Research on the Current Situation and Countermeasures of the Integration of Information Technology and Physical Education

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Abstract: *Under the background of informatization, the innovation of teaching mode in vocational colleges has been promoted, and a variety of teaching methods have been derived, such as electronic whiteboard and micro class, which provide technical support for teachers to carry out teaching. In the physical education curriculum of vocational colleges, physical education teachers can introduce information technology, optimize teaching mode, enrich the content of physical education curriculum, increase the interest of physical education curriculum, stimulate the enthusiasm of students to participate in physical training, and lay a solid foundation for the improvement of students' physical quality. The application of information technology in physical education has many advantages, and it also puts forward higher requirements for physical education teachers. Physical education teachers need to innovate their teaching concepts, recognize the advantages of information technology, use their spare time to continuously learn information technology knowledge, improve their information technology literacy, and create a good learning environment for students. From the perspective of practical teaching, there are many problems in the integration of information technology and physical education, which can not achieve the ideal teaching effect and limit the development of students. Therefore, physical education teachers in vocational colleges should combine the students' learning situation, give play to the advantages of information technology in teaching, and improve the efficiency of physical education classroom teaching.*

Keywords: *information technology, Physical education, Integration status quo, Teaching strategies*

1. Introduction

In recent years, with the proposal of the concept of quality education, the physical education curriculum has been attached importance again. The physical education teachers in vocational colleges should abandon the old teaching mode, innovate their own teaching concept, create a favorable learning environment for students based on their development, and improve the attractiveness of the physical education curriculum. In the past teaching, the physical education curriculum was not valued and was in a marginalized position. Teachers did not attach importance to the curriculum design and could not attract the attention of students. The participation of students in sports activities was not high, which made the teaching efficiency of physical education curriculum low. Under this mode, the students' enthusiasm for sports will be gradually annihilated, and their physical quality will decline due to the long-term lack of physical exercise, while physical education courses are dispensable in the eyes of students. In view of this situation, the physical education teachers in vocational colleges should make reasonable adjustments, introduce information technology to improve the situation, carry out teaching with the assistance of information technology, organize sports activities in combination with the contents of interest to students, give play to the advantages of information technology, supplement relevant materials for students, expand students' horizons, and play a positive role in improving their physical literacy.

2. The current situation of the integration of information technology and physical education

First of all, the integration of information technology and physical education can bring students new learning experience and help improve the efficiency of physical education class. However, from the actual teaching situation, the disadvantages outweigh the advantages. Under the background of

informatization, vocational colleges will follow the pace of the development of the times and introduce information technology into classroom teaching. There are many problems in the integration of information technology and physical education teaching, and it is superficial. The teaching concept of physical education teachers is outdated, and they have to use information technology under the pressure of the school. The teachers themselves do not understand information technology, only grasp some superficial knowledge, and cannot achieve the ideal teaching effect in practical application, It will hinder students' learning and make them gradually lose their enthusiasm for sports. Physical education teachers will use the Internet to collect relevant materials, such as videos and courseware, which will be directly quoted in the classroom. In order to consider the students' acceptance ability, the contents of videos and courseware introduced by physical education teachers do not match the learning level of vocational school students, and will dampen students' enthusiasm for learning. In addition, with the assistance of information technology, the teaching mode adopted by physical education teachers has not changed. It is limited to multimedia. Some teachers will look for teaching videos, directly let students watch the teaching videos in the classroom, and then carry out exercises. During this period, the teachers do not give guidance to students, so that students can not achieve the ideal exercise effect, It can not promote the improvement of students' physical quality.

Secondly, the physical education teachers in Vocational Colleges rarely involved in information technology in their previous teaching, and their understanding of information technology was very limited. In addition, the teachers' teaching concept was outdated, and their use of information technology in teaching was not high. Limited by the teachers' own information technology literacy, the integration of information technology and physical education was difficult. After class, physical education teachers need to combine the contents of the new class and the physical conditions of the students in the class to make courseware and videos that match the students, so as to stimulate the students' enthusiasm for learning. However, due to the limitations of their own quality, physical education teachers often feel powerless and waste a lot of time but can not make beautiful courseware and videos. The fundamental reason is that physical education teachers do not keep up with the pace of the development of the times, are out of touch with the times, are unwilling to learn new technologies, and do not ask young teachers who are proficient in information technology for advice when encountering difficulties, which limits their own growth and violates the requirement of "lifelong learning" in Teachers' professional ethics. The combination of information technology and physical education classroom teaching can bring many advantages, catch the eyes of students, get rid of the shackles of the previous teaching mode, display the details of actions with the help of information technology, record the changes of students, improve the efficiency of classroom teaching, enable students to truly master the actions taught by teachers, and improve the physical quality of students[1].

