

**Development of learning achievement and interest on learning English of Grade Three
students in Guangxi Chongzuo Jiangzhou District No. 1 Primary School using
cooperative learning**

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Abstract

The objectives of this study were (1) Cultivate students' interest in English learning through cooperative learning method. (2) Through cooperative learning method, the students' cooperative consciousness is cultivated. The samples were 60 students in Grade3 Class1 and Class2 Guangxi Chongzuo Jiangzhou District No. 1 Primary School. Research tools combine of testing, classroom, observation, questionnaire and interview was used for quantitative and qualitative analysis. The Index of Item-Objective Congruence (IOC) values of questionnaire ranged from 0.80 to 1.00, indicating that all items were appropriate. The reliability of the instrument was tested using Cronbach's alpha coefficient, which yielded an overall value of 0.93, confirming a high level of internal consistency. The statistics used for data analysis were means, standard deviation and t-test.

The result of this study found that cooperative learning can greatly improve students' interest in learning English and cooperative consciousness. By using cooperative learning, students are able to actively participate in classroom interactions and learn English on their own. Their learning interest, learning attitude and interpersonal skills have been improved to a certain extent. First of all, cooperative learning provides students with the opportunity to study independently and can provide students with more classroom teaching activities. The change of students' role from passive to active in class has changed their learning attitude and

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made them start to learn actively and creatively. Second, cooperative learning can stimulate and cultivate students' interest in English learning. Third, through cooperative learning, students learn to cooperate with others, and respect and help others in cooperation. Before the teaching intervention, the interest level of the experimental class and the control class is the same, both at the medium level, but after the teaching intervention, the interest of the experimental class is significantly higher than that of the control class. Students' favorite types of cooperative learning activities are: role play, topic discussion, group games and competitions. The "situational", "cooperative" and "competitive" characteristics of these activities are the main reasons for their recognition. These findings are important for the development of cooperative learning activities in the future.

Keywords: learning achievement, interest on learning English, cooperative learning

Introduction

Since the reform and opening up, the scale of English education in China has been expanding continuously, and remarkable achievements have been made in education and teaching. English is a compulsory course during the period of basic education. In the English Curriculum Standards for Compulsory Education (Revised Edition 2022), being able to communicate with others and accomplish tasks cooperatively is set as the fifth-level goal of language skills. At the same time, in terms of emotional attitude, students are also required to actively cooperate with others to complete learning tasks together. This shows the importance of cooperative learning for mastering English skills. In FLTRP New Standard English, play, do and speak. Do and say. These teaching activities advocate the use of cooperative learning in English classroom teaching, requiring students to complete learning tasks through cooperation and mutual help.

According to my usual classroom observation, the students in my class are 1) not interested enough in English learning and 2) not good at cooperating with others. Our English course belongs to the starting point of the third grade, which is the key year for English learning. Grade Three students are young and self-conscious. They like to play games and role play to express themselves. Therefore, cooperative learning is very important for junior students. Cooperative learning changes the original passive learning mode and establishes a

learning method characterized by autonomy, cooperation and harmony. Cultivate students' conscious practice in the true sense, and improve students' learning interest and communication and cooperation ability. Through cooperative learning, students can achieve different goals at the same time. They can also develop their personalities and show their talents in different forms of group activities, helping students realize themselves and go beyond themselves while achieving their goals. As an important entry point, cooperative learning is of great significance at present.

Research objectives

1. Cultivate students' interest in English learning through cooperative learning method.
2. Through cooperative learning method, the students' cooperative consciousness is cultivated

Research hypothesis

1. Students' interest in English learning is cultivated through cooperative learning.
2. Through cooperative learning method, the students' cooperative consciousness is cultivated

Literature review

This research is based on the concept

1. Theory and concept of Cooperative learning
2. Theory and concept of Role playing
3. About company/organization
4. Related research
5. Conceptual framework

