

# The Core Value and Implementation Path of Effectively Integrating Flipped Classroom into Physical Education Teaching

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**Abstract:** Flipped classroom is a complete subversion of the traditional classroom teaching structure and process, which has triggered a series of changes in teacher roles, curriculum models, management models, and other aspects. It is an inevitable product of the development of the times and provides many new design ideas for teaching reform. As an important component of higher education, physical education teaching lacks theoretical basis and practical exploration for introducing flipped classroom research. This paper adopts research methods of literature and field investigation, attempting to take the core value and implementation path of integrating flipped classroom into physical education teaching as the research entry point. Combining with the actual situation of physical education teaching, it systematically analyzes the main problems of flipped classroom entering physical education teaching, and proposes the implementation path of effectively integrating flipped classroom into physical education teaching. It is hoped that it can provide reference and help to improve the quality of physical education teaching.

**Keywords:** flipped classroom, physical education teaching, core values

## 1. Introduction

With the advancement of educational concepts in higher education institutions and the introduction of diversified educational methods, traditional educational models are no longer able to meet the needs of national education development. With the advent of the information age, flipped classroom has become the focus of research in the field of education. It relies on information technology and applies multimedia technology to transfer the academic tasks that students were required to complete in the classroom to extracurricular activities. Students can learn relevant teaching content by themselves before class by watching micro videos and other forms, and teachers can answer questions for students in the classroom, so as to form a new educational model of inquiry cooperation and cooperative learning between teachers and students. This mode provides students with a vast space for imagination and free play, which can enhance their self-learning ability and enable them to learn course knowledge independently and systematically [1]. At the same time, it can also increase the frequency of teacher-student interaction. However, there are differences between physical education teaching and other professional courses, which have strong practicality and require teachers to repeatedly teach and students to practice in order to achieve the desired results. In the past, in physical education teaching, teachers needed to teach students various movement essentials and key and difficult techniques in a limited classroom, reducing the opportunities for students to practice and improve their physical fitness while ensuring the effectiveness of physical education classroom education. Integrating flipped classrooms into physical education teaching can effectively compensate for the lack of practice time and opportunities in classroom teaching, solve problems such as students' difficulty in digesting the essentials of teacher demonstration actions, and have positive significance in improving the quality of physical education teaching and enhancing teaching effectiveness[2].

## 2. The core value of effectively integrating flipped classrooms into physical education teaching

### 2.1 It is beneficial for improving the application level of educational informatization

Integrating flipped classrooms into physical education teaching can improve the level of

educational informatization application. In the process of information technology development, flipped classrooms are the main product, based on high-tech educational technology, and are personalized teaching methods. In the process of integrating information technology with teaching, classroom knowledge can be reinterpreted through the application of technological information such as the Internet, stimulating students' interest in learning, fully meeting students' requirements in sports teaching, and further promoting the innovative development of sports teaching informatization[3]. On the one hand, after the flipped classroom is introduced into physical education, teachers can use network media to display sports technology, spread sports cultural connotation, and monitor students' learning dynamics in real time. On the other hand, students can engage in self-directed learning through teaching network platforms, communicate with teachers through WeChat or discussion areas, and enhance their physical education skills from multiple aspects. This can also help them accumulate learning experience and continuously develop and maintain good physical education learning habits. After introducing flipped classrooms into teaching, technology and information technology can be applied to every aspect of physical education teaching, not only in selecting teaching resources, compiling teaching content, uploading teaching information to the platform, but also in students' online learning and diversified viewing of teaching videos. The terminal demonstrates the role of information technology in the development of physical education teaching.

### ***2.2 It is conducive to strengthening the pertinence of physical education teaching***

After introducing flipped classrooms into physical education teaching, the pertinence of physical education teaching can be strengthened [4]. At present, the goal of physical education teaching is reflected in many aspects, such as strengthening students' physique, promoting students' physical and mental health development, and cultivating student movement 'sports habits. There are significant differences in factors such as physical fitness, gender, and understanding ability among different students. Traditional teaching is conducted through a class teaching system, which cannot be tailored to individual circumstances, resulting in a serious impact on the effectiveness of physical education teaching. After integrating into flipped classrooms, the teacher-student relationship has gradually improved, and students have more rights to arrange appropriate learning plans based on their own time and practical needs. At the same time, teachers can lead students to better solve practical problems through offline discussions based on the fundamental situation of students' online learning and the specific problems they face during learning. In this way, it can not only enhance the pertinence of teaching, but also truly achieve individualized teaching.

