

The Application of Inquiry Teaching Method in Physical Education

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Keywords: Inquiry teaching, Aerobics teaching, Aerobics level

Abstract: In the practice of physical education in colleges and universities, aerobics is a physical education course that many students are willing to take. As a college aerobics teacher, a high-quality aerobics class requires students not only to master the essentials of movement, but also to think and innovate, and use inquiry teaching to inspire college students to actively think and explore, this is very novel and necessary in college teaching. Through experimental research on the characteristics of inquiry teaching, and combining with practical experience, this paper puts forward some analysis and discussion on the practical application and strategies of inquiry teaching.

1. Introduction

With the increasing emphasis on the cultivation of students' physical and mental health in higher vocational colleges, aerobics has also been introduced into physical education in higher vocational colleges as a branch of physical education. However, at this stage, the limitations of aerobics teaching methods still hinder the improvement of curriculum efficiency and the shaping of students' own body[1]. The author introduces the new method of inquiry teaching, and tries to explain the scientific and effective application of this method in aerobics teaching in higher vocational colleges, the specific contents are as follows.

The analysis of inquiry teaching shows that it is a student-centered active learning method, which means that students learn and practice relevant concepts and principles, the teacher only provides them with corresponding examples or auxiliary guidance, so that students can find and solve problems in the process of exploring knowledge, and improve their practical ability[2]. The essential feature of this teaching method is that teachers do not directly tell students the answers to questions, but are committed to providing students with corresponding teaching environment and help, so that students can find knowledge and learning strategies consistent with teaching objectives through their own exploration. On the basis of understanding the concepts of aerobics teaching and inquiry teaching, the following will analyze the application effect of inquiry teaching in aerobics teaching in higher vocational colleges in the form of experiments[3].

2. Overview of Inquiry Teaching

The so-called inquiry teaching method, also known as the research method or the discovery method, specifically means that teachers only provide students with questions and examples in the

process of organizing students to learn principles and concepts, and let students conduct independent research through observation, reading, discussion, thinking, experiment and other ways, so we can rely on ourselves to discover and explore the methods of specific conclusions and principles. The inquiry teaching pursues the main position of students, advocates students' initiative and exploration in learning, seeks rules and forms concepts by themselves, which helps to cultivate students' enthusiasm and creativity. Generally, the methods of inquiry teaching include creating situations, open classes, classroom cooperative research, timely instruction and innovative homework[4].

3. Experimental Research on Inquiry Teaching in Aerobics Teaching

3.1 Research Purpose

Aerobics is a combination of sports and beauty education, which is of great help to students' learning, growth and physical and mental health. The inquiry teaching in aerobics teaching has attracted more and more attention of college teachers and students. In order to improve the teaching level of aerobics in colleges and universities and explore whether the inquiry teaching mode is more conducive to students' learning and development, we analyze through a group of experiments[5].

3.2 Research Object

The experiment took 100 college students as the research object, who were randomly selected from different majors.

3.3 Research Methods

This teaching experiment adopts various methods and forms to ensure the accuracy and scientificity of the experimental research. Firstly, through the collection and study of relevant literature, master the relevant theoretical basis of inquiry teaching; Secondly, through rigorous experimental methods; Finally, through the analysis of the experimental data, the conclusion is drawn[6].

3.4 Teaching Experiment

Step 1: The same aerobics course education was conducted for 100 college students in the study. The 100 college students were randomly divided into two or four classes, and the same teachers taught them the same teaching content. Traditional teaching methods are used in teaching. After teaching for the same period of time, the teacher will give them a comprehensive score according to the unified standard. The purpose of this step is to select 50 students with basically the same performance in aerobics from the 100 students. Step 2: Divide 50 students with basically the same grades into two classes on average, regardless of height, fat and thin, hair length, etc, according to the principle of random distribution, 25 students in each class[7]. The students in the first class are called "traditional class", the second class is called "inquiry class". Step 3: A four-week teaching design was carried out for the students in the traditional class and the inquiry class, the teaching content was identical, but the teaching methods were different. For students in traditional classes, teachers use traditional teaching methods to teach. Specific process: Teachers give demonstration lectures on aerobics movements - teachers teach by movements - students imitate training - teachers correct mistakes - students practice by standardizing movements. For the students in the inquiry class, the teacher adopts the inquiry teaching method. Specific process: The teacher gives a

demonstration speech of aerobics movements -- students observe and imitate freely -- teachers and students observe teaching videos and imitate freely -- teachers and students observe and discuss action points -- students practice freely and constantly find problems and improve problems -- students practice in groups -- the students in other groups pointed out the mistakes made by the students and helped them correct them -- all students finished the exercise and discussed and improved the action essentials -- students practiced and summarized as a whole. After four weeks of teaching experiments, the students in the two classes have different gains. Ask two or three professional aerobics teachers to give a comprehensive score according to the aerobics results of the students in the two classes. The score comprehensively considers the degree of completion of each student's actions and the degree of coordination with music, and strives to achieve fairness and justice [8].

