

## **The Construction And Realization Of The Online+ Offline Teaching Mode Based On Micro-Class In Physical Education**

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**Abstract:** In recent years, with the rapid improvement of science and technology, information technology has officially entered all walks of life and various fields, and exerts a great influence on people's living habits and lifestyles. In the tide of the information age, however, the traditional physical education mode can hardly satisfy the needs of society, and it is imperative for us to optimize and reform the traditional mode. Relying on modern network technology, the online+ offline teaching mode based on micro-class guides students in a targeted way, provides students and teachers with new choices and effectively improves the quality and efficiency of physical education. How to realize the online+ offline teaching mode based on micro-class in physical education has become a common concern for many educators. At present, some schools have begun to try constructing and realizing the online+ offline teaching mode of physical education, and yield certain results. However, in reality, there are still many schools that haven't realized the importance of the reform of physical education mode, or find it difficult to make actual progress. In light of this, in this paper, we make a brief analysis of the online+ offline teaching mode based on micro-class and put forward construction and realization methods and strategies, in the hope of providing some references for various schools in China.

### **1. Introduction**

Micro-classes, also known as micro-classrooms, provide a wide variety of learning methods for students to choose from, mainly in the form of micro-videos. Today, with the rapid development of information technology, micro-classes that rely on the development of network technology have triggered a tremendous response at home and abroad. Compared with traditional classrooms, the form of micro-classes is more flexible. They can improve students' abilities and qualities in a more targeted way in a shorter time, and better attract students' attention to the classroom and fully mobilize their enthusiasm. The well-developed network provides students with more abundant learning resources. While learning, students can get in contact with a broader information system, and their information receptivity can get increasingly stronger. However, this doesn't mean that the traditional classroom will be eliminated. Instead, micro-classes will be combined with offline classrooms as an organic whole, to break the shackles of traditional teaching mode and give fuller play to the advantages of classroom teaching in PE and other subjects. In the face of this historical trend, teachers should improve their micro-class literacy, have a good mastery of the online+ offline teaching mode based on micro-class and contribute their shares to PE teaching in various schools in China through teaching practice.

### **1. Overview of Micro-classes**

#### **1.1. Composition of Micro-classes**

Different from traditional teaching resources, as a new type of teaching resources derived from the rapid development of information technology, micro-classes are mainly composed of various auxiliary resources and key video teaching resources in the classroom. The auxiliary resources of micro-classes are extremely plentiful, including a variety of contents, such as courseware materials that are related to a certain teaching topic, targeted exercises and tests, teaching design and teaching

reflection. These auxiliary resources and fragments of key teaching examples constitute a resource application environment, which has some structural law and a well-defined topic. Despite the great difference between micro-classes and the traditional resources applied in the past education and teaching, as a new type of resources, micro-classes are actually an extension and development of the existing traditional teaching resources.

## **1.2. Characteristics of Micro-classes**

### **1.2.1. A micro-class has fewer teaching contents**

In a traditional classroom, there are many teaching contents in a class. In addition to the important and difficult points, teachers should also consider the learning situation of different students and explain basic contents or exercises to them in detail. A PE lesson may contain different kinds of teaching contents, showing the phenomenon of too many teaching contents as a whole. Too many teaching contents will bring great pressure to students and teachers and affect the teaching quality in classroom. Compared with the traditional classroom with many teaching contents, micro-classes advocates targeted explanation and a more distinct topic. The teaching workload of teachers can be obviously reduced, and students can select different contents at their own discretion. Although micro-classes may only reflect a certain teaching activity in the traditional classroom, or the difficult point of a certain subject, and have fewer teaching contents, they are very classic and concise.

### **1.2.2. A micro-class has a shorter teaching time**

At the current stage, a lesson for primary and secondary school students in China takes about 40-45 minutes, while a lesson for higher-grade students may be longer, for example, in some of the universities, a lesson may take about one and a half hours. A traditional classroom has relatively long teaching time, while students' concentration on study is limited. Many students cannot guarantee their learning efficiency because of long class hours, and even get tired of the class. In this case, PE teaching cannot achieve the expected effect on the long-term development of students. Teachers likewise will feel tired and stressed because of long teaching hours. Compared with traditional courses, micro-classes can better grasp the rules and characteristics of students' learning. As the main form of micro-class teaching, micro-class teaching videos are generally kept within 10 minutes. A shorter teaching education is more in line with the cognition rules and characteristics of students and can help them get a better command of the teaching content.

### **1.2.3. A micro-class has a small resource capacity**

Micro-classes offer more abundant teaching contents and teaching resources to students, so that they can have more choices and autonomy in the process of learning. However, this doesn't mean that micro-classes would occupy a large resource capacity. Instead, the resource capacity occupied by micro-classes is very small, whether in teaching videos or auxiliary teaching materials related to it. For families with slightly poor economic conditions, students can learn with a mobile phone alone, and both students and teachers can watch teaching videos smoothly. Moreover, it is also very convenient to upload and download auxiliary teaching resources. Teachers can view the teaching design and courseware materials in real time. While students can transfer teaching resources among various devices with ease, if they need to review them after the class. The small resource capacity of micro-classes offers unprecedented selectivity to both teachers and students.

