Chapter 45 Study on College Basketball Teaching Based on Cooperative Learning Mode

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Abstract Cooperative learning teaching model is based on social interdependence theory, cognitive theory, and choice theory. Cooperative learning teaching mode is the relationship between the research and use of the students in the class, let the teachers and students and student–student cooperation as the basic strength, make a group activities as the main teaching form. According to our country's university basketball teaching research, the emphasis is on theoretical and experimental teaching of cooperative learning teaching mode; the teaching method further inquires that how to influence students' physical health and personal communication. This paper provides the theoretical basis and a new perspective into basketball teaching reform.

Keywords Cooperative learning • Teaching mode • Physical health • Basketball lessons

45.1 Introduction

International education committee of the twenty-first century (1996) in its report "education-Wealth contains" says that the UNESCO education should focus on the cultivation of four basic learning skills; namely learning, learning know life together, learn, and they think that our education should be based on learning to live together. For expounded in this report, the cultivation of the students' ability to learn to live together [1] is very necessary to teach them study

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and life, this highly advocates cooperation status and can achieve the cooperative learning concept [6]. Obviously, the training of the students' co-operative ability has attracted widespread attention from both the public and the government.

It is a creative and effective teaching pattern, to form the good psychological quality and social skills. It is known as "one of the most important and the successful teaching reform"; cooperative learning is a kind of necessary reform to the traditional teaching method. Having a second view of the present situation of college students in China, it is to press the cooperative learning and improve their ability to cooperate.

45.2 Object and Methods

45.2.1 Object

The research object is second grade students in our university who have basketball class. Among them, the experimental class have 30 people, and control the class totally have 30 people.

45.2.2 *Methods*

45.2.2.1 Documental Data Method

According to the research content, seeking a large collection of related material, reading education, psychology and education psychology, sports psychology, statistics, and so on.

45.2.2.2 Survey Method

Adopting expert interview to prove subject's feasibility.

45.2.2.3 Teaching Experimental Method

Use of cooperative learning of experiment teaching mode; Use the traditional teaching mode control class.

According to the requirement of cooperative learning concept, the students are in the pupils into four groups. That is a base, each group members keep stable during the experiment, which provides students long term, committed relationship, let members support each other, help, encourage, and help. When the group of students, their psychological health, physical quality, and special technology into

consideration, so that they can learn from each other. Each group is by six or eight students. It is very important, for each member of a special function in the group: the tape recorder, the reporter, monitoring, the observer, the facilitator, and so on. Each member is assigned with different duties monthly and must perform their duties. At the same time, their role changed often, so that all the members have the opportunity to practice new role. Ensure that each member in doing his or her job, a list distributed to each group to be filled [2]. The students must bear their own responsibility. In addition, obviously, each team member will share the same score group inside, that is, team members have to help each other, because they "swim and sank in together". The anxiety scale is given at the beginning of the first semester of every student in two in the control group and the experimental group for a placement test, including three parts: physical quality, special technology, and personal communication. Test results are accurate, objective, so the researchers involved in the standard of two classes of the judge. No significant differences in the control of the classes.

The body quality testing, in the middle of the term referring to a basketball skills and collecting the data in class questionnaire survey in the last class, at the end of the semester. Overall 30 students attended the experiment class meeting in control class. Therefore, 60 students participated in the final assessment.

45.2.2.4 Psychological Measurement

Adopting "Texas Social Behavior Inventory (TSBI)" by Helmreich et al. to test personal communication and adopting "Teacher-Student Relationship Inventory" by Zhen Richang.

45.2.2.5 Statistical Method

All the data processed in SPSS13.0 software.

45.3 Results and Discussion

The Statistical Package for the Social Sciences (SPSS) 13.0 was run to work out the descriptive statistics of the physical quality, special technology, and the questionnaire on personal communication and teacher–student relationship involvement, including means [3] and standard deviations. Also, T-tests were conducted to find whether significant difference of classroom involvement existed between two classes.

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45.3.1 The Comparison of Physical Quality, Special Technology Between Experimental Class and Control Class

After the experiment, there are no significant differences of the classes in the 50 m control, standing long jump and 1,000 m; but there are significant differences, the control class nod class's free throws (Table 45.1).

Exercise is the effects of the exercise intensity, the movement by time and frequency, gender, age, congenital genetic differences, and biological rhythms. In our university, there are 90 min weekly basketball class 18 weeks per semester, so students exercise frequency is obviously deficiency. Exercise load is limited 90 min per week in teaching unit, because of the diversity of teaching resources, teaching content, and the task and the student's actual sports ability. The students' physical 50 m [4], standing long jump, 1,000 m, and three quality developments need longer unremitting training, so there is no obvious difference and the test group control in the 50 m, standing long jump and 1,000 m 18 week basketball after class.

