Research on the Application of Network Video Teaching in PE Teaching in Colleges

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Abstract. Since the emergence of Internet technology, its development momentum has shown an unstoppable trend. The emergence of the Internet has changed people's work and life. Especially the impact on the education field is even more significant. The micro-video teaching method under the background of Internet technology is a major innovation in the field of education, which has greatly promoted the development of education and teaching. As a new teaching mode, it makes good use of the integration of information technology and teaching methods to make classroom teaching more intuitive, vivid, and vivid, greatly improving students’ initiative and enthusiasm for learning, and expanding students’ horizons. Expand the classroom capacity, thereby improving classroom efficiency. With the gradual maturity of network technology, more and more micro-video teaching is applied to teaching practice, especially in college physical education work. It has played an incalculable role. This article will discuss the concept, characteristics and types of micro-video teaching. Production, questions and suggestions to discuss the application of micro-video teaching in college sports centers.

Keywords: Network Courses, College Physical Education, Teaching Innovation, Information Age

Introduction
Online video teaching is also called "micro-course" and "micro-course". It was first born in the United States, and the creator of the concept was David Penrose. Online video teaching is based on teaching objectives as the guiding ideology, with teaching practice as the reference, and the use of multimedia technology to produce videos that specifically aim at a certain skill or knowledge point to demonstrate or explain [1-7]. Online video teaching is based on traditional teaching, focusing on both the teaching of teachers and the learning of students. It is a new type of teaching method and a teaching innovation in the context of curriculum reform [8-13]. With the development of society, especially the maturity of network technology, network video teaching is becoming more and more popular with the public, and it is becoming more and more widely used in classroom practice.

1. The Characteristics of Online Video Teaching
A). Short teaching time
The "micro" of micro-video teaching means "small and short", which refers to the short teaching time of micro-videos. Generally speaking, the duration is mostly controlled at 5-8 minutes, not more than 10 minutes. The main carrier of teaching is video.

B). The teaching content is short and targeted
Micro-video teaching is mainly aimed at the demonstration or teaching of a certain skill or knowledge point in classroom teaching. Compared with traditional classroom teaching, the teaching content of micro-video teaching is extremely streamlined, so it can be called "micro-class".

C). Small teaching resource capacity
The video capacity of micro video is usually only about tens of megabytes, and the video format is a streaming media format that can be played online. Participants can watch the lesson examples online, or download and save them flexibly to realize mobile learning. It is convenient for teachers to improve and perfect themselves after class.

D). "Situationalized" teaching and convenient use of resources
The selected teaching content of micro-video teaching usually has clear goals, clear themes and complete structures. During the teaching process, video runs through it, using multimedia technology to display teaching design, required materials, study plan introduction and demonstration courseware, in addition to teaching reflections after class, student feedback results and other teaching staff’s text comments and other teaching resources. In this way, a unique teaching resource environment is constructed. Teachers in different locations and students from different schools can participate in teaching through the Internet and through micro-videos to achieve contextual teaching, which is beneficial for mastering various knowledge. And teachers can also learn from each other's teaching concepts, learn from each other's strengths, and improve themselves. This is also good for improving the level of classroom teaching, which can realize the mutual benefit of teaching and improve the level of students.

2. Types of Online Video Lessons
A). classification
According to classroom teaching methods, micro-video teaching can be divided into 11 categories.
① In lectures, teachers use oral language to describe situations, narrate facts, explain concepts, demonstrate principles, clarify laws, etc., and impart knowledge through lectures, which are mainly used for primary school teaching.
② Questions and answers, the instructor asks a number of questions to the students in accordance with the teaching goals and teaching tasks, and the students have to answer them. The purpose of obtaining or consolidating knowledge is achieved through questioning and answering.
③ Enlightenment class, instructors follow the teaching tasks, follow the objective laws of learning, and use a variety of teaching methods according to the students' situation to guide students, stimulate students' enthusiasm and initiative, and make them love learning and willing to learn.
④ In the discussion class, the instructor divides the students into several groups, asks questions according to the teaching content, guides the students to express their opinions and opinions, learn from each other, brainstorm ideas, and make progress together.
⑤ In the demonstration class, the instructor will show the physical objects or visual teaching aids prepared in advance to the students when teaching, or use modern teaching methods to make demonstrative demonstrations to gain knowledge.
⑥ In practice classes, students need repeated training and practice for tool and skill subjects. At this time, teachers play a role of guidance and supervision. Students practice repeatedly and consciously until they form habits and skills.
⑦ In the experimental class, students in the class use relevant equipment and materials to perform experimental operations under the guidance of the teacher, and obtain knowledge or verify knowledge by observing the changes of experimental objects in the experiment.
⑧ In the performance category, the instructor first makes a demonstrative performance in the classroom, and then organizes the students to imitate and reproduce the teaching content in a dramatic way. The teacher plays a guiding role in it. The students communicate and learn through experience performances to improve their aesthetic feeling and learning interest.
Autonomous learning, the development of this kind of micro-video teaching truly fulfills the requirement that classroom teaching is student-oriented. Students analyze, explore, compare, and discuss through the content displayed in the micro-video, and finally form their own conclusions. This also cultivated students' ability to question and innovate. 

