Research on the Classification and Selection Strategy of Physical Education Teaching Model Based on Modern Information Technology

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Abstract. Because the future education of the information age has the characteristics of creativity, diversity, flexibility, and individuality, backward physical education methods and closed teaching models can no longer meet the needs of future education. The information environment has greatly impacted traditional sports in teaching, the closed teaching mode is "using classrooms and sports fields as the environment, teachers as the center, and low-media teaching materials as tools". Based on this, this article puts forward a research on the classification and selection strategy of physical education model based on modern information technology. This article will focus on the analysis of the classification and selection of the physical education model, and put forward guiding strategies, and compare the information technology-based physical education model with the traditional physical education model. Studies have shown that the use of modern information technology can optimize the basic conditions of physical education, allowing teachers and students to effectively share information technology-based physical education resources, and better meet the actual demands of students for independent learning and physical exercise; not only to develop students’ physical skills With interest in learning, physical education can move towards a higher quality, and it can also improve the pertinence of physical education and physical training, which has important practical significance for the development of personalized physical education and the improvement of students’ physical quality.

Keywords: Information Technology, Physical Education, Model Classification, Selection Strategy

1. Introduction

The teaching method structure [1-2] includes teaching concepts, teaching goals, operating procedures, teacher-student interaction, context and evaluation elements. Due to the limitation of study time in our country and the limitations of traditional sports in our country, methods of task teaching and practical learning have been created to highlight and test conclusions. This closed teaching method severely limits the creativity and creativity of students. Therefore, in the physical education process led by the traditional physical education model [3-4], learning how to establish a new teaching model that meets
modern requirements has become an important and urgent task before us.

Today’s students are more interested in intuitive, visual and interesting things and are willing to accept them. The application of multimedia teaching software [5] has triggered the core role of students, expanded the field of knowledge, shortened the teaching time, stimulated students’ innovative thinking, improved the quality of classroom teaching, enhanced the needs of students’ sports activities, and solved the teaching mode of boring while talking and demonstrating. The key points and problems of previous sports activities should be described repeatedly by teachers. It is not easy for students to check every detail of the activity and track it carefully in the face of complex and fast movements repeatedly repeated in physical education class. The use of multimedia teaching software in the classroom can avoid the above problems. In the course, the fitness coach will play live demonstrations and demonstrations for students to listen to and watch live broadcast. For the key and difficult points repeatedly slow play, some sounds and images are used to highlight the key points and problems, improve students’ participation, initiative and comprehensive ability to master movements, and improve the teaching effect. It can be seen that the application of modern information technology [6-7] in physical education will greatly improve students’ understanding and skills of the knowledge learned, as well as the effectiveness of physical education teaching.

This paper studies the classification and selection strategies of physical education teaching models under the influence of information technology. This paper will focus on the classification of physical education teaching models [8] and the analysis of selection angles, and put forward guiding strategies [9-10], which will be based on information technology a comparative study of the traditional physical education model and the traditional physical education model. According to research, modern information technology can optimize the basic conditions of physical education, and can better meet the realistic demands of students for independent learning and physical exercise.

2. Classification and Selection Strategies of Physical Education Teaching Models under the Background of Modern Information Technology

2.1 The Current Classification of Physical Education Teaching Models

According to the different characteristics of physical education teaching, the teaching forms are divided into:

1) Classification according to teaching mode: interactive learning form, modern technology education form, independent learning, strategy education form, discussion education form, situational education form.

2) Classification according to teaching objectives: self-entertainment and fitness education, skills mastering education, high-quality education, learning ability training education, and interest-inspiring education.

3) Classification according to the teaching organization: mutual learning form, tutoring technical teaching, collaborative learning form, targeted education form, integrated education form inside and outside class, and club education form.

The reason for the diverse characteristics of the physical education model lies in its guiding ideology, the purpose of physical education, the focus of the goal and the different teaching conditions. But in general, the model of physical education is universal. No matter how much the sports model has changed, it should only serve the overall teaching goal after it has achieved its functions in multiple directions and multiple aspects.