### ***2.3 It is conducive to improving the scientific nature of teaching evaluation***

Teaching evaluation plays an important role in the process of value judgment teaching and results. Traditional physical education teaching evaluation is relatively single and belongs to a total evaluation. For example, in the process of evaluating students' academic performance or evaluating the level already achieved, final assessments are usually used to understand the completion of students' technical actions. This evaluation system is relatively one-sided in evaluating students, unable to truly judge their progress level, nor can it stimulate their enthusiasm for sports, provide them with more creative space, nor fully tap into their sports potential [5]. After introducing flipped classroom into teaching, in addition to using diagnostic evaluation, formative evaluation, and summative evaluation, the evaluation system of teacher-student mutual evaluation is also used, fully reflecting the diversified characteristics of teaching evaluation. Diagnostic evaluation is the main method of evaluation on the front line of classes. After online evaluation, based on students' feedback, teachers can have a more comprehensive understanding of the problems and difficulties in students' learning, arrange reasonable courses, teach students according to their aptitude, and take corresponding improvement measures. In the classroom, using teacher-student interaction, students' classroom performance, providing feedback on their learning, and improving their learning plans and methods are formative evaluation methods. In summary evaluation, this method will mainly be applied after class, using a comprehensive assessment of students to assess their level of learning. Students can subjectively and objectively evaluate the teaching effectiveness and attitude of teachers through online questionnaires. In addition, experts can evaluate the teaching effectiveness of teachers by combining online student feedback and offline listening, using more scientific and comprehensive evaluation methods to provide assurance for the quality of university physical education teaching.

### **3. The main problems of effectively integrating flipped classrooms into physical education teaching**

#### ***3.1 Uneven quality of sports teaching videos***

Compared to traditional classrooms, flipped classrooms can provide students with self-learning course content before class, but teachers need to record videos in advance or search for videos on a large number of learning resource platforms [6]. The recorded videos may have quality issues, mainly reflected in the low quality of shooting content and editing production. In the process of shooting a video, it not only involves pre prepared teaching content, but also includes aspects such as the teacher's demeanor and language during the video recording process. Although the relevant teachers carefully prepared the teaching content, there was a slight nervousness during the process of recording videos in front of the camera, which led to an unnatural feeling and could not stimulate students' interest in learning. In the process of producing videos, teachers need to edit the levels of the course, add some sounds, animations, etc., and have corresponding requirements in terms of color and layout of the images. Teachers have varying abilities in editing and producing videos, and the quality of the videos they produce varies. During the video production process, quality issues are determined by whether the videos selected by the teacher match their teaching plan. The decision on the effectiveness of resource application is not based on the quantity, but on whether the relevant resources have reached the maximum practical requirements. For example, can users' usage needs be met. In the era of networking, a variety of teaching resource platforms are constantly emerging, and teachers need to carefully identify them in the selection process. However, some teachers have many problems and shortcomings in the process of identifying teaching resources, resulting in uneven quality of physical education teaching videos.

#### ***3.2 Poor teaching ability and literacy of physical education teachers***

After introducing flipped classrooms into teaching, physical education teachers need to strengthen the use of modern teaching methods, create micro videos related to course content, and upload the videos to the teaching platform for students to download. Students can learn independently based on the videos, which requires higher video quality[7]. Moreover, teachers should be able to apply technologies such as creating micro videos and recording screens, which requires them to have the ability to apply modern information technology on the basis of their teaching abilities. Teachers need to spend a lot of effort and time making these micro videos. In the current process of building a comprehensive flipped classroom system, teachers should establish advanced teaching concepts, apply various teaching designs, and master various teaching methods. However, at present, some physical education teachers have low teaching abilities and literacy, undertake a large number of physical education teaching tasks, and need to take on training tasks. They have limited time in learning information technology, which is not conducive to implementing flipped physical education classrooms. Under the influence of inherent teaching thinking patterns, some teachers cannot well accept flipped classrooms. Therefore, in the process of flipped classroom teaching, teachers' teaching literacy and abilities have a significant impact on teaching.

