The Implantation and Application of Multimedia Technology in Physical Education

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Abstract: The application of multimedia technology is not a new topic, and there are relatively few related researches on implantation research and application implementation in the field of physical education and teaching. In order to solve this problem, this paper takes the research and development of multimedia technology in physical education as the research direction, and makes a more in-depth theoretical exploration. First, the article introduces the positive role of multimedia teaching technology in physical education from three aspects. Second, it expatiates the necessary conditions for implanting multimedia technology in physical education through two perspectives. Third, it details in four different dimensions. The implementation path of multimedia technology is analyzed. Finally, three practical considerations of multimedia technology in the implementation of physical education are put forward based on the actual work.

1 Introduction

With the advancement of science and technology, college physical education teaching has entered a rapid development cycle, and multimedia technology has become increasingly mature. It has gradually become an important teaching method for physical education teachers to strengthen the effectiveness of teaching, solve teaching problems, and enhance students' enthusiasm for learning. Accompanied by clear and fast image display, students can focus more on classroom learning; and the introduction of smart sound effects can further activate the classroom learning atmosphere[1]. Therefore, more and more physical education teachers have begun to accept, and even actively and consciously apply the auxiliary means of multimedia education and teaching to allow students to more vividly understand technical movements in the learning process, more comprehensively remember the curriculum system, and faster The process of overcoming difficult points is beneficial to the learning and growth of students, and it is also very beneficial to the work development of physical education teachers.

2 The Positive Role of Multimedia Teaching Technology in Physical Education

2.1 Improving Students'Learning Cognition

Under the traditional physical education teaching mode, students' learning and understanding are first derived from the teacher's teaching, and then deepen the learning effect through the teacher's personal demonstration. Students experience inattention in class, weak awareness of active learning, and poor learning outcomes. The emergence of multimedia teaching aids has solved the above problems to a certain extent. On the one hand, through the application of multimedia courseware, it is possible to repeatedly play, repeat presentations, and intersperse explanations, which greatly improves the multi-dimensionality of teaching content. Dismantling; on the other hand, letting students enter the classroom with their favorite teaching methods and entering their cognitive scope will help improve the post-00students ’acceptance of learning, thereby increasing their learning activity.

2.2 Expand the Boundaries of Students' Learning

As we all know, one of the important factors that hinder the improvement of students' ability is to recognize the limitations of boundaries. With the support of multimedia teaching technology, a high amount of information has brought new cognitive space. A large number of graphics refresh the students 'senses[2]. Coupled with modulated sounds and words, they unconsciously open up students' desire for knowledge. Under the benign stimulus of the desire for knowledge, students 'internal learning motivation is stimulated, and students' own imagination, creativity, thinking ability, etc. will gradually be liberated. In view of the strong real-time updates of multimedia technology information, the latest consultations will be delivered at any time, and physical education teachers will be more at ease during the teaching process, leading students to improve the quality of learning.

2.3 Make up the Shortcomings of Students' Learning Effects

Compared with other cultural disciplines, physical education disciplines have different requirements and requirements for technical action. When the teacher demonstrates technical actions, there are more and more uncontrollable factors outside, and each demonstration is more or less different, which brings some trouble to the students. At the same time, some physical education teachers are affected by age or physical conditions, and it is difficult to control some difficult movements. This also increases the instability of teaching effects to a certain extent. And through the implantation of multimedia teaching methods, PE teachers are more at ease when explaining the essentials of action. For example, before teaching high jump, let students watch pictures and related materials, understand the technical parameters of muscle movement, movement principle, and the best angle of joints, and then help students to quickly enter the state and understand the posture during the lecture. The importance of sensation changes the mechanical imitation into the experience of self.

3 Necessary Conditions for Implanting Multimedia Technology in Physical Education

3.1 Excellent Team of Physical Education Teachers

In general, the use of multimedia technology has exceeded the professional scope of physical education teachers. It is a supplementary teaching method, not a main teaching method. Since the originator of education and teaching is physical education teachers, it is necessary to train a team of teachers who are highly skilled, highly informatized, and good at change. The construction of the teaching staff should pay attention to the following points: First, the age structure of the team is reasonable[3]. We must pay attention to balance in the age mix of old, middle and young. Second, we must strengthen the re-education and learning of the team. Focusing on the requirements of information technology, we constantly provide professional courses in the direction of multimedia technology. Third, we must pay attention to the practice of the team. It is necessary to provide physical education teachers with more horizontal and vertical communication opportunities to stimulate their internal motivation, and at the same time, recognize that the gap continues to improve.

3.2 Necessary Hardware Equipment Facilities Investment

The application of multimedia technology is inseparable from the release of necessary hardware equipment and the support of corresponding software. Therefore, colleges and universities must do the following: First, do a good job in terms of funding. The replacement should be replaced, the addition should be added, and the form of financial leasing can also be used to alleviate the shortage of funds. Second, sufficient energy should be invested in technology research and development[4]. Not only can the university's own scientific and technological research and development strength be integrated, but also the external company or group's scientific and technological research and development team can be used to continuously improve the pursuit of interface, control, stability, security, novelty, etc. Third, sufficient investment in logistics support attention. On the one hand, we must consider the management and control of the whole chain, such as course arrangements,

assessment methods, and evaluation methods. On the other hand, we must also pay attention to the handling of emergencies and emergencies to avoid any unnecessary risks.

