

Application on Information Technology in College Aerobics Teaching

Yanjie Li

School of Physical Education, Bohai University, Jinzhou, 121013, China

747228464@qq.com

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Abstract: Aerobics is a sport that is favorite and popular among the masses. It combines gymnastics, dance, music, fitness and entertainment. The traditional aerobics classroom teaching lacks vitality, the content is single, and the method is monotonous, which cannot meet the needs of students in the new era. The development and application of information technology has caused tremendous changes in all aspects from the educational concept to the educational process. The effective application of information technology in college aerobics teaching can fully compensate for the limitations of traditional teaching modes and make aerobics teaching more standardized, intuitive, comprehensive and effective. In order to improve the application effect, this paper proposes the following strategies: stimulating students' interest, enriching teaching forms, standardizing aerobics movements, building a network resource pool, and improving the information technology literacy of aerobics teachers.

1. Introduction

Information technology has improved the quality and speed of information transmission, making information processing functions far beyond human capabilities, realizing the integration and automation of information storage, transmission, processing and utilization, and creating a new information age. The information age extends the human brain function, expands human intelligence, enhances human ability to understand the world and transform the world, and extensively infiltrates and affects all areas of human society. In the field of education, it has caused tremendous changes from the educational concept to the educational process. Aerobics is an emerging fitness and bodybuilding sport. It targets the human body, aims at fitness, uses body training as the content, uses art creation as a means, and uses various types of exercises to harmonize with music. Guided by multidisciplinary theories such as training, physiology, psychology, aesthetics and music, through physical exercises with bare hands or using fitness equipment, it is both a fitness body and a mass fitness method for cultivating sentiment, and a project for competitive sports. Compared with other sports, the main features are: the effectiveness of fitness and body, the mass of people who are healthy and entertaining, and the era of the rhythm. With the help of information technology, teachers can directly pass information about aerobics teaching content directly to students. This will enable students to learn aerobics more intuitively and systematically, and promote the effective development of aerobics teaching activities.

2. Influences of Information Technology on Modern Education

Information technology has had a profound impact on modern education, mainly in the following aspects:

(1) Information technology has transformed the educational environment. The educational environment refers to situations created consciously for the cultivation of people, including the family environment, the social environment and the school environment. The educational environment is a hidden curriculum that plays a very important role in the overall development of students. Modern education theory believes that the teaching process is the active construction process of the learning subject, and the lively teaching environment can stimulate students' learning motivation, guide students to actively participate, master scientific learning methods, and improve

learning efficiency. The wide application of information technology has promoted a networked, multimedia and intelligent educational environment in which all educational resources have been communicated, a new and infinitely open platform has been constructed, and real resources have been realized shared.

(2) Information technology has transformed the teacher's view of teaching. The teacher's educational concept is a related education phenomenon formed in education and teaching, especially the ability to teach and the subjectivity of the students, which directly affects the teacher's perception and judgment, and thus affects the teaching behavior. Modern information technology has begun to change the way people learn, think and work. The teacher's teaching concept must also undergo profound changes, strengthen the awareness of modern education, and establish a modern education concept. It is also necessary to promote the integration of information technology and disciplines, use multimedia technology to enrich teaching activities, and enrich the school information technology resource pool. The integration and sharing of information resources has shortened the preparation time, teachers have more time to study students and teaching materials, and devoted themselves to education reform.

(3) Information technology has transformed students' learning perspectives. The student's concept of learning refers to the intuitive understanding of the knowledge and learning experience of the individual students, and involves an intuitive understanding of the nature of knowledge, nature of learning, learning process and learning conditions. In each dimension, students' perceptions differ, even if the same student's knowledge changes over time and experience. The student's concept of learning is a product of learning activities, education and cultural background, not only influenced by individual factors, but also by environmental factors. The popularity of information technology has transformed the student's concept of learning from the original passive listening to active learning. The source of knowledge has also been extended from the original single book material to network resources, improving the ability of cooperative learning and independent learning.

(4) Information technology has transformed the traditional view of talent. The concept of talent is a basic concept system about talent phenomena and problems, including basic views on the nature, standards, growth process and development and use of talents. The advanced concept of talents is conducive to the promotion of social development, and the backward concept of talents is bound to some extent to social progress. The concept of talent not only determines the direction and effect of a country's talent work, but sometimes even determines the country's success or failure. The concept of talents in the new era must be guided by the development concept of the new era, with the general principles and new features of innovation, coordination, green, openness and sharing. In the era of information technology, the concept of talent has changed from knowledge to quality. In addition to the traditional "ethics, intelligence, and physics", it has highlighted information and innovation capabilities.

