

# The Application of Hierarchical Teaching Method in the Swimming Teaching

Changxin Li<sup>1, a \*</sup> and Xiguo Liu<sup>2, b</sup>

<sup>1</sup>College of Physical and Health Education, Mianyang Teachers' College, Mianyang 621000, China

<sup>2</sup>Sichuan Water Sports School, Chengdu 611430, China

**Keywords:** Hierarchical Teaching; Class Grouping; Teaching Efficiency

**Abstract:** Hierarchical teaching method is used in swimming teaching to improve the swimming level of students in a short term. This paper shows the evaluation of this method on swimming class teaching quality through the comparative study between the experimental class and the comparative class, and puts forward measures to improve the quality of teaching. The results show that the hierarchical teaching increased the number of swimmer with intermediate swimming level. It helps optimize the classroom teaching, make reasonable appraisal methods and improve the body condition and will of students, what's more, let them learn swimming, a fitness method with lifelong benefit.

## 1. Introduction

Swimming not only can strengthen physical health and prevent and cure disease, but also have a high practical value in the military and other fields. Among many people, the individual swimming levels are quite different. Class grouping based on the level of student is reasonable. 'Hierarchical Teaching' can greatly achieve the individualized teaching effects. Through the practice in physical education teaching, we find that scientific, comprehensive and systematic teaching purpose should be made starting from swimming class organization form to form a complete teaching mode, so that students can learn the skill of swimming quickly and cultivate their comprehensive ability to meet the needs of future life. It will provide a reference basis for effectively improving the teaching quality of swimming. This paper studies the characteristics of swimming and the laws of swimming teaching and takes the test for the conventional teaching methods and assessment methods. Overland auxiliary exercise was added in the teaching. Hierarchical teaching was taken based on the imagery exercise. A satisfactory result has been got through experiment contrast.

## 2. Research Object and Methods

**Research Object.** The application of hierarchical teaching method in sports teaching

**Research Methods.** Literature Data Method. The study in this paper refers to a lot of documents related to swimming teaching in CNKI and CMFD, and monographs about swimming teaching in recent decades, which provide the detailed analysis on this article.

Observational Method. By observing the swimming skills and master degree of students in swimming teaching and collecting the hierarchical teaching material, we get the evaluation of study level of students. Experimental class and comparative class are set up. Experimental class will take the hierarchical teaching method, while the comparative class will take the general teaching method. Comparing the swimming levels of students in the two classes, it gets the evaluation of the effect of teaching method.

Practice Method. Set up reasonable teaching method and assessment method based on the hands-on teaching practice (as a teaching assistant) in the summer vacation. Take the comparative teaching between experimental class and comparative class. In experimental class, hierarchical teaching method is used to divide students into primary group and secondary group to get different teachings.

### 3. Results and Analysis

**Swimming Teaching Purposes and Requirements for Different Groups.** The Setting of Hierarchical Teaching Purpose in Experimental Class. The table below shows the teaching target requirements for the experimental class with hierarchical teaching. It is visible to see that the primary group has achieved good results, same as for the comparative class. However, the gap between the primary group and the secondary group is a bit big.

**Table 1** Hierarchical Teaching Purpose for Each Group in Experimental Class

Evaluation Index	Primary Group	Secondary Group	Comparative Class
Swimming Posture	Breaststroke, freestyle	Breaststroke, freestyle, backstroke	Breaststroke
Swimming Distance (m)	50	50	50
Swimming Skill	Excellent and Good	Excellent, Good and Good	Good

Results of the Assessment in Experimental Class and Comparative Class.

**Table 2** The Comparison of Swimming Distance Tested between the Experimental Class and the Comparative Class (No Swimming Posture Limited)

Swimming Distance (m)	<10	25	50	75	100	125	150	175	200	average (m)
Primary Group (10)	0	0	1	3	2	3	1	0	0	100
Secondary Group (8)	0	0	1	1	1	2	2	0	1	121.9
Comparative Class (20)	1	1	2	6	8	1	1	0	0	83

According to the research, we find that the average swimming distance of students in experimental class is much higher than that of students in comparative class. Students in experimental class can learn above two swimming postures with good or excellent skills, while students in comparative class can learn only one posture with skills just achieve the requirement of teaching outline. So, this kind of teaching requirement can be more close to the swimming level for most students, which requires the hierarchical teaching objects to get the ideal study result through their own efforts. The class group has different standards and requirements, which are advantageous to teach students in accordance of their aptitude, thus making them feel their progress and arousing their enthusiasm and learning success after their own efforts.