2.2 Strategies for the Selection of Physical Education Teaching Models

There are many factors that affect the structure of physical education teaching mode, mainly related to factors such as teaching, teaching content, teaching conditions and teaching unit design. For many reasons, this article chooses the content of teaching as the logical source and discovery point to promote many sports activities.

Physical education is the soul of physical education model. Different ideologies teach an ideology
to give life a specific teaching model, so the teaching model has clear guidance, and always adhere to
the correct path and finally complete the expected task. In order to realize a specific teaching concept,
it is important to choose the content of the teaching materials. However, due to the diversity of
teaching concepts, this article divides the teaching content into two categories, because the choice of
teaching content also reflects the characteristics of diversity and complexity. One way of teaching is to
"eat more and less meals", which means that the lesson should be explained in as much detail as
possible. Another type of teaching is "snacks and meals", which means simple introductory methods
can be used in teaching.

3. Experimental Thinking and Design

3.1 Experimental Ideas
This paper studies the classification and selection strategy of physical education teaching mode under
the influence of information technology. This paper mainly analyzes the classification and selection
angle of physical education teaching mode, and puts forward the guiding strategy, and makes a
comparative study between the sports teaching mode based on information technology and the
traditional physical education teaching mode.

3.2 Experimental Design
Through the use of information technology to analyze and research movement techniques, compare
students’ movements with standardized movements, discover the shortcomings of students’ movement
techniques, and help teachers and students improve and improve technical activities. The teaching uses
multimedia technology to edit the videos and images of students’ sports technology, and they
aggregate the analysis together for comparison and analysis to help students improve their skills and
help them improve their movements.

The purpose of this research is to study the classification and selection strategies of physical
education teaching models based on modern information technology. This paper takes traditional
sports as a control group, and sports based on modern information technology as a comparative
research experiment. In traditional physical education, teachers usually demonstrate simple activities.
In the experimental group, the use of modern information technology in sports will enable students to
have a deeper understanding of sports, enhance students’ sports and social development, and further
strengthen practical skills. Table 1 shows the comparison between traditional sports and information
technology sports.

| Compare items       | Traditional physical education | Information Technology Physical Education |
|---------------------|--------------------------------|------------------------------------------|
| Teaching content    | Exercise methods and techniques| Video, virtual scene                     |
| teaching methods    | One-way professor              | Two-way interaction                      |
| Teaching characteristics | Less practice                 | Immersive teaching                      |

4. Discussion

4.1 Discussion on the Classification and Selection Strategies of Physical Education Teaching Models
based on Modern Information Technology
With the help of modern information technology, a teaching data and processing center can be set up
to realize the whole process monitoring of the students’ physical training environment, physical
education mode, and physical education effect. Through the collection, collection, processing and
analysis of physical education teaching data, we can guide and optimize physical education activities
and guide students to conduct targeted training. The application of modern information technology can optimize the physical education environment and improve the pertinence and effectiveness of physical education. In order to allow physical education to be carried out in a virtual environment without being restricted by the external environment, it is necessary to use modern biomechanics technology and computer simulation technology to present good visual effects to students and improve the efficiency of physical education. In order to achieve a more ideal physical education teaching effect, the existing modern information technology can split the sports action, use the action freeze-frame pictures and text explanations, let the students talk to the machine, and imitate the sports action in the process, and then The freeze-frame pictures are compared, so that students can master the essentials more efficiently. In order to allow more students to improve their learning effects through human-computer dialogue, it is necessary to combine physical education theory and physical practice, and use multimedia technology to produce physical education courseware that is compatible with physical education. The form enhances the interest of physical education and stimulates students’ learning desires.