Conceptual framework

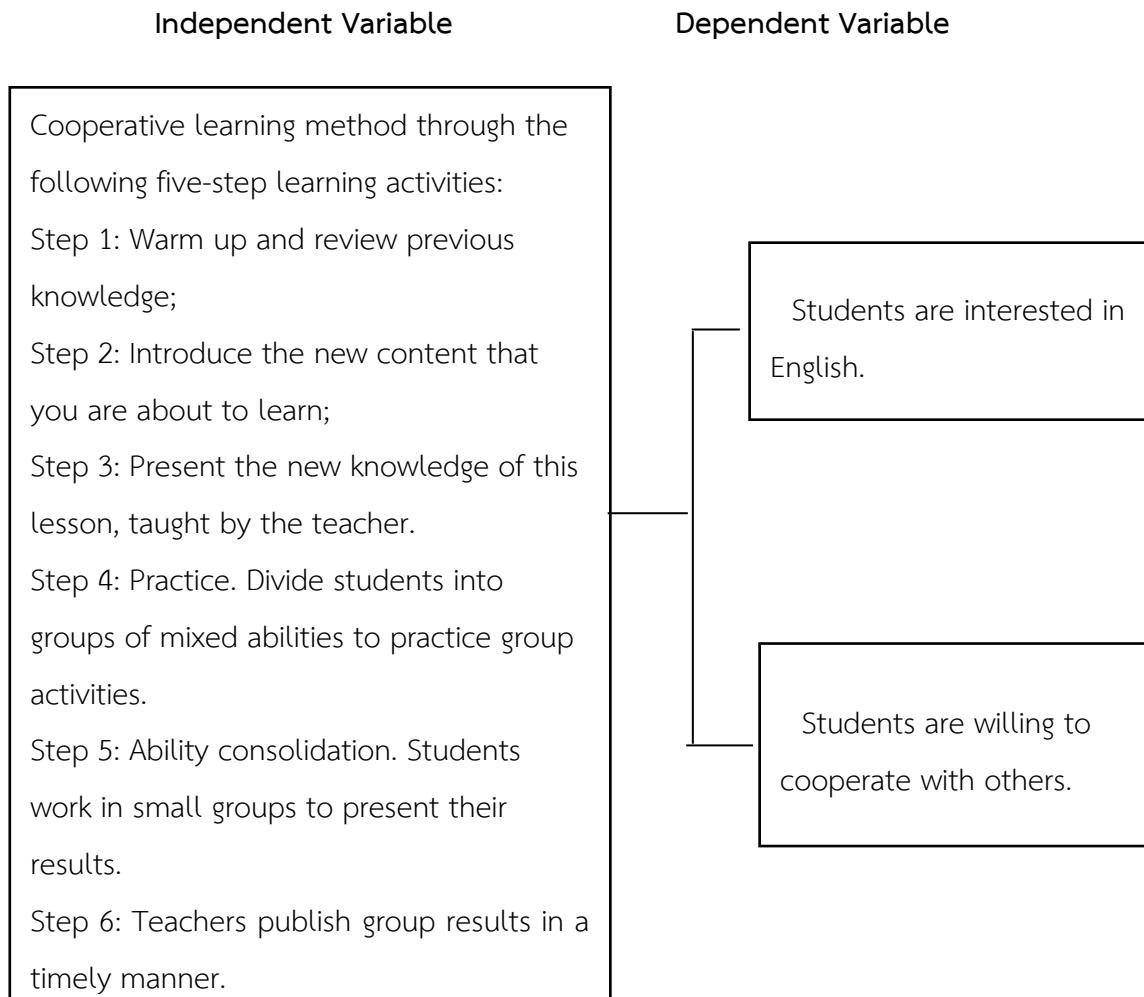
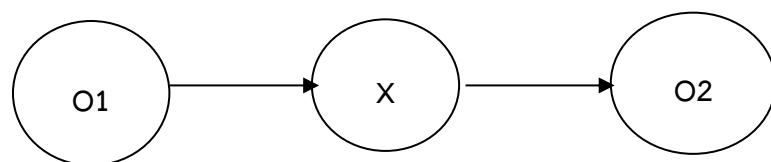


Figure 1 Conceptual Framework

Methodology

1. Research design

Randomized Pretest – Posttest Control Group Design



X is the learning English

- 01 is a pre-test test
- 02 is a post-test test

2. Population and sample

1. Population is 120 students from Classes 1, 2, 3 and 4, Grade 3 in Guangxi Chongzuo Jiangzhou District No. 1 Primary School.

