The Application of Microteaching in Special Calisthenics Teaching in Colleges and Universities

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Abstract: The experiment of Microteaching in calisthenics special course in colleges and universities shows that the method of multimedia teaching is adopted in Microteaching. By watching the teaching video, students can get intuitive feelings and understanding, feedback timely and accurate, which is conducive to improving students' grasp efficiency of technical movements; Using video, multimedia and other teaching means, so that students in the limited teaching time faster master the correct technical movements of calisthenics, improve the teaching quality and teaching effect; Microteaching further gives play to students' subjective initiative in aerobics special courses, so that students can improve their interest in class and active the relationship between teachers and students.

Keywords: Aerobics; Microteaching; Application

1. Introduction

With the deepening and development of education reform, in the current wave of new curriculum reform, school teaching has put forward higher requirements for teachers' comprehensive quality, and teachers are facing new opportunities and challenges. In order to meet the needs of The Times, teachers have to start from the reality of the school, to improve the school's education and teaching, improve the quality of school teaching as the goal. Microteaching is a system of controlled practice that makes it possible for normal students or in-service teachers to focus on solving a particular teaching behavior or to learn under controlled conditions. It is a systematic method to train teachers' teaching skills on the basis of teaching theory, audio-visual theory and technology.

2. Research objects and methods

2.1 Research objects

42 aerobics students from Shangrao Normal University, majoring in dance in 2015, were selected as the experimental objects. We randomly divided them into Test group21 and Control group21, carried out the teaching experiment of 96 class hours.

2.2 Research methods

2.2.1 Document method

Through the library of Shangrao Normal University, Super Star electronic books, and through browsing the Internet, refer to the articles, periodicals and books about aerobics, Microteaching, physical education teaching theory, teaching methods, school physical education and other aspects in the past 10 years and relevant literature and materials at home and abroad. The literature closely related to this study is screened out for in-depth analysis and study, which provides sufficient theoretical basis for the writing of the paper.

2.2.2 Questionnaire method

The author interviews the students after school and timely issues and recycles the questionnaires. A total of 42 questionnaires are issued. Forty-two valid questionnaires were collected with an effective recovery rate of 100%. The validity and reliability of the questionnaire were tested, which all met the requirements of the study.

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2.2.3 Teaching experiment method

The teaching tasks of both the experimental class and the control class are carried out by the same teacher, and the two classes are consistent in teaching content, teaching hours, venues and other aspects. Then 16 weeks of teaching experiment, in the process of the experiment in order to prevent the factors that are not conducive to the experiment, invited a calisthenics teacher from the institute of Science and Technology to monitor the class, make records and play records, video work. During the test, the two groups of students were mixed and tested in the order of drawing lots. The test was conducted by three aerobics teachers who were not involved in the experiment. According to the scoring standard of Competitive aerobics of Shangrao Normal University and *The Scoring Rules of Competitive Aerobics Competition Rules 2013-2016*, the scores of the two groups of students were finally sorted out according to the grouping list. Before the experiment, the basic physical quality, physical coordination and acceptance ability of the two students were mastered. The results showed that the conditions of the two groups were basically similar, which met the requirements of the teaching experiment. Table 1 is as follows:

Table 1. Comparison of the basic conditions of the two groups of students before the experiment

Groups	Physical quality / points	Ability to accept / points		
Test group	79.78±0.23	73.39±0.17		
Control group	78.89±0.21	73.41±0.2		

Traditional teaching methods are adopted in the teaching process of Control Group, mainly including explanation method, demonstration method, prompt method, leading method, integrity and decomposition method, repetition method, etc. Teachers in teaching and students in learning mostly use demonstration method, leading method. The Microteaching process is summarized by using Microteaching theory in combination with experiments as shown in Figure 1:

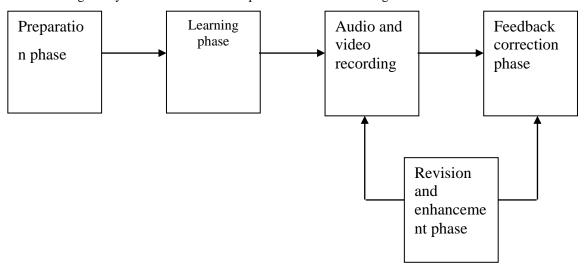


Figure 1. Test group microteaching method flowchart

In the preparation stage before the implementation of microteaching method in calisthenics class, teachers guide students to learn the basic theory of calisthenics, the basic technology and coordination of the basic pace and arm of calisthenics teaching, lifting, excessive connection and so on. Clear the tasks in aerobics class, understand the implementation process of microteaching; Organizing teaching, videotaping and watching teaching videos; Feedback and evaluation By replaying live teaching videos, students can get feedback information in time. Teachers and students watch together to further observe the degree of students in each group to achieve their learning goals; After watching the video, each group of students made a self-analysis to see whether they had mastered the teaching skills they had learned and summarized the areas for improvement. Students can improve the positive transfer ability of technical movements by watching videos and implementing feedback correction according to self-analysis.