3. Countermeasures for the integration of information technology and physical education

3.1. Enrich teaching resources

With the assistance of information technology, PE teachers in vocational colleges can provide more learning resources for students, present relevant learning materials such as videos and texts in multimedia for students to read, expand students' knowledge, enrich PE classroom teaching, and lay a foundation for improving classroom teaching efficiency. Students in vocational schools have a relatively simple understanding of the physical education curriculum. Before teaching, physical education teachers can collect relevant learning materials, select contents that are consistent with the physical and mental development characteristics of students, and display them in front of students in the classroom with the help of multimedia, so that students can understand the physical education knowledge outside the teaching materials and have a strong interest in the learning of physical education curriculum[2]. For example, when physical education teachers teach "Sports Dance", they can present relevant video materials with the help of multimedia to create a strong learning atmosphere in the classroom, so as to achieve an ideal teaching effect. Students in vocational colleges are relatively unfamiliar with "Sports Dance"[3]. Teachers can use music to let students relax, learn dance movements in the music atmosphere, slow down students' impulsive psychology, and help students establish self-confidence in learning, so as to improve students' learning efficiency. Teachers should give correct guidance to students who have inferiority complex in practice. In the class, the video of Latin dance can be played to let the students feel the charm of dance, so as to introduce the learning contents of the new class and improve the students' enthusiasm for learning "Sports Dance". Then, the physical education teacher will demonstrate the warm-up dance. The students can follow the dance of music, learn simple dance steps, change the previous rigid and traditional manual exercise mode, and

ignite the students' enthusiasm for learning, It also encourages students to give play to their imagination, flexibly move their feet and change their gestures, and integrate them with the rhythm of music, so as to exercise their coordination and sense of rhythm while exercising their bodies, and make sufficient preparations for the study of "Sports Dance" [4].

3.2. Stimulate students' interest

Compared with the previous physical education teaching, with the assistance of information technology, the physical education curriculum is more attractive. Physical education teachers can change the teaching mode, protect the students' dominant position, stimulate the students' learning interest, get rid of the shackles of the previous teaching mode, relieve the teachers' teaching pressure, create a strong learning atmosphere easily, and stimulate the students' thirst for knowledge. Physical education teachers in vocational colleges should first understand the actual learning situation of students, take the content that students are interested in as the starting point of classroom teaching, increase the interest of classroom teaching, meet the learning needs of middle school students in the class, and let them harvest more content from the physical education classroom. For example, when explaining the content of "ancient Olympic Games", PE teachers in vocational colleges should focus on the historical background, rise and fall of the ancient Olympic Games, the setting of competition items and the spiritual wealth of the Olympic Games, so as to guide students to understand the importance of sports competition to human development and stimulate students' interest and enthusiasm in sports. In the classroom, PE teachers can introduce relevant videos with the help of multimedia, so that students can think about the questions raised by the teachers while watching the videos: "what is the story in the video? Where is it? What are the characters?" Mobilize students' enthusiasm for learning and activate the classroom atmosphere. Then, it tells about the origin and legend of the ancient Olympic Games, presents relevant materials in the PPT for students to read, and raises targeted questions: "what is the reason and significance of this kind of sacrificial activity based on the historical knowledge learned?" After the students' discussion, the teacher gives comments and summaries, and then plays the video to let the students understand the rise and fall of the ancient Olympic Games with the help of the video, and form a preliminary understanding of the competitive events of the ancient Olympic Games through the pictures. With the help of multimedia, students can learn sports knowledge through interesting videos and rich pictures, and their learning interests can be fully mobilized [5].

3.3. Improve the teaching of movement

In the physical education classes of vocational colleges, physical education teachers should attach importance to the explanation of physical actions, help students master sports skills and improve their physical quality. The content of physical education courses is very rich. Physical education teachers can introduce information technology to adjust the teaching mode and improve the efficiency of physical education classroom teaching. In the past physical education curriculum, students' learning of physical education knowledge depended on the explanation of physical education teachers, especially the learning of physical education actions, which required physical education teachers to demonstrate one by one. However, some physical education teachers in vocational schools were not high in their own quality. When carrying out demonstration teaching, they would show irregular actions, cause wrong cognition to students, affect the effect of physical education classroom teaching, and also have a negative impact on students. Physical education teachers' demonstration teaching has both advantages and disadvantages. The advantage is that it can give students an intuitive feeling, and the disadvantage is also very obvious. It is a great challenge for teachers. Teachers need to carry out repeated demonstration. Students in the front row can visually observe the teacher's actions, while students in the back row will be blocked from their sight and cannot grasp the key points of actions. With the integration of information technology in physical education classroom teaching, the problems existing in the previous teaching will be solved, the working teaching can be improved, and the new learning experience can be brought to the students. For example, when teaching the "hurdle step and leg crossing technique", physical education teachers can first play the video of Liu Xiang winning the Olympic gold medal, so that students can carefully observe the video and express their feelings[6]. On this basis, they can carry out urban work teaching, guide students to watch the action teaching video, and use the decomposition teaching method to advance from easy to difficult. The content of the action teaching video is explained in great detail. The teacher can use the video to point out the key points that students need to master. For the parts that students do not understand, the physical education teacher can demonstrate, so that the students can follow the rhythm of the teacher and imitate the hurdle action in combination with the teaching video. After the action explanation is completed, the physical

education teacher can organize the students to carry out practical exercises, and the teacher can observe the students' actions on the side, In view of the shortcomings of the students and make corrections, ensure that all the students in the class can master the "hurdle step and step leg movement"[7].

