

The application of Internet technology in physical education teaching in colleges and universities

Xue Hao

University of The East, Manila, Philippines, 0900

Abstract: *Physical education is an important part of the university education system, and it is necessary to carry out a detailed analysis of the relevant contents. This paper takes the physical education teaching in colleges and universities as the research object, analyzes the application value of Internet technology, sorts out the basic principles of physical education teaching in colleges and universities, and sorts out the specific application of Internet technology in physical education teaching in colleges and universities from the dimensions of optimizing curriculum resources, building network matrix, improving the evaluation system, and carrying out independent exercise, aiming to provide thinking directions for more college physical education teachers, scientifically apply Internet technology, upgrade and optimize the level of physical education teaching in colleges and universities, and cultivate the good habits of lifelong exercise in students.*

Keywords: *Internet technology; college sports; Physical education instruction*

1. Introduction

With the rapid development of Internet technology, it has now become an important production tool in various fields, which is of great significance for promoting the entire industry to enter the "Internet +". The introduction of Internet technology into the teaching field can provide continuous power support for subject teaching, strengthen the quality of subject teaching, and improve the efficiency of subject teaching, which is of great significance for cultivating high-quality professionals. From the perspective of physical education in colleges and universities, the specific application of Internet technology in physical education teaching is comprehensively studied.

2. The application value of Internet technology in physical education teaching in colleges and universities

2.1 Effectively expand teaching methods

In the conventional college physical education teaching mode, teachers need to communicate face-to-face with students, which will be affected by various factors such as teaching venues and teaching equipment to a certain extent, resulting in limited teaching methods that adapt to teaching conditions and it is difficult to achieve the expected teaching goals of physical education. The application of Internet technology to college physical education teaching can connect network platforms, intelligent equipment terminals, etc. through Internet technology, effectively breaking the teaching site limitations of the conventional college physical education teaching mode. At the same time, teachers can also use Internet technology to reasonably adjust the teaching content of physical education according to the existing teaching equipment and students' sports needs, so as to effectively expand the teaching methods, so that students can reasonably improve their physical fitness through sports and gradually improve the quality of physical education teaching in colleges and universities.

2.2 Enhance students' interest in learning

If the conventional college physical education teaching mode is adopted, the teacher needs to combine the textbook text, explain the teaching content of this lesson, and guide students to play sports, and the teaching mode is solidified, which is difficult to make students have a higher interest in learning. The rational application of Internet technology in physical education teaching in colleges and universities can provide students with more convenient learning conditions, allow students to freely

absorb the theoretical knowledge of physical education according to their own time arrangements, cooperate with the teaching guidance provided by teachers, and carry out high-quality sports, so as to enhance students' interest in learning, so that students can transform from passive learning to active exercise, cultivate students' lifelong physical education habits imperceptibly, and lay a solid foundation for students to carry out high-quality learning and work [1].

3. The basic principles of physical education in colleges and universities

3.1 Principle of Intuitiveness

When teaching physical education in colleges and universities, teachers need to follow the principle of intuitiveness, that is, make full use of students' cognition and experience of sports, use intuitive and specific teaching methods, scientifically stimulate students' sensory system, let students understand the actual meaning of teaching content, and facilitate students' practice and use, so as to smoothly master the correct exercise and exercise methods, and provide reliable help for students' independent exercise [2].

3.2 The principle of graduality

When designing the teaching content of physical education in colleges and universities, teachers need to follow the principle of graduality, that is, according to the learning performance of students in physical education, design the teaching content from easy to difficult, guide students to gradually learn the theoretical knowledge of physical education, and strengthen their own sports ability. For teaching methods, it is also necessary to move from simple to complex, so that students can continue to absorb correct exercise skills, strengthen physical fitness, and reasonably cultivate students' healthy exercise habits.

4. The specific application of Internet technology in physical education teaching in colleges and universities

4.1 Optimize the resources of physical education courses in colleges and universities

To apply Internet technology to the teaching of physical education in colleges and universities, it is necessary to optimize the resources of physical education courses in colleges and universities and create a new teaching framework for physical education in colleges and universities. In the regular teaching of physical education in colleges and universities, teachers need to provide students with corresponding curriculum resources on the basis of textbooks and texts and their own teaching experience. This kind of curriculum resource design model, which relies on teachers' personal teaching ability, is difficult to keep up with the development of the times and continuously update the content of resources. The data retrieval function of Internet technology can be considered to expand the resources of physical education teaching courses in colleges and universities, provide students with a sense of freshness in learning, and guide students to actively participate in physical education learning activities in colleges and universities. In practice, relevant work can be carried out from the following three aspects: First, the production of micro-lesson videos about the teaching content. Teachers can make 3~5 minute micro-lesson videos that match the teaching content according to the textbook text and the syllabus of physical education in colleges and universities, and provide them to students through WeChat groups and other means. Students can preview the teaching content by browsing the micro-lesson videos, so as to understand the theoretical knowledge of physical education subject to be learned more quickly and improve the efficiency of physical education teaching in colleges and universities. In their leisure time, students can repeat some theoretical knowledge by flipping through the micro-lesson videos, so as to achieve the learning effect of self-solving; Second, set up a video file of teaching resources. At the end of each month, teachers need to make video files of all kinds of teaching resources involved in the teaching content of the month and upload them to the official website of the university for students to download and browse. According to their own learning needs, students can compare the micro-lesson videos and video files of physical education to deepen their understanding of sports, reasonably standardize students' sports behaviors, and guide students to carry out high-quality and high-level sports. Thirdly, the addition of local cultural characteristic physical education courses takes into account that some areas have sports with local cultural characteristics, and teachers can also introduce such local sports into the teaching of physical education, and guide students