Cooperative learning theory improves the learning interest of the students, strengthening the learn basketball practice class. So there are significant differences, the control class nods class's free throws. It is worth noting that let students understand basketball theory and all kinds of practice ability, especially for general research process.

45.3.2 The Comparison of Personal Communication Between Experimental Class and Control Class

After the experiment, there is a significant difference between the control and test group in social contacts.

Cooperative learning teaching mode is the training of the students' personal communications technology. Its advantages are constructing the harmonious classroom learning environment. Basketball is a team game. It takes five people cooperation with each other. So personal communication is developed

Table 45.1 The comparison of physical quality, special technology between experimental class and control class after the experiment

	Experimental class $(N = 30)$	Control class $(N = 30)$	T
50 m (s)	$7'45 = 0 \pm 0.35$	$7'52 \pm 0.33$	0.055
Standing long jump (m)	2.45 ± 0.14	2.44 ± 0.26	0.282
1,000 m (min/s)	$3'\ 56'\pm 16'$	$3' \ 54' \pm 16'$	0.842
Fixed-point free throw	5.91 ± 2.57	5.01 ± 2.55	2.518*

^{*}Significant different from control, P < 0.05

^{**}Significant different from control, P < 0.01

environment. Students' autonomous learning experience and the interaction between team members, it is easy to learn and improve the teaching effect. The students to become close cooperation partners, learning and the enthusiasm of students' study fully aroused [5]. It is suitable for the development of classroom teaching. Cooperative learning teaching mode is different from the traditional teaching method and personal teaching class mode; it can train and develop most student's having quality of social, cooperation, altruism, realizing the social community, and so on. To work together to make the students in the process of mutual benefit in pursuit of activities. At the same time, self-control is in the breeding process improvement (Table 45.2).

45.3.3 The Comparison of the Teacher–Student Relationship Between Experimental Class and Control Class

From the Table 45.3, we can know the extent of the total mess up the relationship between teachers and students in the medium of all classes and control both in class. There was no significant difference between classes and control class Z inspection.

Inventory consists of the relationship between teachers and students in three aspects: trouble degree between the teachers and students in the process of teaching, disaster degree between teachers and students emotional distance, the trouble degree between the teachers and students relations, and the identity of the higher scores in serious trouble degree. These three aspects to the test were shown in (Table 45.4).

From the statistics, we can know that no significant differences in trouble degree between the teachers and students in the process of teaching control between the experimental classes after class, but there are significant differences between the teachers and students trouble degree of emotional distance, suffering degree between the teachers, and students relations in the position.

In cooperation activities, students can be defined as all the members in student community, those in a teacher and student group. In such a relationship, the teacher must put you as a separate group [6]. And students utilize the opportunity to appreciate to share time with teachers to become "partners" in their learning and not only guide it. They think that they are to be specific attention to their achievements, need to be recognized and attention, respectively. Teachers shall undertake joint liability peers. Shared responsibility to promote students' concept, the purpose of assessment is to inform the learning process, and not distinguish

Table 45.2 The comparison of social contacts between experimental and control class after the experiment

	Experimental class $(N = 30)$	Control class($N = 30$)	T
Social contacts	41.5 ± 8.65	37.5 ± 4.69	2.58*

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control class after the experiment							
	Experimental class			Control class		Z	
	N	\bar{X}	S	N	\bar{X}	S	
Total score	28	-0.43	3.49	25	0.53	3.91	0.97
Troubled degree	Medium	Medium					
of teacher-student relationship							

Table 45.3 The comparison of the teacher–student relationship between experimental class and control class after the experiment

Table 45.4 The three comparisons of the teacher-student relationship between experimental class and control class after the experiment

	Experimental class \bar{x}	Control class \bar{x}	U
Trouble degree between teachers and students in the process of teaching	0.45	-0.33	0.21
Trouble degree between teachers and students in emotional distance	1.7	2.95	2.07*
Trouble degree between teachers and students in status relationship	-1.46	3.01	2.93*

U: Two samples of rank and inspection comparison

between those who can and those who have no opportunity. The teacher is a warm and enthusiastic student, close to as many of the students and have no pressure.

In cooperation activities, the teacher is a teacher and organizer, consultant, help, and prompter prompt. In cooperation activities, teachers will no longer dominant class, control, and guide the student to every minute. And the teacher's behavior by the behavior of the students, in turn affected the behavior of students.

45.4 Conclusion

First, There is no significant differences between the physical quality of cooperative learning teaching mode and "traditional" teaching mode. Second, cooperative learning teaching model can help improve interest in learning basketball techniques. Third, cooperative learning teaching mode, give full play to students' personal communications technology, helps the relationship between teachers and students.

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