Blended Teaching Model in Physical Education in Colleges and Universities under the Background of "Internet +"/Proceedings of the 2nd Sichuan Sports Science Conference in 2024. Department of Physical Education, School of Arts and Sciences, Chengdu College of University of Electronic Science and Technology, 2024.
- [3] Zhong Y, 2023, Research on the Blended Teaching Design and Lesson Examples of the Ideological and Moral Cultivation and the Fundamentals of the Rule of Law Course. *The Guide of Science & Education (Electronic Edition)*, 2023: 53- 55, 113.
- [4] Zhao P, Chen G, Liu J, 2010, Theoretical and Experimental Research on Computer-Supported "Blended" Learning in Physical Education. *China Educational Technology*, 2010(8): 5. DOI: 10.3969/j.issn.1006 - 9860.2010.08.022.
- [5] Hua S, 2020, Discussion on the Blended Learning Model in Physical Education Teaching in Colleges and Universities under the Background of "Internet +". *China Broadband*, 000(010): 178.
- [6] Ding L, Ma A, Wang J, Wang P, 2025, Practical Research on the Blended Teaching Model of Public Physical Education Basketball Courses in the Era of Smart Education, 2025.

- [7] Xu H, Wu B, Dou J, 2024, Analysis of the Advantages of the “Online + Offline” Blended Teaching in Sports Dance Teaching: A Case Study of the Teaching of the Chinese Dancers’ Grade-testing Combinations. *New Sports (Second Half of the Month)*, 2024(3): 52-54.
- [8] Li X, Sui X, 2022, Practical Research on the “Online + Offline” Blended Teaching Method in Public Physical Education Courses in Colleges and Universities. *Slam Dunk*, 2022(16): 78-80.
- [9] Wang Y, Feng Y, Ren J, 2022, et al. Teaching Reform and Practice of the Online - Offline Blended Course of “Table Tennis” in Sports Universities. *China Sports Coaches*, 30(3): 70-72.
- [10] Sun C, 2021, Analysis of the Blended Learning Model in Physical Education Teaching in Colleges and Universities under the Background of “Internet +”. *Education in Science & Technology and Economy News Database of China*, 2021(11): 3.
- [11] Hao W, Gao Z, 2018, Research on the Application of Educational and Teaching Informatization in Volleyball Teaching in Higher Vocational Colleges. *Contemporary Sports Technology*, 8(23): 4. DOI: CNKI:SUN:DYKJ.0.2018- 23- 013.
- [12] Liu Y, 2021, Research on the Blended Teaching of College Basketball under the Background of “Internet + Sports”. Shaanxi Normal University, 2021.
- [13] Yu M, 2021, Research on the Design and Application of Micro-courses in Ball Sports Courses. Tianjin University of Sport, 2021.
- [14] Tian J, 2025, Design Research of the “School Physical Education” Course in the SPOC Environment. [2025 -06-24].
- [15] Mo S, Wu Y, 2022, Research on the Application of the Online - Offline Blended Teaching Model in Physical Education Courses in Colleges and Universities. *Contemporary Sports*, 2022(30): 0044-0046.

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