to learn in the form of characteristic physical education courses, so as to improve the attractiveness of physical education to students. For example, the Tohoku region has a large area of snowfall in winter, and has a series of winter sports. Teachers can make sports videos about skating and skiing in autumn and winter according to the sports conditions of colleges and universities, and provide them to students through WeChat groups. Combined with the on-site demonstration of physical education teaching in colleges and universities, students can be proficient in the methods of winter sports and learn the theoretical knowledge of winter sports protection. Teachers can record information about students' performance in local sports and disseminate it at the social level through the university's official website. It can not only show the local cultural characteristics to the public, publicize the local humanistic concept, and show the sports style of colleges and universities, but also attract more students to apply for colleges and universities to ensure the sustainable development of colleges and universities [3].

4.2 Build a physical education teaching network matrix

If we want to further develop the application value of Internet technology in physical education teaching in colleges and universities, it is necessary to build a physical education teaching network matrix and widely disseminate physical education teaching resources. Due to the influence of various factors, when teachers carry out physical education teaching activities in colleges and universities, physical education teaching resources are only disseminated in a small range among teachers and students. This leads to teachers' level of physical education understanding and athletic ability, which will directly affect the final quality of teaching resources. In order to reasonably improve physical education teaching in colleges and universities, it is necessary to break the communication limitations of existing physical education teaching resources, carry out reasonable communication through Internet technology, ensure the continuous optimization of physical education teaching resources, and gradually enrich the concept of physical education teaching. In practice, relevant work can be carried out from the following three aspects: First, open an official account of college sports disciplines. Teachers can apply to colleges and universities to open official accounts on various Internet platforms related to college physical education, provide theoretical knowledge of college physical education to more social personnel, and contribute to the promotion of sports in the whole society. Teachers can open an official account on Internet platforms such as Douyin and WeChat official account in the name of "XX University Physical Education Discipline", and upload micro-lesson videos and video files to the official account according to the progress of college physical education teaching. It can not only provide convenience for students to quickly browse the teaching content, but also allow the public to get in touch with the theoretical knowledge of systematic physical education, and gradually expand the popularity of the official account. Second, build a network matrix for physical education teaching in colleges and universities. Teachers can build a network matrix according to their official accounts on various Internet platforms, push video content about sports to account followers represented by student groups, regularly update sports article columns, improve the influence of physical education teaching in colleges and universities at the social level, and reduce the difficulty of micro-class video dissemination. Teachers and students can exchange their experiences about sports in a timely manner through the official accounts of various Internet platforms, so as to improve the feedback efficiency of physical education teaching in colleges and universities, and facilitate teachers to optimize the follow-up physical education teaching content. Third, absorb the sports experience of athletes in various fields. When disseminating video resources about physical education teaching activities through the network matrix of physical education teaching in colleges and universities, some people from non-student groups will put forward learning needs and point out teaching problems. Teachers can reasonably analyze the deficiencies of existing physical education teaching activities and carry out targeted optimization processing according to the background message and the information retrieval function of Internet technology. By absorbing the long-term accumulated sports experience of sports personnel in various fields, the richness of physical education teaching content in colleges and universities can be further increased. At the same time, the learning needs of athletes can also reflect the understanding of a certain theoretical knowledge of the student group, and teachers can analyze the learning needs of the athletes, confirm the lack of exercise in the student group, carry out high-quality physical education teaching optimization work, and provide a reliable guarantee for the healthy and scientific sports of the student group [4].