3.4. Creating teaching situation

The purpose of the physical education course is to improve the physical quality of students, and students need to participate in it and carry out physical exercises under the guidance of teachers. Affected by the campus environment, the students of vocational schools do not put too much energy into the physical education curriculum. The students focus on the study of professional knowledge, strive to improve their professional quality, and make adequate preparations for future employment. Physical education teachers should recognize the situation of students, correct their wrong ideas, and make them realize the importance of physical education curriculum. Physical education teachers should also pay attention to the adjustment of the course mode, introduce information technology, create relevant learning situations for students in combination with the content of the new course, stimulate students' enthusiasm for sports, integrate interesting games to bring students new learning experience, guide them to participate in the games, exercise their bodies and feel the charm of the physical education course. For example, when teaching "aerobics", physical education teachers can create relevant teaching situations with the help of multimedia, so that students can feel the charm of Aerobics while mastering aerobics. Students in vocational schools are in the critical period of their physical and mental development. They pursue independence. They have good self-consciousness, strong desire for expression and knowledge. They can participate in active exercises in the classroom independently. Students' physical coordination and flexibility have been better trained in previous studies. Most students prefer aerobics. The learning content is moderately difficult for students, and the students are more willing to learn. Physical education teachers can start with the dances that students are familiar with and interested in, play dance videos in the multimedia, wake up students' memories, let students guess the types of dances, then play music, invite students to show the dances they have learned, create a strong learning atmosphere in the class, and lead to "aerobics" with the help of dance. In the learning environment created by teachers, students can put more energy into it. Under this mode, the physical education curriculum in vocational schools can be revitalized, and the quality and efficiency of physical education classroom teaching can be guaranteed, which will help to improve the students' physical literacy and lay a solid foundation for their future learning and development.

3.5. Carry out feedback and error correction

In the physical education course, the physical education teacher will teach the students the movements, so that the students can master the basics and carry out the exercises. However, the teachers can not really understand the students' mastery, and there will be a certain degree of misjudgment. However, the combination of information technology and physical education classroom teaching can effectively avoid the recurrence of such situations. After teaching the movements, Physical education teachers can demonstrate first, and then divide students into different groups to display the learned actions in groups. The teachers record the display process of students, and play the actions to correct students' errors in the multimedia, so that students can recognize their shortcomings and follow the suggestions of teachers to correct them. For example, when physical education teachers teach "Taijiquan", most of the students' movements in the class are not standardized. Physical education teachers can correct them with the help of multimedia to improve the teaching efficiency of physical education. Take "the twelfth movement: high Tangma" as an example. The key point of this movement is to turn both hands on the heels, push the palms and retract the hands to lower the center of gravity. The upper body is natural and upright, the shoulders should sink, and the right elbow should drop slightly. When changing the center of gravity with the steps, the body should not fluctuate. However, students are prone to make mistakes in practice, such as out of step with the palm, wrong direction of the palm of the left hand, insufficient lowering of the center of gravity, resulting in deformation of the whole movement[8]. At this time, the physical education teacher can record the students' actions and let the students compare them with the actions in the demonstration video. The students can find out the irregularities of their actions and correct their actions according to the guidance of the teacher. With the help of information technology, students can intuitively see the irregularities of their actions through video, and improve the accuracy of their actions through the guidance of physical education teachers. "Taijiquan" is an important teaching content of physical education courses in vocational colleges. Physical education teachers can record the performance of students in each class, and send the video to students after learning. Through the video, students can intuitively see their changes and progress,

select the largest and most standard students to show in the class, which can play an incentive role. Students will also invest more energy in physical education courses, Their physical quality can also be improved, and the quality and efficiency of physical education classroom teaching can also be guaranteed [9].

4. Conclusion

To sum up, in the new era, vocational colleges should attach importance to the innovation of teaching mode, break the shackles of previous teaching and promote the comprehensive development of students. The purpose of the physical education course is to strengthen physical exercise, so as to improve students' physical quality, develop good habits of exercise, and lay a good foundation for future study and development. Vocational colleges are committed to cultivating high-quality talents with professional skills. Therefore, they will focus on professional courses, while physical education is a public compulsory course, which will be ignored and ignored by students. As a result, students lack physical training for a long time and their physical quality is generally poor. Under the influence of quality education, vocational colleges recognize the importance of physical education courses, plan more class hours for them, and let students have more opportunities to participate in physical training. The introduction of information technology into the classroom by physical education teachers can make the physical education classroom look new. With the assistance of information technology, students' enthusiasm for sports will be fully stimulated, and they will actively participate in physical training. Under the guidance of physical education teachers, Master the correct exercise methods and steadily improve your physical quality.

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