#### ***3.3 Poor self-study ability of students in physical education***

The ability of students to learn independently can to some extent affect the implementation effect of flipped classrooms. Whether students complete autonomous learning according to the teacher's requirements before class directly affects the quality of flipped classrooms [8]. We found through investigation that most students in some schools lack the awareness of actively completing learning tasks, and some students are unwilling to complete autonomous learning tasks. Under the influence of these factors, the teaching effectiveness is greatly reduced. The mutual benefit of teaching and learning has a significant impact on improving teaching level. Students' neglect behavior will inevitably undermine teachers' teaching enthusiasm. At the same time, because students have received traditional physical education teaching content since childhood and their thinking patterns have solidified, they need to go through corresponding adaptation periods when using new learning methods, which leads to a common situation of low learning initiative among students, which has a negative impact on the implementation effect of flipped classrooms.

#### **4. The implementation path of effectively integrating flipped classrooms into physical education teaching**

##### ***4.1 Improving the teaching ability and literacy of physical education teachers***

Teachers are the main implementers of educational reform, and improving the teaching ability and comprehensive literacy of physical education teachers is an important foundation and necessary prerequisite for the orderly implementation of teaching reform. If you want to effectively use flipped classroom in physical education teaching, physical education teachers are required to have rich knowledge, solid theoretical foundation, professional education practice ability, lofty professional ethics, and master professional knowledge such as sports Somatic Science, pedagogy and psychology. Therefore, schools should continuously strengthen the cultivation of teaching ability and professional literacy for physical education teachers. In daily work, attention should be paid to the skill training and vocational education training of physical education teachers, especially to enhance their ability to implement flipped classroom teaching, with a focus on improving their information technology education skills, making physical education teachers familiar with network platform operation, video recording, video editing, flipped classroom lesson plan design, etc. In the split classroom mode, students do not learn freely or without organization, but engage in exploration and exploration activities in the carefully designed teaching classroom by the teacher. All designs of physical education teaching are implemented around the concept of student-centered. Whether students self-study their physical education knowledge and skills in the pre class stage, transform their physical education knowledge and skills in the classroom, or reflect and consolidate their knowledge and skills after class, they are all related to the careful design and organization of information by physical education teachers. Compared to traditional physical education teaching, the flipped classroom model puts forward higher requirements for teachers' teaching ability and literacy. Teachers must fully understand and recognize the flipped classroom model, and make adaptive changes in teaching, so that the flipped classroom can fully integrate into physical education teaching.

##### ***4.2 Improving the overall quality of physical education teaching resources***

Currently, there are two main channels for obtaining educational resources: firstly, teachers personally design and produce teaching materials; Secondly, using internet platforms as a medium to obtain educational resources. The solutions adopted for the quality issues of educational resources obtained through different channels also vary. For physical education teaching videos designed and produced by teachers themselves, on the one hand, it is necessary to ensure that the selection of teaching materials is innovative. Students are easily attracted to other new things when using online platforms to learn sports knowledge. Therefore, teachers should have innovation and interest in selecting teaching content to stimulate students' thirst for knowledge. Teachers should stand from the perspective of student groups, fully consider their self-learning habits and behaviors, choose vivid and accurate physical education teaching scenarios, and on the other hand, ensure the quality of video shooting and production. Teachers should ensure that video sound and painting are synchronized, with high quality and clear sound. At the same time, unnecessary factors such as video layout and drawings should be appropriately reduced to interfere. The overall style of the video should be unified, subtitles should be standardized, and colors should be coordinated to create a positive learning atmosphere for students. In addition, in the video, physical education teachers should ensure concise teaching discourse and easy to understand language expression, create a pleasant and relaxed learning environment through witty and humorous discourse, comprehensively grasp the pace of physical education curriculum education, and fully utilize the maximum effect of flipped classroom teaching in the shortest possible time. At the same time, teachers should establish a dignified and appropriate image, with firm and friendly eyes and coordinated body language to bring a sense of peace and professionalism to students. And students choose learning resources to save time compared to the production process, and the corresponding approach is relatively simple. Schools should guide physical education teachers to strengthen the use of resource platforms and select appropriate learning resources based on educational goals and students' basic characteristics. If any omissions are found in physical education teaching content, sufficient preparation should be made in advance and timely supplementation should be made to ensure the systematic and comprehensive nature of physical education knowledge.

