



To Study the Effectiveness of Co-Operative Learning Approach on Achievement of Students of Standard IX

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Guide

1. Introduction

Cooperative learning, often called small-group learning, is an instructional strategy in which small groups of students work together on a common task. This task can be as complex as solving a multi-step problem simultaneously, or developing a design for a new type of school. In some cases, each group member is individually responsible for part of the work; In other cases, group members work together without formal role assignments.

Cooperative education brings about a change in the role of students and teachers in the classroom. Ownership of teaching and learning is shared by groups of students, and is no longer the sole responsibility of the teacher. The power to set goals, evaluate learning and facilitate learning is shared by all. Students have more opportunities to actively participate in their learning, to question and challenge each other, to share and discuss their ideas, and to internalize their learning. Along with improvements in academic learning, co-operative learning helps students to engage in thoughtful discourse and test different perspectives, and has been shown to increase students' self-esteem, motivation, and empathy.

In present study, the researcher constructed teaching learning program in English subject on the basis of co-operative learning approach for the students of standard VIII. The main aim of researcher was to study the effectiveness of this program on students' academic achievement in English subject over traditional teaching method.

2. Definitions of Key words

2.1 Effectiveness

According to Susan Wallace (2009), effectiveness means the effect of an experimental factor under controlled conditions, that is, with other factors held constant.

In present study, the scores of post-test had shown the effectiveness of cooperative learning approach.

2.2 Cooperative Learning Approach

Johnson and Johnson (1993) said, the instructional use of small groups so that students work together to maximize their own and each other's learning.

According to Jacobs, Power & Loh (2002), principle and techniques for helping students work together more effectively.

According to Cottell & Mills (1994), cooperative learning is a structured form of small group learning. It is based on two key assumptions, positive interdependence and individual accountability.

It is a bunch of instructions given by the researcher to the students of standard 8 to teach them selected units of English grammar.

3. Variables of the Study

In this study the following types of variables are selected.

1. Independent variable

The independent variables of present study are as follows.

1. Method of teaching
 - A. Cooperative learning approach (Experimental group)
 - B. Traditional teaching method (Controlled group)
2. Moderate variables
 1. Gender
 - A. Boys
 - B. Girls
3. Dependent Variables
Scores of post-test

4. Objectives of the Study

1. To study the effectiveness of co-operative learning approach on achievement in English subject obtained by the students of standard 89.
2. To study the effectiveness of co-operative learning approach on achievement in English subject obtained by the students of standard 8 in the context of different teaching methods.
3. To study the effectiveness of co-operative learning approach on achievement in English subject obtained by the students of standard 8 in the context of gender.

5. Hypotheses of the Study

- Ho₁ There is no significant difference between the mean scores obtained in post-test by students of experimental group and controlled group.
- Ho₂ There is no significant difference between the mean scores obtained in post-test by boys of experimental group and controlled group.
- Ho₃ There is no significant difference between the mean scores obtained in post-test by girls of experimental group and controlled group.
- Ho₄ There is no significant difference between the mean scores obtained in post-test by boys and girls of experimental group.

6. Limitations of the Study

1. The researcher conducted this study on the students of standard 89 of Ahmedabad city.
2. The researcher conducted this study on Gujarati medium students.

7. Research Method

In present study, the researcher had to check the effectiveness of a modern teaching strategy on achievement in English subject obtained by the students of standard 8. This modern teaching technique was compared with traditional teaching method. The researcher formed two different groups of students which were treated with different teaching strategies. The researcher used experimental research method by keeping the objectives of the study in mind.

8. Experimental Research Design

There are three different types of experimental research design:

1. Pre-experimental research design
2. True experimental research design
3. Quasi experimental research design

The researcher selected true experimental research design for this study. In this type of designs, different equivalent groups are formed to be treated with different teaching strategies. The researcher used Only post-test equivalent groups design for this study.

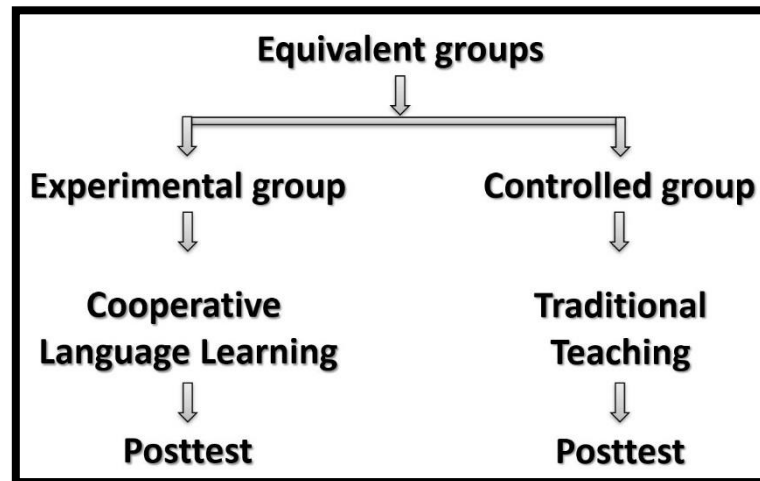


Figure 1.0: Experimental Research Design

The researcher formed two different equivalent groups on the basis of students' marks of English subject obtained in previous school's test. One of the two groups was formed as experimental group which was treated with co-operative learning approach and another group was treated with traditional teaching method. After teaching, the students of both the groups were given a post-test of 50 marks.

9. Teaching Materials

The researcher constructed a teaching program based on co-operative approach and traditional teaching method.

The following topics were selected for this program.