3. Results and analysis

3.1 Analysis and research on the influence of the implementation of Microteaching on the sports skill level of the students in the specialized aerobics class in colleges and universities

Table 2. 2013-2016 Second level prescribed collective five set routine result table

Item	Test group(n=21)	Control group(n=21)	P value	
Difficult points	1.5 points	1.1 points	P < 0.01	
Complete points	8.3 points	7.7 points	P < 0.01	
Art points	8.1 points	7.4 points	P<0.01	

Relevant data were obtained through questionnaire survey and experimental research analysis, and statistical analysis was conducted on relevant data and obtained data by SPSS12.0 statistical software. We obtained the required results. It can be seen from the data results in Table 2 that the P values of difficulty score, completion score and art score are all <0.01, indicating that there are significant differences in the evaluation of the performance of the prescribed routines of the group of five in the Test group and Control Group in level 2 from 2013 to 2016. This result fully shows that the application of microteaching mode in the special calisthenics course in colleges and universities has an obvious impact on students' learning of complete set of prescribed movements as well as their technical mastery and understanding, especially in the aspect of artistic completion. By watching the original teaching videos, students intuitively perceive the deficiency of artistic appeal of their own actions and correct it in time. After that, students further improve the forward transfer by watching group teaching videos.

3.2 Analysis and research on the effect of microteaching on the students' learning physical quality in aerobics elective classes in colleges and universities

Table 3. The comparison of the physical quality of the students in the calisthenics elective class in colleges and universities

Item	Groups	Average points	Difference	
Push-ups	Control group	79.89		
	Test group	80.39	0.5	
60s sit-ups	Control group	75.49		
	Test group	76.21	0.72	
20s big kick	Control group	77.81		
	Test group	80.98	3.17	
Longitudinal fork	Control group	79.55		
	Test group	83.23	3.68	
400M	Control group	78.25		
	Test group	78.71	0.46	

It can be seen from Table 3 above: in the strength test, there was no significant difference between the two groups of students in 60s sit-up and push-up. In the 400M test of glycolysis energy supply, there was no significant change between the two groups, but in the flexibility test, there was a significant change in the scores of the two groups of students in the 20-second big kick and left and right vertical fork. The comparative analysis of students' physical quality shows that the flexibility of students in the Test group using Microteaching is improved compared with that in the Control group.

3.3 Analysis and research on the influence of the implementation of Microteaching on the students' interest in aerobics

Table 4. The implementation of microteaching is of great interest to the students of specialized aerobics classes

Number of people Groups	Very like Number of			Like Number of		Just so so Number of		Not like Number of	
2	people		people	%	people	%	people	%	
Test group	8	40%	11	51%	2	9%	0	0%	
Control group	5	24%	8	38%	7	33%	1	5%	

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As can be seen from Table 4, 8 people in the Test group and 5 people in the Control group were selected, accounting for 40% and 24% of the total number respectively. 11 people chose Test group and 8 people chose Control group, accounting for 51% and 38% of the total number respectively. 2 people in the generally preferred Test group and 7 people in the Control group, accounting for 9% and 33% of the total number, respectively; There is no Test group that you don't like, and there is 1 person in Control group, accounting for 5% of the total number. The results show that the Test group students' interest in the aerobics class is concentrated in liking or very liking, while the Control group students' interest in the aerobics class is relatively scattered.

The implementation of microteaching has an obvious difference in the influence on the interest of the students in the aerobics elective classes in colleges and universities. The application of microteaching in aerobics teaching further improves the students' interest in aerobics class in colleges and universities, further gives play to the students' subjective initiative, so that students can improve their interest in class teaching, active atmosphere, and show their personality.

4. Conclusion and Suggestion

4.1 Conclusion

- 1) In microteaching, multimedia teaching means are adopted. By watching teaching videos, students can get intuitive feelings and understanding, and feedback is timely and accurate, which is conducive to improving the mastery efficiency of technical actions.
- 2) Microteaching adopts video recording, multimedia and other teaching methods, so that students can quickly master the correct technical movements of calisthenics in the limited teaching time, improve the teaching quality and teaching effect.
- 3) Microteaching further gives play to students' subjective initiative in aerobics special courses, so that students can improve their interest in class and active the relationship between teachers and students.

4.2 Suggestion

- 1) Microteaching can effectively integrate the overall education goal of physical education, and multimedia teaching equipment can be selectively installed in colleges and universities with conditions. In the students should also use more visual equipment for calisthenics teaching and training, and in the spare time to repeatedly watch and imitate, through audio-visual improvement of the standard movement of positive transfer ability.
- 2) Reasonable arrangement of teaching time, teaching plan and progress in microteaching enables students to complete the learning of standard actions in a short time and optimize the teaching effect.

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