2. Sampling were 60 students from Class 1 and class 2 Grade 3, obtained by cluster random sampling method, and the teaching experiment was carried out for one semester.

3. Research instruments

Tools used to collect information for this unit;

- 1. Testing
- 2. Classroom observation
- 3. Questionnaire
- 4. Interview

4. Data Collection

The tools used in the research are those created by the investigator and include:

1. Experimental treatment Both experimental class and control class are taught by the author. The textbook is Volume 1 of Primary School English (starting point for Grade 3), Foreign Language Teaching and Research Press. The experimental group adopted the cooperative learning method, in order to assist the teaching, the teacher also adopted some other teaching methods.

Pre-test is a test taken at the beginning of the semester. The test questions, designed by Chongzuo's education Bureau, are divided into two parts: listening and writing. The maximum score is 100.

The post-test was taken on January 17, the end of the semester. The exam questions were also designed by Chongzuo's education bureau and included two parts: listening and writing. The full score is 100.

2. Classroom Observations

The analysis of elementary school students' classroom behavior also provides strong evidence for experimental research. In cooperative learning, according to the observation of the behavior of the underachiever in the experimental class, the author immediately gives help and guidance when the students encounter difficulties in learning. In

class, the author tries to give appropriate evaluations and encourages each group member to help, learn, communicate and cooperate with each other. But in the English class of the control class, the author just adopts the traditional teaching method and pays little attention to the students' learning. In normal times, the author would also invite other English teachers to her class to observe and record the performance of each group. Then the teacher will have a discussion on the application effect of cooperative learning.

3. Interview

The interview mainly focuses on whether the cooperative learning method can improve students' interest in English learning and cooperation consciousness after class. The interview consisted of three questions, all of which were written in Chinese so that the subjects could answer them clearly.

4. Questionnaire

There are two questionnaires in this study. Based on the basic theory of cooperative learning and other questionnaires about cooperative learning, and combined with the interview suggestions of 6 teachers with rich teaching experience, the author designed all the questions in the questionnaire. The questionnaire consisted of 17 multiple choice questions, including students' attitudes towards English learning, Questionnaire 1 was distributed to all students in both the experimental and control classes, a total of 60 students. The purpose of the questionnaire was to understand the students' English learning situation, study habits, attitude and motivation of learning English, and awareness of cooperative learning. Questionnaire 2 was distributed to the experimental class after an 18-week teaching experiment from January 15 to January 8. The purpose of Questionnaire 2 was to find out whether cooperative learning would affect students' English learning.

5. Data Analysis

Part 1 Research questionnaire analysis

There is a questionnaire about students' interest in English learning and their sense of cooperation. Questions 1-8 in Questionnaire 1 are almost all designed based on these standards and the author's reference to other questionnaires. The author collected the results of the questionnaire before and after the experiment.

Part 2 Pre-questionnaire analysis

Before the experiment, questionnaires were distributed to 60 participants from the experimental class and the control class for questionnaire survey from September 12 to 12. The purpose of the questionnaire was to understand the students' interest in English learning and their sense of cooperation.

Table 1 Proportion of questionnaire items before teaching(CC= control class, EC= experimental class, the following tables are the same)

	A.YES		B.NO		C.ELSE	
	EC	CC	EC	CC	EC	CC
	P(%)	P(%)	P(%)	P(%)	P(%)	P(%)
Q1	37	50	58.5	48.5	2.5	1.5
Q2	68	72	35	25	2.5	1.5
Q3	60	62	37	32	7	3
Q4	13	7	63	67	24	26
Q5	62	60	20	25	18	15
Q6	40	30	40	55	20	15
Q7	30	25	30	28	40	47
Q8	51	50.5	40	37	8	12.5