3. Traditional Aerobics Teaching Methods

The teaching method of aerobics is an integral part of the modern gymnastics teaching system and the means and means used to complete the aerobics teaching tasks. Because aerobics consists of more complex movements, there are different tasks in each stage of the teaching process. Therefore, choosing different teaching methods will play a role in mastering the movements, cultivating interest and improving the positive effects of teaching. Among the many traditional teaching methods, the most effective for aerobics teaching include the following:

(1) Pedagogy. The pedagogy is a teaching method for teachers to impart knowledge and develop students' intelligence through concise and vivid oral language. Through narrative, depiction, interpretation and inference, passing on information, imparting knowledge, clarifying concepts, argumentation laws and formulas, and guiding students to analyze and recognize problems. In the teaching of aerobics teaching, the teacher should explain the teaching tasks and teaching requirements to the students, and use the name, essentials, practices and requirements of the action to guide the students to master the basic knowledge, skills and skills of aerobics, according to the

content of the lecture to practice. When teachers use a variety of teaching methods, they are usually accompanied by pedagogy.

(2) Method of demonstration. The method of demonstration is the most commonly used visual teaching method in physical education. Through specific demonstrations, teachers can establish the movements of the students to learn, understand the structure and essentials of the movements, and cause the students to act. Teachers must ensure the correctness of the action demonstrations in order to enable students to establish correct action representations and concepts. The method of demonstration occupies an extremely important position in aerobics teaching, which is determined by the characteristics of aerobics teaching. In the process of the method of demonstration, we should pay attention to the following matters: Demonstration should be a model of action, demonstration should have a clear purpose, demonstration should be conducive to student observation, and demonstration should be combined with explanation.

(3) Leadership law. Leadership law refers to a method in which teachers or excellent students lead students to carry out collective exercises in physical education or physical exercises. The leadership method enables students to quickly establish correct action concepts and muscle sensations, stimulate students' enthusiasm for learning, improve the quality and effectiveness of exercises, and enable teachers to get feedback in a timely manner, and improve and improve teachers' own skills and skills. Leadership should be targeted and purposeful in order to truly improve the effectiveness of teaching. Teacher leadership is combined with student leadership. Teacher leadership is mainly used in the beginner stage, and student leadership is mainly used in the review phase or in the individual correction phase.

(4) Decomposition method. The decomposition method starts from mastering the complete movement, divides the complete movement into several sections according to its technical structure, or divides the parts according to the physical activity into several parts, and teaches them piece by piece or by section, and finally grasps the movement completely. The advantage is that the difficulty of the motion technology is relatively reduced, easy to grasp, and it is easy to highlight key points and difficulties. The decomposition method is suitable for sports projects with low internal organization and high complexity. Aerobics is the application project, so it is very suitable for the decomposition method. For the coherent movements that are difficult to decompose, after learning the various decomposition actions, you need to practice together with the individual actions before and after.

(5) Repeat method. Any motor skill is gradually formed through repeated practice, and the repeated superposition of the number of exercises occurs from the quantitative change to the qualitative change. Repeated practice is the basic method in physical education training. The more repetitions of the same technical exercise, the better the stability of the motion technology. In the application of repetition method in aerobics teaching, it is necessary to pay attention to the following problems: prevent duplicate actions from being repeated and arrange the number of repetitions reasonably. In the initial stage of the action, it is necessary to avoid excessive load and premature fatigue, so as not to affect the mastery and improvement of the action. To form a more stable technical movement, the number of repeated exercises is relatively increased.

(6) Linear progressive method. This is the easiest way to teach freely without developing into a combination or routine. When you sequence the actions, make only a few small changes at a time. These changes can be upper limb movements, leg movements, or adding factors. Choosing an action from a basic action to add a change factor has infinite creativity, so diversity is the key. In linear progression, the transition from the previous action to the next action must be easy to follow, plus the advance prompt, balanced selection of the action type and body plane, such a line transition is effective. This method is suitable for students with poor aerobics.

(7) Pyramid method. The pyramid method is a method of repeating the number of individual actions like a pyramid shape. The number of actions can be increased gradually or gradually. The positive pyramid method is to gradually increase the number of repetitive actions, and at the same time to adapt to the rhythm of the music, and the progress is relaxed and natural, the students focus on the movement itself, body posture, movement techniques and exercise intensity. The inverted

pyramid method is to gradually reduce the number of repetitions of the action, each time reducing the half of the action, increasing the complexity of the combined action, generating new stimulation to the students, and increasing the interest of the exercise. This method is conducive to cultivating students' logical thinking and intuitive thinking.

