

Effect of Co-operative Learning on Achievement in Environmental Science of School Student

Dhananjay Dheeraj*, Rima Kumari**

*Department of Education, Magadh University Bodhgaya

**Directorate of Distance Education, Magadh University Bodhgaya

Abstract- Man is a social animal. Academic excellence is updated with the help of social institutions and social institutions are run by cooperation of individuals of society. A correlation existed between society and academics since time immemorial. There is a need to introspect and realize the cooperation between these two. Cooperation is working together to accomplish shared goals. Within cooperative activities individuals seek outcome that are beneficial to themselves and beneficial to all other group members. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each others learning.

The investigators in this paper have tried to explore the effect of cooperative learning on Achievement in social science of secondary school students. The present study is an experimental study based on randomized two group post test. It was conducted on a sample size of 60 students from Gaya district of Bihar. Out of which 30 Students were in experimental group and 30 students in controlled group. Two self developed tools were used in the form of Instructional Tool unit wise Lesson Planning along with teaching aids and Measuring Tools in the form of a teacher made test and a 3 point scale to study the impact of the method used. Experimental group was taught through co-operative learning method and controlled group was taught through traditional method. Findings of the study reflected that mean achievement of the students exposed to co-operative method differs significantly from the mean achievement of the students taught through traditional method.

I. INTRODUCTION

Teaching is the principal mode of education. It can be called a transaction between the teacher and the pupil, in which one transmits knowledge to the other. This view has been held and practiced, but has become ritualized in that a limited amount of information is transferred to the pupil, who crams it by rote and, at the examination, reproduces whatever part he can recall and in whatever order or disorder. Thence to a marks sheet and a degree, defeating the very purpose of education. The objective of education is thus diverted to make a pupil remember a memorable part of the course. The real objective would be not only to make a pupil learn a subject, but to train him how to learn.

The aforesaid system is seen in the schools and colleges of India where the teacher dominates the class and the students are passive listeners. No effort is made to involve them in the teaching-learning process and also the aspect of individual difference is "totally ignored. Consequently the -problem of wastage and stagnation is increasing day by day. To avoid this,

several attempts have been advanced to systematize ways of meeting . Individual differences among the pupils in the classroom and to make teaching learning more effective and enjoyable. Especially the constructivists contribution in this field is worth notable. They unfolded a new dimension of learning who considered learning as a constructive process; where learners do not passively receive information but instead actively construct knowledge as they strive to make sense of their worlds. Constructivism thus changed the conception of teaching-learning and brought a revolution in the field of education. This is supported by the research studies all over the world.

The constructivists proposed several instructional strategies, among the cooperative learning, collaborative learning, problem-based learning etc. are prominent. Therefore, to keep pace with the changing circumstances, we should not keep ourselves aloof from new experiments in the field of education to make learning more effective and enjoyable experience for pupils. This fact provoked the investigator to undertake the present study.

II. STATEMENT OF THE PROBLEM

"Effect of cooperative learning on achievement In Environmental Science of school students."

III. OBJECTIVES

- (i) To design teaching-learning material on cooperative learning
- (ii) To study the effectiveness of cooperation learning on achievement in EVS-II of Class- V students in, comparison with traditional method.
- (iii) To examine whether learning becomes more joyful through cooperative learning.

IV. HYPOTHESIS

- (i) Cooperative learning enhances significantly the achievement in EVS of Class - V students.
- (ii) Learning will be more joyful through cooperative learning strategy.

V. DELIMITATIONS

As the time is major constraint, the study will be restricted to the Class V students of D. A. V. Public School Cantt. Area, Gaya 8-10 periods f EVS lessons only.

VI. METHODOLOGY

Design of the study, sample, tools, procedure of data collection and techniques of data analysis has been presented in this section.

VII. DESIGN OF THE STUDY

The Present study is a randomized two groups post-test design

Group	Independent variable	Post test
Experimental	Teaching through cooperative learning method	T 2
Control	Teaching through conventional method	T 2

VIII. SAMPLE

The total sample comprised of 60 students of sections 'A' and 'B' of Class V of D. A. V. Public School, Cantt. Area, Gaya. Out of this, 30 students were there in experimental group and remaining 30 students formed the control group.

IX. TOOLS

Two types of tools were used. They were instructional tools in the form of unit wise lesson plans along with teaching aids, and measuring tools in the form of a teacher made achievement test and a 3 point scale to study the impact of the method (self-developed).

X. PROCEDURE OF DATA COLLECTION

The experiment was conducted on the students of Class V of D. A. V. Public School, Cantt. Area, Gaya. In the very beginning of the experiment, both the sections (A & B) of class VII were mixed up and then randomly assigned to experimental group and control group in order to *lake* both the groups equal in all respects. The experimental group was given a brief orientation on cooperative learning process, and the entire group was divided into six sub-groups consisting of five students in each group. Each group then selected their Group Leader, Recorder, Checker, Encourager etc. Thus when the subjects were ready, the experiment started. The experimental group was taught through collaborative learning method and the control group was taught through traditional methods of teaching. The investigator selected the unit - How we can keep healthy from EVS - II text book of Class = V. When the instruction process was over, an achievement test (Teacher made) was conducted simultaneously on both the groups to obtain post-test scores for comparison. A three point scale consisting of eleven items was also

administered on the experimental group to study the impact of the method.

XI. TECHNIQUES OF DATA ANALYSIS

After collection of raw data, the experimenter has applied 't-test' for analyzing the scores and for meaningful interpretation. Chi-Square test (X2 test) is applied to interpret the 3 point scale.

XII. FINDINGS

Following are the important findings of the present study.

* Mean achievement of the students exposed to cooperative learning differs significantly from the mean achievement of the study taught through traditional method (M1=42.8, M2=38; 't' value = 2.44, P<05). It implies that cooperative learning has a significant impact on the achievement of Class - V students in EVS-2.

Learning is very joyful under- cooperative learning system. The statements - and their X2 values are -

Sl.No.	Statement	X2 Value
1.	Was the class very interesting	60
2.	Would you like to study in groups in Order subjects also?	54.2
3.	Do you find learning is easier in this method ?	43.4
4.	Do you find learning more. joyful in this method?	54.2
5.	Will you do better in the exam, if you study like this in group?	23.1
6.	Do you find learning with friends enjoyable?	60
7.	Do you feel freedom-and comfort in this type of learning?	29.6
8.	Would you like to become group leader?	35
9.	Will you help a friend from your group who is not Performing well?	48
10.	This system of class is not at all monotonous	18.6
11.	Can you learn in group even in outside the class?	15

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AUTHORS

First Author - Dhananjay Dheeraj , M.Sc.,M.Ed, M.Phil .Ph.D (submitted), Assistant Professor, Department of Education Magadh University Bodhgaya

Email id - dheeraj.dhananjay99@gmail.com

Second Author - Reema Kumari, M.A. M.Ed (Persuing) Research Scholar.Directorate of Distance Education,Magadh University

Correspondence Address - Radhika Villa, Sangam Chowk,Road NO.5,Bhaluahi Kharkhura, P.O. – R.S. Gaya, Pin - 823002 INDIA

Email id - dheeraj.dhananjay99@gmail.com