4 Analysis of the Implementation Path of Multimedia Technology

4.1 Start with a Lesson Plan and Develop a New Plan

The multimedia teaching plan of physical education is different from the traditional teaching plan. It must not only reflect the new student-oriented teaching concept, but also form a gradual teaching process. Then, in combination with the current practice of physical education in colleges and universities, the following suggestions are made: First, adhere to the principles and remain unwavering[5]. The multimedia physical education teaching plan must always put the core demands of the students first, and adhere to the basic working principles of careful production, full use, and quality control, or do not do it, and do it best; second, teaching The direction is not blurred. In connection with the production of courseware, physical education teachers should stimulate students' thinking, give play to their enthusiasm, creativity, and ability to think, adhere to the general direction of quality education and science education, and implement the general direction and basic requirements of physical education reform; Third, the implementation of teaching is not sloppy[6]. No matter how good the software configuration, and then the hardware configuration is in place, if there is no teacher as the main body of implementation, all this will be greatly reduced. Therefore, teachers should establish a sense of responsibility in the implementation of teaching, be responsible for themselves, students, processes, and results.

4.2 Starting from Teaching Style and Reasonable Matching Elements

Multimedia technology includes many forms of technology display, interactive dialogue methods, and animation applications with sound and image. During the teaching process, these teaching elements must be properly matched. Starting from the actual work, the following aspects are summarized for your reference: First, in the application of animation, physical education teachers can use the movement and rotation of graphics and animation in multimedia technology, rotation, freeze, slow playback, flicker, color change, matching Use synchronous interpretation and other means to express teaching content and enhance teaching effect. Among them, slow speed can deepen the explanation of technical movements, flashing can help students to correct deviations quickly and quickly, and color changes can better improve the effect of contrast teaching. Second, in the application of man-machine dialogue, there is no need for complicated Technology can do it. For example, according to the needs of teaching, physical education teachers can use multimedia technology to write some interactive training topics, allowing students to answer questions and prompt the right and wrong. If the answer is correct, there will be encouragement and prompts for the next question, if the answer is wrong, There will also be explanation options and words prompting the next question. The interactive dialogue mode can help department students overcome the tension and psychological obstacles in communication with teachers, thereby improving the learning effect. Third, in the application of audio and video materials, physical education teachers use stitching, editing, optimization, etc. More relevant videos and pictures can be added to the teaching courseware. During the teaching process, it can form a perfect combination of dynamic and static, making the teaching content more full.

4.3 In Terms of Teaching Process, Break Through Conventional Restrictions

The effectiveness of multimedia teaching aids depends on a variety of factors, including the environment of the teaching, the quality of teaching props, and the design of the class. Breaking through the original teaching process and embracing the teaching process under the new thinking mode, only in this way can physical education teachers maximize the advantages of multimedia technology. Proceeding from the physical education teaching practice, the following points are summarized to share with you: First, teaching venues with better sound insulation effects can help improve students' study concentration. Therefore, the wall layout inside the venue is not easy to be

fancy, the lighting of the venue should not be too dazzling, and the surrounding environment of the venue should not be too noisy. Second, the audiovisual equipment with good definition and recognition can help improve the accuracy of teaching. Clearer pictures, more comfortable background music, and more convenient equipment and facilities all help improve the quality of teaching, help students see more accurately, and can also ease learning fatigue.

4.4 From the Perspective of Teaching Solidification, Change from Fixed to Mobile

Multimedia teaching has entered a historical period of rapid information development. The popularity of mobile phones in the student group is very high. Therefore, in addition to using the entire time of classroom learning and outdoor training, we must also pay attention to the use of fragmented time. Consolidate the review period after class to guide students to consciously review[7]. To achieve this, it is necessary for physical education teachers to increase some workloads, and use the existing mobile terminal learning platform to tailor-made exclusive courseware to completely realize the perfect combination of fixed and mobile.

5 Matters Needing Attention in the Implementation of Multimedia Technology in Physical Education

5.1 Do What You Can

Due to the large differences between universities in China, it is difficult to reach a uniform standard for the informationization of physical education. Therefore, when universities popularize this work, they must adapt to local conditions and remember that they cannot be forced. On the one hand, on the basis of doing a good overall survey, coordinate the distribution of material, financial and energy resources; on the other hand, first rely on your own strength to do the basic work. If you are beyond your own capabilities, you should consider the solution comprehensively.

5.2 Use Your Strength.

Studying concise and efficient foreign cooperation models can help colleges and universities use multimedia technology on the fast track. On the one hand, we must be good at digging out surrounding information companies, adopt the method of school-enterprise cooperation, use the technical advantages of the other party, develop high-quality teaching courseware that meets the physical education discipline, and establish a stable information exchange platform; Relevant colleges and universities form exchanges and mutual assistance, integrate physical education teaching resources and teaching strength, improve work efficiency, and reduce unnecessary work loss.

5.3 Risk Aversion

In the process of informatization, it is unavoidable that there are risks of this kind or some, some involve network interaction security, some involve personal privacy information, and some may have uncontrollable public opinion risks. Therefore, the development, use, and dissemination of multimedia technologies In particular, special attention should be paid to the estimation, coordination and disposal of various risks, a mature risk emergency plan should be formed, the risk awareness training of relevant personnel should be strengthened, and corresponding emergency drills should be held regularly or irregularly if necessary.

6 Conclusion

The application of multimedia technology in physical education is getting deeper and deeper. From the perspective of teaching effectiveness, students' acceptance and recognition have reached or even exceeded expectations. In the future, the implementation of multimedia technology in physical education and education may still encounter such or other problems, but we have enough confidence: physical education and education in China's colleges and universities will definitely use information-based trains to show different China speed.

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