The table above gives specific data from the pre-experiment questionnaire. Questions 1-8 focus on the English status of the experimental class and the control class. The questions show that I want to know about the teaching methods in the classroom in the past. It shows that 58.5% of the students choose B in the experimental class, which means that the teaching method adopted by the teacher is the combination of teacher-student guidance and teacher-student interaction. So we can say that it is very helpful for the author to do the experiment in class one. In Class two, 48.5% of the students chose A, which means that the teacher mainly adopted the traditional teaching method. As for question 2, 68% of the students in the experimental class and 72% of the students in the control class chose A. This means that the atmosphere in both classes is serious and tense. Therefore, in the teaching process, teachers should create an ideal classroom environment for students to learn English freely and happily. For question 3, 60% of EC students choose A, 62% of CC students choose A, indicating that

most students have confidence in English learning. Questions 4 to 6 are about students' performance in class. As for question 4, 63% of EC students and 67% of CC students chose B, which means that most students do not like B to actively answer the question. According to the answer to question 5, we can know that the reason why most students don't like to speak actively is that the classroom environment is too tense. From the data in question 6, we know that when they meet difficulties in their study, they are willing to cooperate and discuss with their classmates instead of asking their teachers for help, so the task of teachers is to improve students' cooperative learning. From the data analysis, we can draw the conclusion that before the experiment, students with the same EC and CC had the same English level. Teachers should find other teaching methods to make the teaching more effective, so the author uses cooperative learning method to see if it can promote students' interest in learning English and cooperation consciousness.

Part 3 Post-questionnaire analysis

At the end of this semester, after EC just received the questionnaire, the author made a small modification to the previous questionnaire. From the data, we can make a comparison before and after the questionnaire survey to determine whether cooperative learning has enhanced students' learning interest and the table is as follows:

Table 2 Item proportion after questionnaire

	A		B		C	
	EC(Post-) P(%)	EC(Pre-) P(%)	EC(Post-) P(%)	EC(Pre-) P(%)	EC(Post-) P(%)	EC(Pre-) P(%)
Q1	76	No	20	No	4	No
Q2	20.5	68	60.5	35	4	7
Q3	52.5	No	29	No	19	No
Q4	51	No	No	67	18.5	No
Q5	65.2	60	32.1	37	11	3
Q6	53.2	No	35.7	No	1.7	No
Q7	30	65	57	28	11.1	7
Q8	56.5	10.4	40	34.3	13	55.3

From the data in question 1, 76% of the students chose A, which means that most of the students became more interested in learning English after the teacher taught them according to CL method. It is a good result that the majority of students have accepted cooperative learning. 60.5% of the students chose B in the second question, which shows that the classroom atmosphere is more relaxed and interesting than before. So we can say that most students have increased their interest in learning English and become more active in class.

Questions 3 to 5 are designed to explore the impact of the influence on students' grades and attitudes on their interest in learning English. For question 3, 52.5% of students chose A and 29% chose B, indicating that cooperative learning can effectively improve students' learning interest and cooperation awareness. From the data of questions 4 and 5, we can find that most students have more confidence in their English learning and their learning ability has been improved to a certain extent. They learn English more actively and like to cooperate with each other and help each other.

Questions 6 to 8 are about students' behavior in an English class using cooperative learning. By comparing with the data in the pre-questionnaire, it is not difficult to find that: for question 6, most students think that the content taught by cooperative learning is very interesting and helpful to improve their learning interest. According to the data of question 7, most students choose B, which means that group cooperative learning is of great help to them. Finally, the data show the same idea that students hope to have more interesting group cooperative learning activities to create a relaxed atmosphere for them to learn through cooperative practice in class.

Comparison of pre-test results of 4 EC and CC

At the beginning of the teaching experiment, the pre-test scores are presented in the table below. This test is given before the experiment. The table below shows that the average scores for the experimental and control classes are very similar. In other words, the English level of the students in the two classes was almost the same. From the table, we can see that the average score of the control group is 0.684 higher than that of the experimental group. And $\text{Sig. } = 0.684 > 0.05$, so it can be concluded that there is no significant difference between the two classes.