4. Application Strategies on Information Technology in College Aerobics Teaching

The effective application of information technology in college aerobics teaching can fully compensate for the limitations of traditional teaching modes and make aerobics teaching more standardized, intuitive, comprehensive and effective. In order to improve the application effect, this paper develops the following strategies:

(1) Use information technology to stimulate student interest. The enthusiasm for learning begins with interest. Interest is the prerequisite for learning all the knowledge, and encourages students to pursue knowledge and explore the mysteries of knowledge. Modern educational technology provides information technology such as teaching aids, learning tools, projections, movies, videos and recordings. It is intuitive and vivid, and students can see and see, and can operate by hand. It directly acts on the students' various senses, produces comprehensive stimulation, stimulates students' interest in learning, enriches the teaching content, and also activates the classroom atmosphere, mobilizing the consciousness and enthusiasm of students seeking knowledge. The effect that the traditional teaching mode cannot achieve is completed. Constantly give students new stimuli, so that the students' brains are always excited, which stimulates students' strong desire to learn and enhance their interest in learning. Aerobics itself is a comprehensive project that integrates physical exercise, music, dance and art. Information technology and aerobics have made a significant difference at this level.

(2) Use information technology to enrich the form of teaching. Good teaching results, relying on advanced teaching media to help students make a variety of learning responses. The traditional teaching mode is boring and lacking in vividness, and students' initiative and creativity cannot be effectively played. After the intervention of multimedia information technology, it promoted the change of educational concepts and educational models. Teachers and students can share high-quality educational resources and enjoy the most cutting-edge teaching resources, which brings opportunities for the reform and development of higher education. Using information technology, students are guided to use learning materials and teachers to help them acquire knowledge in a certain situation. In the information technology mode, the same set of technical movements of aerobics can not only be decomposed or combined at any time according to requirements, but also can constantly change the background music. The application of information technology in aerobics teaching, the greatest success lies in the passive learning as the initiative, the abstraction as concrete, through the entertainment practice, easily consolidate the learned movements, and enrich the teaching form.

(3) Using information technology to regulate aerobics. The teaching method and the model method are typical teaching methods of traditional aerobics teaching, but the teaching process is tedious and difficult to improve the quality of teaching. On the contrary, it will make the classroom teaching of aerobics become boring and reduce the enthusiasm of students. Teachers explain the demonstrations at the same time, which is more visual and conducive to the students' learning and imitation. However, due to the limitation of time and space, the teaching effect is not ideal. The application of information technology in aerobics teaching has broken the limitations of the teaching method in time and space. Multimedia information technology can use animation or video. The teacher leads the students to watch the set of aerobics action videos, and the aerobics movements are displayed in front of the students intuitively, so that each movement is clear and clear. At the same time, the teacher can also adjust the progress of the video or animation according to the needs of the teaching, or watch the decomposition action, let the students master each movement, memorize every detail and improve the teaching quality.

(4) Use information technology to build a network resource library. The construction of network teaching resource library is an important part of education information construction, an important

guarantee and prerequisite for realizing the integration of information technology and curriculum, and the basis for network teaching. Open and shared teaching resources, students can easily enter, meet students' personalized learning, and consolidate and strengthen knowledge. It is also the best carrier for students' extracurricular extended learning and an important resource for students to learn independently. The aerobics teaching resources in colleges and universities are scarce, and it is necessary to build an online course resource library. It can integrate a variety of fitness and bodybuilding resources such as aerobics, rhythmic gymnastics, sports dance and folk dance, and use information technology to edit, splicing and synthesizing relevant cutting-edge, novel and easy-to-learn actions into the resources needed for aerobics teaching. It is also taught to students through video, pictures, and language, text and teacher demonstrations. It assists in aerobics classroom teaching and practical teaching, and also creates conditions for online learning and independent learning.

(5) Further improve the information technology literacy of aerobics teachers. The essence of information literacy is a basic ability that global informatization needs people to include not only the ability to use information tools and information resources, but also the ability to acquire identification information, machining, process and deliver information, and create information. Teacher information literacy is a component of the modern teacher's professional competence structure. On the basis of fully understanding the value and role of information technology, teachers actively learn information theory knowledge, effectively collect, evaluate, analyze and synthesize information, and realize information technology and specific education. Information awareness and ability to integrate teaching practice. Whether the aerobics teachers themselves have high information literacy directly affects the application effect of aerobics information technology. The specific promotion strategies include: changing ideas and concepts, improving teachers' awareness of information literacy; improving the training system, creating conditions for teachers' information literacy improvement; creating a good environment and promoting the consciousness of teachers' information literacy improvement.

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