4.3 Improve the evaluation system of college sports

In the teaching of physical education in colleges and universities, teachers need to reasonably

improve the evaluation system of physical education teaching through the application of Internet technology, so as to provide students with the motivation for sustainable growth. In the regular physical education teaching in colleges and universities, teachers mainly evaluate students' physical education learning through classroom comments and mid-term and final assessment results. However, the level of students' understanding of the theoretical knowledge of physical education and the students' own athletic ability are in a state of continuous change, and it is difficult to objectively evaluate the sports growth of students by conventional evaluation methods, so it is necessary to improve the sports evaluation system of colleges and universities through Internet technology. In practice, relevant work can be carried out in the following three aspects: First, confirm the daily learning performance of students. Teachers can use cameras and other monitoring equipment to capture students' behaviors, expressions and other information in physical education teaching activities in colleges and universities, combined with the data analysis function of Internet technology, confirm students' daily learning performance, analyze whether students have slackness in learning, lack of exercise, etc., so as to facilitate teachers to communicate with students in a timely manner, reasonably solve students' problems in other disciplines of study and life, and guide students to actively participate in physical education; Second, analyze the recent sports of students. Teachers can analyze the changes in students' recent exercise through the changes in students' daily exercise data and the data analysis function of Internet technology. For example, in the 100-meter sprint, the teacher can analyze the students' running data this month, confirm the fluctuation of the students' sports data, and compare the previous month's sports data to confirm whether the month's sports data is improving. If there is a significant decline in exercise data, teachers can confirm whether students have diseases or limb injuries, so as to reasonably adjust the amount of exercise of students and speed up the recovery of students in subsequent physical education teaching in colleges and universities. Third, to form a personal sports portrait of the student. Teachers can use Internet technology to form a sports portrait of students based on their personal physical conditions and sports data fluctuations, confirm the types of sports that students are good at, and reasonably analyze students' physical fitness, so as to achieve the effect of quantitative evaluation of students' sports conditions. For students with weak physical fitness and deviation in athletic ability, teachers should focus on basic motor skills when designing the teaching content of physical education, so as to improve the physical fitness of such students and strengthen their athletic ability. For students with good physical fitness and athletic ability, teachers can appropriately increase the exercise intensity to reasonably stimulate the athletic talent of such students and maintain a good physical condition [5].

4.4 Carry out independent exercise for college students

Teachers need to further upgrade the existing physical education teaching system in colleges and universities through Internet technology, and scientifically carry out the guidance of independent exercise for college students. In regular college physical education, students need to maintain sufficient self-control and exercise during non-physical education classroom teaching hours. After the application of interconnection technology, students can be urged to play sports through smart devices, so that students can gradually form sports habits, and strengthen the positive impact of physical education teaching activities on students in colleges and universities. In practice, relevant work can be carried out in the following two aspects: first, set the standard of semester sports through smart devices. At this stage, in order to guide students to carry out sports activities, various colleges and universities will set sports standards such as 100-kilometer running, but the relevant supervision mechanism cannot be effectively implemented. In response to this situation, teachers can set specific semester transportation standards through students' smart devices, sports watches and other smart devices, and use smart devices to detect students' movements and complete efficient data comparison. Students can set the amount of weekly exercise or daily exercise according to their own exercise needs, and the smart device will notify the students whether they have completed the set exercise amount, so as to cultivate students' exercise habits, so as to achieve the effect of urging students to exercise. If a student is unable to continue to participate in college physical education or sports due to illness or limb injury, the student can directly upload the medical record sheet through the smart device, explain the details, and the teacher will handle the follow-up content to avoid affecting the normal recovery of the student's body; Second, use smart devices to push personalized sports items. For some students with other sports needs, teachers can find sports clubs within colleges and universities according to the personalized sports projects proposed by students, and push the sports venues of sports clubs to students through smart devices to guide students to join sports clubs. Teachers need to communicate with the relevant persons in charge of sports clubs on a regular basis to confirm students' sports performance, reasonably adjust the content of physical education in colleges and universities, provide necessary conditions for students' physical recovery, and reasonably tap the sports potential of students participating in

personalized sports programs and sports clubs, so as to provide students with high-quality career planning .

5. Conclusion

To apply Internet technology to physical education teaching in colleges and universities, it is necessary to analyze the sports situation of the student group in detail, confirm the real sports needs of the student group, design a perfect teaching plan from the dimensions of curriculum resources and evaluation system, give full play to the cross-time and cross-space control role of Internet technology, and guide students to actively participate in sports, so as to achieve the teaching goal of gradually improving the level of physical education teaching in colleges and universities.

References

- [1] Chen Junmeng. *Research on the innovation and development of physical education teaching in colleges and universities under the Internet+ environment*[J].*Sports Boutique*,2023,42(03):17-20.
- [2] Li Hui. *Research on the development of informatization of sports management in colleges and universities under the Internet*[J].*Innovation Research on Ice and Snow Sports*,2022,(16):90-93.
- [3] Zhang Qiang. *Research on the impact of mobile Internet on physical education teaching in colleges and universities*[J].*Journal of Harbin Vocational and Technical College*,2022,(04):42-44.
- [4] Tang Yi. *On the application of Internet technology in physical education teaching in colleges and universities*[J].*Science and Technology Wind*,2022,(01):62-64.
- [5] Pan Wen, Zhou Xiangyu, Wang Yujing. *Giving full play to the power of the Internet to promote the high-quality development of physical education courses in colleges and universities*[J].*Stationery and Sports Supplies and Technology*,2021,(23):123-124.