Table 3 Comparison of pre-exam results between EC and CC

Class	N	Mean	Std.Deviation	Std.Error Mean
Pre-test	CC	60	88.69	10.960
	EC	62	88.01	13.099

Table 4 Comparison of pre-test scores between EC and CC Independent Sample test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variance assumed	.234	.629	.312	120	.756	.684	2.190	-3.653	5.020
Equal variance not assumed			.313	114.567	.755	.684	2.184	-3.641	5.009

Comparison of scores after EC and CC tests

The purpose of this test is to find out whether there is a significant difference between EC and CC after a semester of experimental research. From the results of the post-test, we can see that there is a significant difference in the scores of the two groups. When the results of the two groups reach a certain distance, it indicates that cooperative learning can help improve students' academic performance.

Table 5 Comparison of EC and CC post-test scores Group Statistic

Class	N	Mean	Std.Deviation	Std.Error Mean
Pre-test	CC	60	89.24	10.134
	EC	62	92.81	6.517

Table 6 Comparison of EC and CC post-test scores Independent Sample Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variance assumed	5.741	.018	-2..324	120	.022	-3.357	1.538	-6.617	-.528
Equal variance not assumed			-2.308	100.106	.023	-3.573	1.548	-6.644	-.501

From the above post-test results, the average score of the experimental class was 3.573, higher than that of the control class, and $\text{Sig} = 0.022 < 0.05$, indicating a significant difference in scores between the two groups. In addition, we can see that there is no significant difference in the scores of the control class, which means that the traditional teaching methods can not improve students' scores. With the same amount of time spent learning English, the experimental class with the cooperative learning method has a significant improvement in their academic performance. Therefore, we can draw the conclusion that cooperative learning has a good impact on the experimental group, which can improve the students' learning interest and cooperation consciousness and thus improve their academic performance.

Comparison of English scores of the two tests

This test demonstrated the difference between the pre-test and post-test in the experimental class, and whether the participants made much progress after the teaching experiment.

Table 7 Comparison of pre-test and post-test EC scores Comparative sample statistics

	N	Mean	Std.Deviation	Std.Error Mean
Pair I Pre-test EC	62	88.01	13.099	1.664
Post-test EC	62	92.81	6.517	.828

Table 8 Comparison of pre-test and post-test EC scores (b)Correlation of comparison samples

Class	N	Correlation	Sig.
Pair I Pre-test EC & Post-test EC	62	.953	.000

Table 9 Comparison of pre and post-test EC scores

	Paired Difference					t	df	Sig.(2-tailed)			
	Mean	Std.Deviation	Std.Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair 1 EC-EC	-4.807	7.161	.909	-6.625	-2.988	-3.887	54	.001			

From the results of the above post-test, the average score of the pre-test was 88.01, and the average score of the post-test was 92.81. From the data, we can observe that the experimental class using the cooperative learning method has a significant improvement. Since the observed significance level is 0.001(<0.05), this indicates that there is a large difference in achievement between the two tests. The results showed that there was a significant difference between the pre-test and the post-test.

Comparison of scores of two tests in the control class

This test verifies the difference between the pre-test and the post-test as to whether the students in the control class made progress without using the cooperative learning method. The results showed the following:

Table 10 Comparison of CC scores before and after the test

Class	N	Correlation	Sig.
Pair 2 Pre-test CC & Post-test CC	60	.988	.000

Table 11 Comparison of scores of the control class before and after the test Compare the correlations of the samples

	N	Mean	Std.Deviation	Std.Error Mean
Pair II Pre-test CC	60	88.69	10.906	1.415
Post-test CC	60	89.24	10.134	1.308

Table 12 Comparison of pre - and post-test control class (cc) scores Paired Sample Tests

	Paired Difference					t	df	Sig.(2-tailed)			
	Mean	Std.Deviation	Std.Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair 2 CC-CC	-.550	1.838	.237	-1.025	-0.75	-2.318	59	0.54			

As shown in the table above, we can get the following results:

The average score of the pre-test is 88.69, and the average score of the post-test is 89.24. From this data we can observe that there was little difference in the score of control in the two tests. The observed significance level was 0.054(>0.05), indicating that there was no significant difference between pre-test and post-test in the control class.