- Poem: Maccavity the mystery cat by T. S. Eliot
- Chapter: The Tsunami
- English grammar: Preposition

10. Research Tool

The researcher constructed an achievement test of 50 marks in selected topics of English subject of standard 8.

11. Sample of the Study

The researcher selected Diwan Ballubhai Primary School of Ahmedabad city using random sampling technique. From this school total 80 students had been selected. The sample of the study was as follows.

Table 1: Sample of the Study

	Experimental Group	Controlled Group	Total
Boys	20	20	40
Girls	20	20	40
Total	20	40	80

There were 40 students out of which 20 boys and 20 girls selected in experimental group and 40 students out of which 20 boys and 20 girls selected in controlled group.

12. Implementation of Experimentation

The researcher treated the students of experimental group with co-operative learning strategy and controlled group with traditional teaching method. The researcher experimented this study in Diwan Ballubhai School of Ahmedabad city. The researcher took seven periods of 35 minutes in each group and treated them with different strategies. After teaching, an achievement post-test was conducted in

both groups at the same time. The researcher gave a post-test of 50 marks for two hours. After the test, the researcher collected the answer sheets from the students.

13. Data Analysis

The researcher checked the answer sheets of post-test given by the students of experimental and controlled groups. The scores of these tests were used for the data analysis. The researcher performed t-test to check the hypotheses constructed above.

14. Results of Data Analysis

Ho1 There is no significant difference between the mean scores obtained in post-test by students of experimental group and controlled group.

Table 2: t-test between mean scores obtained by students of experimental and controlled group

Group	N	M	SD	SED	t	Significance
Experimental	40	34.33	6.04	1.31	4.05	0.01
Controlled	40	29.00	5.71			

df	0.01	0.05
78	2.64	1.99

From above table, it is known that the calculated t-value between mean scores of students of experimental group and controlled group is 4.05. The table t-values are 2.64 at 0.01 level and 1.99 at 0.05 level. The calculated t-value is more than table t-values at both levels. Thus, hypothesis is rejected and there is a significant difference between mean scores of students of experimental and controlled group. Moreover, mean score of students of experimental group is more than mean score of students of controlled group. Thus, it is said that the co-operative learning approach is more effective than traditional teaching method on achievement obtained by the students in English subject.

Ho2 There is no significant difference between the mean scores obtained in post-test by boys of experimental group and controlled group.

Table 3: t-test between mean scores obtained by students of experimental and controlled group

Boys	N	M	SD	SED	t	Significance
Experimental	20	34.15	6.94	2.12	2.95	0.01
Controlled	20	27.90	6.44			

df	0.01	0.05
38	2.71	2.02

From above table, it is known that the calculated t-value between mean scores of boys of experimental group and controlled group is 2.95. The table t-values are 2.71 at 0.01 level and 2.02 at 0.05 level. The calculated t-value is more than table t-values at both levels. Thus, hypothesis is rejected and there is a significant difference between mean scores of boys of experimental and controlled group. Moreover, mean score of boys of experimental group is more than mean score of boys of controlled group. Thus, it is said that the co-operative learning approach is more effective than traditional teaching method on achievement obtained by the boys in English subject.

Ho3 There is no significant difference between the mean scores obtained in post-test by girls of experimental group and controlled group.

Table 4: t-test between mean scores obtained by students of experimental and controlled group

Girls	N	M	SD	SED	t	Significance
Experimental	20	34.50	5.17	1.58	2.79	0.01
Controlled	20	30.10	4.79			

df	0.01	0.05
38	2.71	2.02

From above table, its known that the calculated t-value between mean scores of girls of experimental group and controlled group is 2.79. The table t-values are 2.71 at 0.01 level and 2.02 at 0.05 level. The calculated t-value is more than table t-values at both levels. Thus, hypothesis is rejected and there is a significant difference between mean scores of girls of experimental and controlled group. Moreover, mean score of girls of experimental group is more than mean score of girls of controlled group. Thus, it is said that the co-operative learning approach is more effective than traditional teaching method on achievement obtained by the girls in English subject.

Ho4 There is no significant difference between the mean scores obtained in post-test by boys and girls of experimental group.

Table 5: t-test between mean scores obtained by students of experimental and controlled group

Experimental Group	N	M	SD	SED	t	Significance
Boys	20	34.15	6.94	1.93	0.18	NS
Girls	20	34.50	5.17			

df	0.01	0.05
38	2.71	2.02

From above table, its known that the calculated t-value between mean scores of boys and girls of experimental group is 0.18. The table t-values are 2.71 at 0.01 level and 2.02 at 0.05 level. The calculated t-value is less than table t-values at both levels. Thus, hypothesis is not rejected and there is no significant difference between mean scores of boys and girls of experimental group. Thus, it is said that the co-operative learning approach is equally effective on boys and girls.

15. Findings

The findings of present study are as follows.

4. The co-operative learning approach is more effective than traditional teaching method on achievement obtained by the students in English subject.
5. The co-operative learning approach is more effective than traditional teaching method on achievement obtained by the boys in English subject.
6. The co-operative learning approach is more effective than traditional teaching method on achievement obtained by the girls in English subject.
7. The co-operative learning approach is equally effective on boys and girls.

16. Conclusion

In present study, the researcher studied the effectiveness of co-operative learning approach on achievement in English subject obtained by the students of standard 8. The researcher implemented this study on two equivalent groups selected from Diwan Ballubhai School of Ahmedabad city. Total 80 students were selected as a sample. The students of experimental group were treated with co-operative learning approach while the students of controlled were treated with traditional teaching

method. After research, it was revealed that the co-operative learning approach is more effective on achievement in English subject than traditional teaching method.

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