![Figure 1. Students’ interest in sports](image)

In order to make a comparative analysis of learning interest, students’ interest levels are divided into four levels: uninterested, general, interested, and very interested. Each level is evaluated with a full score of 10. Comparing the experimental class with the control class, it can be seen from Figure 1 that the proportion of people who are interested and very interested in the use of modern technology and equipment for physical education in the experimental class is very large, and there are very few people who are not interested. Compared with the experimental class, the control class is trained in the traditional way of physical education. The data of the control class shows the boring and single drawbacks of traditional physical education. It can be seen from the histogram that there is a general attitude towards the training course. The number of people accounted for the largest proportion of the total. It can be seen that the application of modern information technology to physical education has been warmly anticipated by students.
According to the survey results of "whether the content of the class is what you want to hear", it can be seen from Figure 2 that the data survey results of the two groups are not significantly different. The proportion of "the content of class is often what you want to hear" in the experimental group is higher than that in the control group; the proportion of "the content of class is occasionally wanted to hear" and "the content of class has never been wanted to listen" in the experimental group is lower than that in the control group. Therefore, there is no significant difference between the two groups. In the experimental group, the proportion of "what you want to hear in the classroom" is higher than that in the control group. In the experimental group, "the content in the classroom needs to be heard occasionally" and "the content in the classroom will never be what you want to hear." Transparency, sharing, interaction and cooperation based on modern information technology. Different from the traditional physical education information system, information technology teaching system can effectively organize and manage all kinds of teaching materials and educational resources, realize the centralized management of massive education cloud resources, and solve the problem of unbalanced educational resources.

4.2 Problems of Modern Information Technology in Physical Education

1) The traditional concept is backward and ignores the role of information technology

Today, information technology continues to enter the classroom, motivating students and improving their academic and teaching performance. However, in some schools, the concepts of physical education teachers are outdated and lagging behind. They have not actively participated in the learning and training of information technology, and have neglected the role and existence of information technology.

2) Information technology tools are "installed" but not used

Due to lack of funds for education and investment in information technology tools, some information technology tools have been installed to meet the needs of senior officials. These equipment schools are regarded as treasures to vigorously protect; some schools in order to avoid loss, information technology tools have been "installed" but not used to avoid losses.

3) Focus on form and lighter on content

The purpose of using information technology is to improve the quality of teaching. In order to match the teaching content with the content, proper attention should be paid to the aesthetics and novel
structure of the course interface. However, some teachers put the emphasis on the innovation and beauty of the courseware interface, putting the cart before the horse instead of using textbooks that reduce the integration of information technology and teaching.

4) Over-reliance on information technology support

In teaching, some teachers blindly emphasize the use of information technology to meet the needs of students. They believe that the more novel the content, the better. What follows is that there are only erroneous views such as "interest first" and "regardless of intensity".

In order to solve the current problems, it is necessary to know that regardless of the level of development of information technology, it will never replace the creative work that teachers need to lead in the classroom, let alone replace the interaction between teachers and students in traditional education. Therefore, in order to improve existing problems, elementary school managers and physical education teachers must change their educational concepts, integrate and use teaching and information technology in the classroom, and improve the implementation of improved concepts into actual teaching.

5. Conclusions

In the research on the classification and selection strategies of physical education teaching models based on modern information technology, this paper studies the huge changes that traditional physical education teaching models are facing under the influence of modern information technology, and has a great impact on physical education teaching models under the background of information technology. Analyze the classification and selection perspectives, and put forward a guiding strategy, and compare and study the traditional physical education model. The research results show that through the use of information technology to analyze and research movement technology, the students’ movements and standardized movements are compared and analyzed, and the shortcomings of students’ movement skills are discovered, so as to help teachers and students improve and improve technical activities. With the aid of modern information technology, the basic conditions of physical education can be optimized, and the actual demands of students for independent learning and physical exercise can be better met. It can be seen that the application of modern information technology in sports will greatly improve the efficiency of sports teaching by improving students’ awareness and depth of exercise.

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