Part 4: Interview Analysis

After more than four months of cooperative learning teaching in experimental class, most students have a certain understanding of cooperative learning and benefit a lot in this semester. At the end of this semester, the author interviewed 15 students selected from the experimental class because it was necessary to know more about the students' interest in English learning and whether cooperative learning could improve their sense of cooperation

with others. Some questions about cooperative learning and dialogue between teachers and students are as follows:

The first question was "Do you like the cooperative learning method?" When 15 students were asked this question, they all answered "yes." They all agreed that it was a new method that the teacher had not used. Thanks to cooperative learning, the atmosphere in the classroom becomes relaxed. With music, chanting and games, the classroom becomes fun. They said they enjoyed participating in activities. Besides, they all say that they like learning English and they can answer the teacher's questions actively. Of these, 12 students said they were nervous when the teacher asked them to answer questions before the experiment. They liked the English class after the experiment and were very interested in it, because when they made mistakes in class, the teacher and classmates showed them the way and encouraged them to correct them. In the process of cooperative learning, they like to work with each group member to complete interesting and challenging tasks.

The second question is "Do you feel that your teacher pays close attention to you and the students?" They all said "yes". They say the teacher pays more attention to their English study and life. Eleven students said they were braver than before in asking and answering questions. They said they were more interested in learning English. When the teacher praises them, they become very happy, they learn knowledge through group cooperation, the middle school students like to communicate with their group members in the process of English study.

The third question is "Do you like your group?" How do you feel about the relationship with each other?" Thirteen people said yes. Two of them said the relationship had changed a bit. But they both said it was through collaboration and communication with classmates. Before the experiment, they don't like to talk and work with others, for one thing, they are shy, afraid to express themselves and show themselves in class. But now, their communication skills have improved. For example, one student said that the activities were always interesting in class, and he and his peers successfully completed the role play and presented it on stage, which gave him a good memory. After the experiment, they made great progress in their English learning. They said they began to work harder to learn from others and their group members gave them a lot of help. There are more activities in class and they are free to express their ideas. He likes to share his learning methods with classmates who cooperate

with him. From interviews with students, the author found that students are more interested in learning English than before, and have become more active and confident in communicating and cooperating with others. Their grades improved after the experiment. So we can draw the conclusion that cooperative learning method is a beneficial and effective way of learning.

Part 5. Analysis of teacher's classroom observation

Classroom observation is an effective way to understand students' learning status. Here, the author focuses on the performance of students in the experimental class to prove whether cooperative learning can improve their interest in English learning and cooperation consciousness. Before the experiment, the English level of the experimental class and the control class was almost the same. There was no significant difference. However, after the teacher implemented the new teaching method cooperative learning in the experimental class, many students gradually developed interest in English learning, were willing to cooperate with others in class, actively helped other group members and so on. Before, some students did not answer the questions. Now, they begin to answer the teacher's questions actively. Before the experiment, their English scores were so average that they had no interest or confidence in English study. After the teaching experiment, they gradually fell in love with English. They began to communicate and cooperate with other group members. Students are active in learning English and enjoy working with others. This is a good phenomenon. From the teacher's classroom observation, the author summed up the status quo of underachiever in the experimental class has been greatly improved. While in the control class, the teacher adopts the traditional teaching method, many students are still not interested in learning English, and even refuse to learn English. Because they have lost confidence and are ashamed to talk to others, others are afraid to study English exam because of poor grades.

Recommendations

1. Application of research finding

1.1 More gender differences also exist in cooperative learning. For example, girls' language skills are generally better than boys'. Therefore, the ratio of male to female should be fully taken into account in the group study.

1.2 To extend the time of research and exploration, education is not an overnight process, but a long-term cultivation and shaping process. Research results obtained in a short period of time are unlikely to produce accurate results.

1.3 Research on different areas of the same type. For the same type of city study, different areas have different research results.

2. Further research

2.1 Further research on cooperative learning in primary schools is essential. The purpose of using cooperative learning method is to enhance students' interest in English learning and cooperation awareness through interaction and communication among students

2.2 In future studies, it is worth studying how students cooperate effectively or how to cooperate with each other in a successful way to improve their academic performance and personal English learning skills.

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