For cooperative learning, students are divided into several groups before micro-video teaching starts, and different groups are assigned different tasks. Through micro-video teaching, each group cooperates and communicates, and the teaching content has been completed. In the inquiry learning category, students make conjectures or hypotheses on the content of the display based on the micro-video display and their own life experience, and then conduct exploration to verify their conjectures. This way can exercise students' creativity.

B). Micro video production

The production process of micro-video is usually topic selection, teaching plan preparation, courseware production, shooting, post-production, reflection, etc.

(A). The topic selection should follow the following two points: First, the selected topic is the focus or difficulty of teaching. Micro-video teaching time is short, and the content requires refined content. Generally, one knowledge point is taught in one class, so it must be selected correctly; second, the selected content is suitable for micro-video teaching. Generally, it is necessary to select content suitable for the use of multimedia equipment such as graphics, images, animation, audio and video, etc.

(B). Teaching design must be organized and logical.

(C). The content is refined, scientific and rigorous

(D). Micro-class teaching effect

Micro-video teaching is real, intuitive and vivid, and is close to students' lives. Therefore, during the teaching process, it is highly targeted and easily stimulates students' interest in learning.

3. The Significance of Using Network Video Teaching in Physical Education

A person's physical fitness is the foundation of all other qualities, and without good physical fitness, everything else is empty talk. Especially college students, facing graduation and embarking on society, good physical fitness determines the adaptability of future work and the completion of work quality. A major function of physical education is to cultivate positive, optimistic, strong, and healthy mental qualities of students. In the process of physical education, micro-video teaching is used cleverly and appropriately to decompose teaching tasks, especially some action essentials, which can be displayed through micro-video. Students can watch and ponder over and over again, which can help students master the essentials of technical movements and deepen their understanding and learning of traditional Chinese culture. Especially in outdoor physical education classes, most of what teachers teach are some skills and techniques. In traditional physical education, teachers need repeated demonstrations and explanations when teaching these things. Teachers are tired and dry. The teaching effect is not ideal. The use of micro-video allows students to observe and practice through video. And it can also be compared with other content through micro-video, which is more conducive to students to master the teaching content. Today, when quality education is vigorously promoted, the education industry is constantly innovating and changing in terms of educational concepts, teaching models, and teaching methods. In this historical background, micro-video teaching has also played an important role in college physical education. As a college physical education teacher, combining the characteristics of physical education teaching skillfully using the advantages of multimedia can effectively improve the quality of college physical education. Its role is specifically manifested in:

(A). When the physical education teacher teaches the students, the students hope to see intuitive and vivid demonstrations or demonstrations for some content of motor skills. Micro-video teaching has pictures, sounds, and pictures, and modern multimedia technology is used in the display process. In this way, students can understand faster and master the essentials more accurately.

(B). In physical education, physical education teachers can record the key and difficult points in teaching into micro-videos. Through the video display, students can see more carefully and understand
more thoroughly. Moreover, students can also practice repeatedly against micro-videos, which can help students master the essentials of action, and the use of micro-videos can also greatly arouse students' interest in learning.

(C). In physical education, micro-video resources can be used to establish an action resource library to allow students to observe carefully, cultivate students' good observation ability, and help students establish correct action concepts.

(D). Micro-video teaching is intuitive, vivid, and vivid, and is convenient for students to download and watch repeatedly. Therefore, in teaching, the content that is difficult for students to make mistakes in some sports techniques is made into micro-videos and displayed through multimedia for students to analyze, discuss and draw your own conclusions. Among them, coupled with the teacher's demonstration or explanation, those difficult points are more easily accepted and mastered by the students.

(E). In the process of micro-video teaching, the teaching content can be expanded through the Internet. Through the expansion, not only the classroom content is enriched, but also the enthusiasm of students can be better mobilized, the comprehensive quality of the students can be improved, and the overall development of the students can be promoted.

4. Application of Sports Video Resources in Sports Teaching

(A). Teaching application of video resources

The biggest advantage of micro-video teaching is real and intuitive. Then, in teaching, those complicated, difficult, important skills and skills can be displayed in the form of micro-video, and then students can change the way of playing, conduct more detailed and long-term observation, discussion, and practice on the teaching content until you really master the relevant content. The micro-video teaching method can effectively overcome the key and difficult points in teaching. For college physical education where the teaching content is based on skills and skills, micro-video teaching should be used more in teaching practice, so that more students can master relevant skills and skills faster. Today's teaching innovation focuses on the improvement of a person's quality and the cultivation of students' innovative thinking and awareness. Internet technology and multimedia equipment are widely used in teaching practice, gradually changing and replacing the traditional teaching mode. Network technology has applications in all walks of life, especially in the field of education and teaching, which should not be underestimated. As colleges and universities, especially physical education teachers in colleges and universities, we must be good at learning, use for innovation, constantly master advanced teaching methods and techniques, mobilize students' subjective initiative, and improve teaching quality.