3.5 Data Analysis and Conclusion

After four weeks of teaching experiments, the teacher has scored each student in the traditional class and the inquiry class, and also obtained the average score of the class. The experimental results show that the average score of students in the inquiry class is significantly higher than that in the traditional class. Specific data are shown in Figure 1.

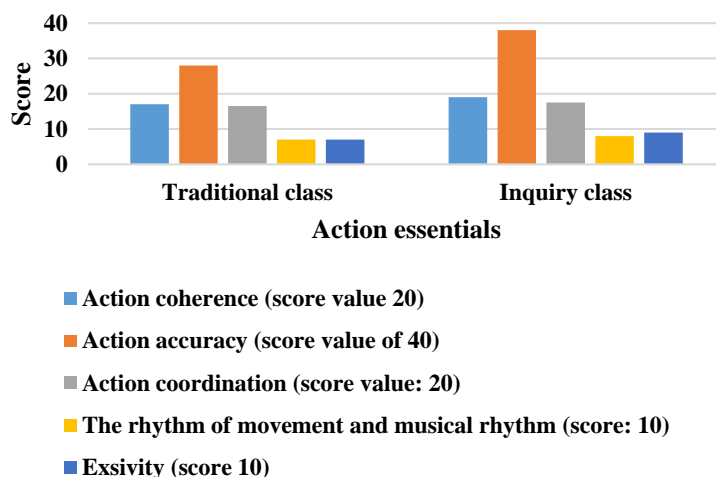


Figure 1: Results Table of Exploratory Teaching Experiment

From this, we can draw the experimental conclusion: In college aerobics teaching, the teaching results of inquiry teaching are more significant than those of traditional teaching[9].

4. Inquiry Teaching Strategies

Through the above experimental research, we found the effectiveness of inquiry teaching in college aerobics teaching, therefore, when carrying out inquiry teaching, teachers also need to pay attention to certain strategies and methods, so that students can better accept. In the process of inquiry teaching, various methods can be used to give play to the characteristics of teaching. Specifically, there are three points:

(1) Carry out diversified teaching and mobilize students' enthusiasm for active learning. Inquiry teaching is student-centered, so in the process of teaching, we should give full play to students' initiative and mobilize students' enthusiasm for learning. In the process of calisthenics teaching in colleges and universities, teachers can guide students to learn actively through diversified teaching methods. For example, use multimedia teaching methods to organize students to observe and learn.

In the process of observation, students are more likely to relax physically and mentally, and only when students are most relaxed and comfortable, their learning effect is most significant. In the process of teaching, we should insert observation and study, and then organize students to carry out imitation training, we should actively discuss and find out the main points of action in aerobics practice[10].

(2) Carry out competitive practice to improve students' concentration. In the process of teaching, teachers not only require students to learn every action according to the requirements, but also actively think and explore every action essentials, the most important thing is to form a relaxed and tense atmosphere in the process of learning and firmly grasp students' attention. Competition practice can form a competitive relationship between students. One student exercises, while the other students watch, they can think, discuss, point out mistakes, etc, finally, the winners are selected and rewarded accordingly.

(3) Carry out mutual-aid learning to form a harmonious classroom atmosphere. In addition to teaching students the essentials of action, students learn from each other. Teachers can encourage students to learn in a mutual-aid way, students can ask each other for advice, correct each other's mistakes, learn together and make progress together to form a harmonious classroom atmosphere [11].

(4) Guide students to actively seek information and learn independently. When teaching aerobics, teachers should ask more questions to students and guide them to think actively. Sometimes, even if teachers know what a problem is, they don't say it, but let students find it by themselves, guide students to find relevant information, learn and explore by themselves. The knowledge acquired in this way is more stable than that taught by teachers [12-14].

5. Conclusion

The author takes the students in the physical education class of a college as the main research object, analyzes the relevant concepts of aerobics teaching and inquiry teaching, and makes a comparative analysis of the application effect of inquiry teaching and conventional teaching in aerobics teaching by means of experiment. The research results show that compared with the conventional teaching methods, the students' physical health level and aerobics technical level have improved significantly after receiving the inquiry teaching. It can be seen that in the future, strengthening the application of inquiry teaching in aerobics teaching has important practical significance for improving students' physical health and aerobics technical level, and promoting the healthy development of aerobics and sports in higher vocational colleges.

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