**Organization and Teaching Methods for the Hierarchical Teaching of Swimming.** Teaching Level. Before Class, we should understand the basic condition including physical quality, gender, age and swimming level of students, be familiar with the teaching material, and prepare the class carefully by considering teaching object, teaching purpose and teaching condition. The general level target in the preparation should be the same, but need to be adjusted in detail in real teaching practice, which will be convenient to adjust the swimming skills of students and the accomplishing situation. Based on their existing skills, specific teaching should be taken to constantly improve their swimming skills and ability and arouse their enthusiasm of learning.

According to physical quality and swimming skills, students in experimental class are divided into primary group and secondary group. Students with ability in swimming and ability to swim for a certain distance will be divided into secondary group. The rest who never swim will be in the primary group. The ways of class grouping are as below. 1) The grouping is based on the performance of students when they are sent into water after the basic explain for swimming skills in the first class. 2) Students in the secondary group will take a test in the first class so as to determine the number of people to make sure the safety. The students in the two groups are changeable. In the future study, students in the primary group can be arranged to the secondary group if their ability has been improved. It is a good way to shorten the gap between the students, which conforms to the requirements of the quality education and pays attention to the personality development of students. In the breaststroke teaching, below methods could be used. The basic knowledge could be taught overall to ensure all students can know and understand the basic knowledge. Hands-on demonstration and auxiliary exercise on land could be combined with. Entering water, arm pull and holding water are the three movements for the upper limb. Recovering, turning over, driving and

locking are the four movements for the lower limb. Recovering means to recover the shank; turning over means to turn over the feet; driving means that the feet will slide for half a circle aside by the body taking the knee as an axle; holding water means the legs will straighten back to close together. All these movements need to be practiced on land for one or two classes to be more familiar with. Then students could be sent into water to take the basic movements and practice with the breathing exercises.

The specification and knowledge of swimming should be taught step by step according to all levels of hierarchical teaching purpose and progress to meet the demands of knowledge for all levels of students. The characteristic and deeper knowledge and technology of swimming should be taught individually to dig out the understanding depth of students. That is to say to take the way of individual guidance to meet the demands of learning for excellent students. In the process of swimming class teaching, the way of hierarchical teaching and technical principle should be paid much attention. As the basic swimming knowledge and skills of students are quite different, their feelings on swimming skills and their interests are also different. In addition, the teaching requirements should be improved, such as increasing exercise load (swimming distance, speed, complete index, etc.). Corresponding requirements of swimming skills are also put forward, for example, it can give more free time to students to arouse their initiative and self-consciousness.

The comparative class uses the general teaching method, the overall teaching method and teaches only one swimming skill, breaststroke, the teaching way of which is the same as taken in the experimental class, teaching the action of upper limb and lower limb separately on land and going to the water when familiar with the actions. In the future teaching, teachers will take the tour guidance.

**Hierarchical Teaching and Guidance in Practice.** The prominent characteristic of hierarchical teaching is to adhere to the principle of teaching students in accordance of their aptitude. All skillful movements of swimming conclude the complete cooperation of legs, arms and breathing. The process of teaching is from the legs, arms, the cooperation of arms and breathing, the cooperation of arms and legs, to the whole cooperation. When teaching some movements of legs and arms, the complete and decomposition methods could be adopted. No matter what methods will be use, the following teaching order should be complied with. 1) To make the explanation and demonstration to let students understand the requirements of each movements and the essentials and difficulties. 2) To take on land imitation practice. 3) To take practice in water with fixed support such as the wall, sleeves and floating plate. 4) to take the practice with complete cooperation of each part to gradually increase the distance of swimming and to consolidate and improve the quality of the action. After 3 to 5 classes of breaststroke teaching, students in secondary group can own good swimming skills. Students in primary group who also master good skills could be in secondary group, which not only is good for the most students to have the basic skills of swimming, but also can save time for students in secondary group to learn the next skills. Teaching steps and practical ways should be designed for students and teaching purpose with different levels. Students should take the practice with purpose and speed under the guidance of teachers. The practice should be taken under the teaching guidance based on the above teaching purpose and requirements for students with different levels. It reflects the guidance of teachers.

It needs time to master a technical movements from the beginning of learning, thus needs a simple, practical and concise teaching. According to the syllabus, each swimming class should be taken in 90-120 minutes. In the practice, as there are many people, for the safe of students, students in secondary group could take the “mutual” teaching way as an instructor. In each class, teacher will explain and make demonstration for all students. After practice together for a period of time, students could be divided into groups for individual practice. Before the practice, the teacher will let the instructors know what problems they need to help students to solve, and how. Once the students are divided into groups, the teacher should take the tour guidance. The classroom practice in the comparative class is mainly the teacher's tracking guidance and free practice of students.