## **2. The Role and Significance of Micro-classes in Physical Education**

### **2.1. A micro-class is more visualized**

The teaching of physical education differs a lot from that of other subjects. Physical education not only requires students to have a good command of PE knowledge and a solid theoretical basis, but also emphasize student's ability to apply the PE knowledge and skills they have learned to actual physical activities. It is very demanding for the visualization of PE course. However, in the

previous single offline physical education class, different PE teachers may have biased understanding of one or several PE techniques. In actual classroom teaching, students may be confused and discrepant in the understanding physical movements and skills taught by different teachers, and fail to form their own PE knowledge system. Without detailed movement pictures with annotations and videos, most of the students can only learn by observing their teachers. By and by, there may be some incorrectness or misunderstanding in the contents grasped by the students. It is hard for them to comprehend the gist of movements. The contents observed in the classroom won't leave a deep impression on them and they fail to form their own understanding network of movements and techniques. In contrast, the stronger visualization of micro-class can make up for the shortcoming of the traditional classroom teaching of PE. Through micro-classes, more professional, vivid and concrete instructions and demonstrations can be delivered to students. Different PE teachers may gain a deeper insight into the principles and key points of the PE techniques they teach, through the online information resources, strengthen their ability to analyze movements, and effectively improve the teaching quality. In the process of autonomous exploration and analysis, students can more learn about the connotations of PE knowledge in a more intuitive way and master the important and difficult points in PE learning more thoroughly. Such a clear and flexible learning method not only cultivates students' interest in PE course unconsciously, but also effectively improves the PE learning quality of students and the PE teaching quality of teachers. It is of great significance for students, teachers and schools.

## **2.2. The PE teaching in the micro-class is repeatable**

PE techniques and knowledge need to be practiced persistently and learned systematically. However, at the current stage, students of different age groups in China have a heavy schoolwork burden. The importance that schools attach to PE course is not equivalent to the status of other important subjects. Even if the school has clarified the importance of PE course and commits itself to cultivating students' physical literacy, it is hard to achieve the goal of arranging multiple PE lessons. Due to this objective environment, in a traditional PE course, there is a long interval between two classes. The contents that students learn from the few PE lessons cannot be reviewed and practiced in time. They will be forgotten over time naturally. Although students form memories in their brains in PE class, such memories are not systematic and consistent. Instead, most of them are fragmented. All of these factors seriously affect students' efficiency of PE learning. For students with a poor learning ability, it is very hard for them to master a PE technique and almost impossible to grasp the gist of PE techniques within limited time. Besides, the status and PE literacy of teachers will also exert an influence on classroom effect. Teachers who are not up to standard may lead to the poor mastery of PE knowledge by students on a large scale. Physical education in the form of micro-classes can divide different contents of PE course in a systematic and professional way. Students can play and watch micro-class videos repeatedly and delve into the PE techniques and contents that they have a weak command of. Different students can receive education of the same quality and PE knowledge with equal difficulty. In micro-classes, teachers can elaborate on the emphases and keys of one or several movements to students, so that students can truly understand the connotations of PE techniques and form learning methods that are applicable to themselves. On the other hand, micro-classes can also solve the problem that students have no time to practice the knowledge due to the heavy schoolwork burden.

## **3. The Construction and Realization of the Online+ Offline Teaching Mode Based on Micro-class in Physical Education**

The contents of micro-classes in physical education are mainly divided into two types, one is the theoretical teaching of PE knowledge, and the other is the teaching of PE techniques. At present, the physical education for students in China mainly focuses on the teaching of PE techniques. Most of the problems that students encounter in the process of learning are also concentrated in the teaching of PE techniques. Therefore, the emphasis of micro-class teaching can tilt toward to the teaching of PE techniques as appropriate.

### 3.1. Material preparation for PE knowledge and techniques

Compared with offline courses, the PE micro-classes can offer more abundant learning resources to students, which should actually be owed to the strong support by materials for PE knowledge and techniques. Whether sufficient materials for PE knowledge and techniques are prepared directly determines the teaching quality and teaching effect of PE micro-classes. For this reason, teachers should get materials for PE knowledge and techniques ready before officially starting the teaching of PE micro-classes, select physical education materials according to different teaching emphases and teaching contents, in combination with the situation and learning abilities of students and find out learning contents that are suitable for students. The contents of micro-classes should be matched with those of offline classes and the emphases should be consistent.

### 3.2. Preparation of multimedia materials

The stronger appeal of micro-classes to students depends largely on the rich and colorful contents and diversified teaching forms of micro-classes. Teachers should intersperse the PE micro-classes with some interesting multimedia materials as appropriate, such as relaxing music and funny videos that are suitable for physical education and lay emphasis on students' learning experience. Such a teaching mode can better mobilize students' initiative and establish a more intimate relationship between students and physical education.

### 3.3. Production of micro-classes

The production of micro-classes is the most important process in the teaching of PE micro-classes. The production of micro-classes includes many processes, such as the selection and design of teaching contents, and the writing of teaching scripts, etc., which means that the production of micro-classes is very demanding for teachers' ability to apply information technology. Teachers should grasp one or several ways to produce micro-classes. At present, one of the most common ways to produce micro-classes by teachers in China is screen recording. When teachers produce micro-classes, they should fully consider the interaction with students and enhance students' intuitive experience.

## Conclusion

The emergence and wide application of micro-classes have injected new vitality into traditional teaching mode of PE and also posed a new challenge to teachers and schools. Teachers should not only have an excellent professional literacy, but also optimize and reform the original teaching by making use of the micro-classes. Although currently, there are still big or small problems with the construction of the online+ offline teaching mode based on micro-class in physical education in various schools in China, we believe that we will be able to effectively improve the quality and efficiency of physical education in various schools in China, as long as we truly realize the importance of micro-classes and construct and realize the online+ offline teaching mode in a certain manner.

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