#### **4.3 Enhancing students' ability to self study physical education**

In physical education teaching, in order to effectively integrate flipped classrooms, teachers must comprehensively analyze the characteristics of student groups, target students of different grades, physical conditions, and levels. Based on mastering their learning situation, teachers should choose physical education teaching content, design scientific and comprehensive physical education teaching plans, and coordinate teaching processes. Teachers should integrate online learning and on-site teaching in a targeted and planned manner, and implement individualized teaching. Adopting flexible physical education teaching methods for different students' basic characteristics can attract their interest in learning, cultivate their awareness and ability of self-directed learning, and ensure the effective application of flipped classroom in physical education teaching. Before class, teachers should first understand and grasp the learning situation, design flipped classroom teaching based on students' characteristics, make the designed teaching closely meet students' needs, and reasonably develop the learning content that students are truly interested in. Only when students are interested in relevant knowledge can they be more willing to learn, actively cooperate with teachers to complete online learning tasks, grasp the key and difficult points of learning, make their learning goals clearer, and better form a good learning attitude. In classroom practice, innovative classroom teaching methods are easy to attract students to participate in learning. Therefore, teachers should use innovative teaching methods to lead students to practice independently, practice with each other, and discuss in groups. Teachers need to ensure that every student has the opportunity to demonstrate their personal motor skills, stimulate their learning initiative, such as using the form of shooting micro videos and applying information technology to design a delayed viewing effect for students to continue learning, help them effectively grasp the effectiveness of their practice, identify shortcomings, correct errors in a timely manner, promote students to quickly understand the essentials of motor technology, and stimulate their learning enthusiasm, Enhance students' confidence in continuing their studies. After class, teachers can use a variety of forms to grasp students' learning outcomes in the first place. They can rely on QQ groups, WeChat groups, etc. to track students and interact with them. For some students who are unwilling to exercise, teachers can use App software for supervision, combined with positioning functions to solve the related problems of students' lack of learning initiative, and remind students to complete exercise tasks reasonably. After class, teachers should also lead students in designing learning plans to cultivate good habits. For example, lifelong sports habits can help students summarize and reflect on their learning content, and timely grasp their own shortcomings. At the same time, teachers can combine the platform to analyze common problems encountered by students during the learning process, and then optimize teaching methods in a targeted manner, continuously carrying out improvement work on teaching plans and design. Teachers need to make comments and summaries after class as a very important part. In the process of timely feedback on students' learning situation, they can combine online platforms or collect student data to affirm good homework. At the same time, in a series of evaluations by teachers, it can stimulate students' interest in learning and have a positive attitude towards learning. Through this way, it can also repeatedly communicate with students, help them continuously learn action skills, and improve teaching quality. In addition, students may make many incorrect actions during the practice process. At this time, teachers need to correct them, carefully analyze the feedback data from the platform, update and adjust the teaching plan, and improve and modify the teaching design and videos.

#### **5. Conclusion**

With the changes and development of the times, the integration of flipped classrooms into physical education teaching is an exploratory attempt, which has positive significance in improving teaching quality. However, in the early stages of practice, there may be many problems to face. It is necessary to bravely face challenges, actively pay attention to the reality of integrating flipped classrooms into physical education teaching, and use diverse teaching methods to improve the quality of physical education teaching based on the actual situation of physical education teaching.

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