**The Characteristics of Hierarchical Teaching.** Clear Teaching Purpose. Hierarchical swimming teaching is to take the class grouping teaching based on hierarchical teaching purpose. It mainly

includes the overall goals and individual goals. The overall goals mean to complete the teaching contents required in syllabus, to master swimming skill and to have the ability of self-help and mutual rescue. One of the individual goals for secondary students is to master a variety of swimming skills based on junior swimming skills to achieve the goal of learning more and using more. The combined teaching of the hierarchical merging is to let students with good swimming skills help and guide others with poor skills. It is helpful for students who are good at swimming to use their strong suit to help and guide others, which will help cultivate their ability to find out problems and solve them.

The Innovation of the Teaching Method. Hierarchical teaching can give students more autonomy, so that they can communicate with each other in a relaxed learning environment and learn each other to meet their demands of learning fun and requirements. In the teaching process, teachers should give students some choices according to specific circumstances, some time and space to show themselves and develop their personalities, and some space to find out the problems and solve them.

#### **4. Thoughts of the Experimental Research on Hierarchical Teaching**

The results of the swimming teaching experiment shows that the hierarchical teaching has obtained good teaching effects. All test indexes in the experimental class are obviously better than that in the comparative class. Hierarchical teaching is good for teachers to prepare the class according to teaching level and student level, and to provide timely assistance and guidance in their practice. Hierarchical teaching is to separate students in groups based on their swimming basis, then determine the teaching goal, choose appropriate teaching content and methods of targeted teaching. It is helpful to arouse the study enthusiasm of students, cultivate their study interest and let them study actively.

It is well known that swimming has the fitness function, and also has certain risk. The bad control of movements or carelessness would lead to the accident. It is concerned with not only the ability of students themselves but also the teaching methods of teachers. According to the conventional teaching methods, swimming teaching places great value on competitive swimming and accurate skills, but ignores the way and ability of independent practice of students, namely the cultivation of “self-save ability”. The examination is also combined with the technical evaluation standards. The conventional teaching method in the teaching should be changed and new “self-save skills” methods should be involved to enhance the self-confidence of students and cultivate their ability of self-save and mutual rescue, so in a relatively short period of time, students can basically master the swimming skills and take independent practice to improve their self-save ability. From the early time of teaching, the skills training on safe swimming, self-save swimming, rescue others and being rescued should be paid attention to. Swimming in happiness, swimming learning in activities and ability cultivation should also be paid attention to.

#### **5. Conclusion and Suggestion**

The hierarchical teaching improves the swimming teaching quality obviously. It also creates a favorable condition for the management of teaching purpose. It mobilizes the enthusiasm of primary group students to take an active learning to catch up with the secondary group students on the basis of learning breaststroke. It also strengthens the skills of secondary group students and let them learn more skills, which is suitable for the requirements of quality education. Hierarchical teaching meets the different needs of the students, which could help to cultivate the ability of students to find out and solve problems. It helps create a good learning atmosphere with cooperation and interaction, select appropriate teaching contents and create new teaching methods. The research shows that the teaching effect is good, because it optimizes the quality of classroom teaching and formulates reasonable appraisal methods, which play active role in guaranteeing the learning quality of swimmers. I suggest that more hierarchical teaching methods should be applied in the future sports teaching to achieve better teaching effects.

## Reference

- [1] Yizeng Song, The Reform and Practice of the Swimming Teaching Mode in Colleges [J], Journal of Beijing Sport University, 2000(3):393-394.
- [2] Pingping Fang, The Application of Mental Training Mode in Swimming Teaching [J] Journal of Harbin Institute of Physical Education, 2001(3):67-69.
- [3] Fushun Xun, Discussions on Hierarchical Teaching in Physical Education[J], School Physical Education in China, 1996(6):14-17.
- [4] Weimin Liu, The Experiment and Discussion of “Hierarchical Teaching” in Physical Education in Colleges [J], Journal of Physical Education, 1997(1):36-39.
- [5] Mingcai Yang, Study on the Hierarchical Teaching in Physical Education [J], School Physical Education in China, 2001(4):41-45.
- [6] Donghui Ye, Study on the Hierarchical Teaching in Physical Education in Colleges [J], School Physical Education in China, 1999 (3) :25-28.
- [7] Weilin Chen, The Purposes and Measures Influenced the Quality of Swimming Teaching in Colleges [J], Fujian Sports Science and Technology, 2001(4):31-35.
- [8] The National Textbook Committee for Sports Colleges, Advanced Course for Swimming [M], Beijing: People Sports Publishing House, 2000.
- [9] Zhidong Wang, Shuhua Chen, Required Swimming Research [M], Beijing: People Sports Publishing House, 1998.
- [10] Gongliang Ye, Required Swimming Research [M], Beijing: People Sports Publishing House, 1998.
- [11] Guoping Zhao, Modern Swimming Teaching Methods [M], Beijing: People Sports Publishing House, 2002(5):27-35.