(B). Teaching Features of Video Teaching Media

Today, education and teaching continue to innovate and develop, teaching methods are diverse, teaching methods are increasingly advanced, and teaching media are gradually becoming diversified. When teaching media are different, the corresponding functions are also different, and the characteristics presented are also different. Each teaching medium has its own advantages and characteristics, and plays an important role in teaching practice. Compared with other teaching media, micro-videos show more reality and are closer to the reality of life. The teaching content of the micro-video through computers and other carriers can be played and learned according to the students' own wishes and requirements. And through the network, this kind of audio-visual integrated, audio-visual micro-video teaching content is discussed and exchanged with others to obtain more abundant information.

(C). The effect of micro video teaching in teaching practice

Based on the development of the Internet, the application of micro-video teaching in college physical education has achieved very good results.

①. The use of micro-video teaching in college physical education can improve students' autonomous learning ability

Micro-video teaching is highly targeted and easy for students to download for online learning, so
students can check for omissions in time and conduct intensive training.

②. Using micro-video teaching can improve the professional level of college physical education teachers

Before class, physical education teachers should study the teaching materials carefully, clarify the teaching goals, the teaching content should be clear, the skill training should be meticulous, and the micro-video design should be able to stimulate students' interest. Through learning or training, you can master the use methods and precautions of multimedia-related equipment, and be able to flexibly use modern teaching methods in teaching practice. The micro-video is short and concise, which requires the teacher's teaching language to be logical and easy to understand. Through micro-video teaching, college physical education teachers can also use feedback to improve their teaching in time.

③. Promote the rapid development of the education industry

Micro-video teaching is an innovative teaching method that has changed the high-density, high-capacity, and impractical teaching drawbacks of traditional classroom teaching. Micro-video teaching can realize online learning, and can form a "one-stop" service environment for micro-video teaching construction, management, application and research through platform functions, for schools and teachers to choose and develop targeted. The ultimate goal of micro-video teaching is to achieve communication and promotion between the same industry, and to apply advanced technology to life practice. Through the Internet, excellent works can be collected together, and the content of the same subject or theme can be compared, evaluated and analyzed, so as to realize the role of communication promotion, common improvement and progress. Plans and plans can be worked out to facilitate the discussion and research of micro-video resources by time and location, brainstorming, and promote the reform and innovation of education and teaching, and realize resource sharing through the network.

5. Notes in Application

(A). Carefully study the teaching content, earnestly study the micro-video teaching theory, try more in teaching practice, use the micro-video teaching method to teach sports and health knowledge, so that students can pay attention to physical exercise from the ideology. Students use micro-video demonstrations to master the essentials of skills and movements, improve physical coordination and enhance confidence.

(B). The content of micro-video teaching should be pertinent, and attention should be paid to refined explanations. Systematize and standardize the knowledge learned.

(C). Micro-video teaching is convenient for teachers to control classroom discipline. The content of micro-video teaching has strong pertinence. Teachers should set up questions so that students have goals when watching, so that it is easy to focus students' attention and improve classroom efficiency.

6. Problems and Countermeasures in the Application of Network Video Teaching in College Physical Education

In recent years, the micro-video teaching model has been widely used in teaching practice, which has promoted the innovation of classroom teaching and has been recognized by the majority of colleagues in the industry. However, there are still many shortcomings for college physical education. For example, micro-video teaching is seriously out of touch with subject content; sports subject knowledge is seriously out of touch with sports skill goals; many micro-video materials are outdated; micro-video teaching design forms are single; topic selection is empty, resulting in a lack of systematic knowledge transfer.

(A). Pay attention to student needs, optimize course design, integrate course resources, and cultivate individual students.

(B). Improve the teaching design, truly realize the synchronous and asynchronous communication characteristics of online learning, and enable students to form a systematic knowledge chain.
(C). Clarify the curriculum design goals, let more experts invest in micro-video teaching, communicate with each other, make progress together, and promote the development and progress of education and teaching.

Conclusion
Micro-video teaching is a product of the development of the times and an innovation in education and teaching. It breaks the traditional classroom model of teaching. Classroom teaching pays more attention to pertinence and effectiveness, and fundamentally meets the development needs of different students. Micro-video teaching is intuitive, vivid, and online learning. These characteristics are very beneficial for students majoring in physical education to learn some skills and techniques. Students can watch micro-videos repeatedly and perform repeated training. This is an advantage that traditional teaching methods cannot have. In physical education in colleges and universities, micro-video teaching can better target students' reality, and improve students' enthusiasm through physical activities, which can enable students to master more complex sports skills faster and better, and facilitate students to develop good physical exercises habit.

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