



**Topic :** Effect of cooperative learning on achievement level of B.Ed. students a study

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## ABSTRACT

Cooperative learning is a fast popularizing recent trend in education at Global level. It is a new and better way for learners to learn and teachers to teach. In cooperative learning students help each other to learn in groups in a controlled way. Students work with their peers to accomplish a shared and common goal. The goal is reached through interdependence among all group members rather than working alone. This recent trend has prescribed in the revised M.Ed. syllabus of Shivaji University and B.Ed. Syllabus of Yeshawantrao Chavan Maharashtra Open University (Y.C.M.O.U.). The present paper is the outcome of pilot study conducted at Acharya Jawadekar College of Education Gargoti. The major findings drawn from the Study are 'Cooperative learning develops communication skill, problem solving, self confidence, content mastery, self esteem, leadership skills and cooperation among the group members.'

## INTRODUCTION

Accessing the timeline history of cooperative learning right from its foundation roots by John Dewey, Kurt Lewin, Jean piaget, Lev vyogtsky in early 1900 S to the first annual cooperative leaning leadership conference at minneapolis in 1996, the concept gains popularity among educators, Hundreds of research studies have compared cooperative learning to various control methods at various levels ranging variours measures. It is not only a subject of research but it is being used in the classroom by millions of teachers in the world. But in Indian educational practices this strategy seems neglected and unpracticed by teachers but a few researchers and teachers are attempting this strategy as a mode of instruction in the classroom. Here in this study the researchers used cooperative learning to teach 1 Unit from B.Ed. syllabus of shivaji University Kolhapur at Acharya Jawadekar College of Education Gargoti.

## MEANING AND NATURE OF COOPERATIVE LEARNING

Cooperative learning means students work together and help is other to accomplish share goals. It ensures students cooperation and maximum positive

interdependence among the group members. In the traditional classroom there seems negative interdependence and throat cutting compitition in the students. Table 1 presents the nature of traditional learning and cooperative learning.

DIFFERENCE BETWEEN TRADITIONAL L. & COOPERATIVE L.

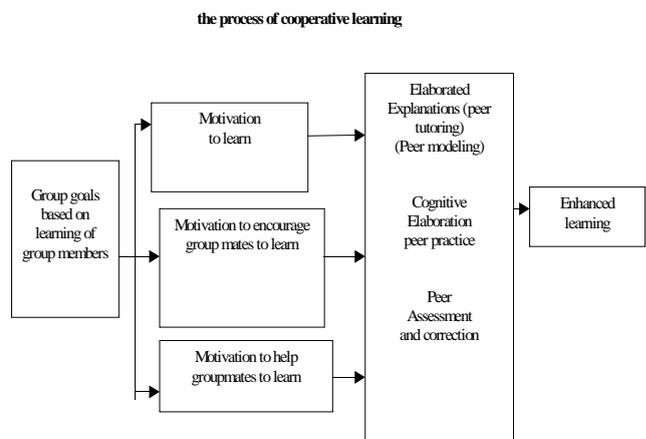
| Traditional Learning                                   | Cooperative Learning   |
|--|--|
| less interdependence                                   | Maximum positive interdependence   |
| Individual goal attainment                             | Group goal attainment, members are responsible for each others learning. |
| Only self accountability                               | Collective accountability  |
| Absence of face to face interactions                   | face to face interactions with peers                                     |
| Assignments are less discussed                         | Assignments are discussed and done supporting each other.                |
| A leader is appointed to direct the class              | Leadership is shared by all members.                                     |
| No group processing of the work                        | Quality work is done through group processing of the work.               |
| Less use of Pro-social skills                          | Use of Pro- social skills.   |
| only individual accountability (competitive learning ) | Individual as well as group accountability.                              |
| Teacher is primary source of instruction               | Teacher is consultant  |

## PURPOSES OF COOPERATIVE LEARNING

Staling steepeck (1986) has given four purposes of cooperative learning :

1. Maximum increase in academic achievement and supportive group environment to motivate learning.
2. Learning from each other through cooperation.
3. Reinforcement of one and all for learning.
4. Development of race relation among schools.

According to salvin (1995) the process of cooperative earning can be diagrammed. :



**STEPS IN COOPERATIVE LEARNING****A) THE QUIET SIGNAL**

The quiet signal is used to stop the noisy atmosphere and get positive attention of the students. In order to use quiet signal teacher raises his/her hand then each student raises his /her hands and stops talking, stops doing, signal others, looks at the teacher and listens. The practice of this signal is necessary for quick attention of the signal.

**B) CLASS RULES**

Class rules are decided early in the academic year of the school /college. These rules are prepared by students by discussing with all the students and with the help of teacher. Teacher should give two/three examples of class rules and encourage students to suggest class rules. Discussing with the students teacher should select 5 rules and a poster should be posted in the class room where every one can see them.

**C) POSITIVE ATTENTION -**

It is showing the student that they are working properly by telling them what they are doing is good. Teacher can give positive attention by using praise words, By smily face, Nodding Approval, by giving rewards, a pat on the back etc.

**D) GROUPS**

Multiheterogenous groups are prepared considering intellectual level, competency, Sex, religion, student characteristics etc. Generally groups are made up of pairs, triads, or teams. Occasionally groups are made up of 5 or more than 5 or the whole class.

**TEACHERS ROLE IN COOPERATIVE LEARNING**

The teachers role is as a consultant to the students. He is expected to:

1. Guide student's in collaborative skills for cooperation among the group members.
2. Supervise students tasks and lead them rightly in learning the subject area.
3. Plan and organize materials, tasks, assignments, discussions etc. for achieving greater performance.
4. Specify academic and cooperative objectives previously before transcending the lesson.
5. Define, explain, and monitor student behaviour and assist them whenever required.
6. Provide closure and summarize the lesson by question answer chain drill and modify students learning if necessary .

**NEED AND IMPORTANCE OF THE STUDY**

A recent National survey by Puma, Jones, Rock,

and Fernandez (1993) Found that 79 % of elementary teachers and 62 % of middle schools teachers in U.S. are using cooperative learning in the class room. Johnson brothers have discovered that cooperative learning improves achievement level, material is remembered longer, higher reasoning is used and it provides external as well as interinsic motivation to learn. Paul Mcnally (2007) has studied students academic achievement in heterogeneous and homogeneous cooperative groups major finding of the research is that the female academic achievement was increased 11 %, 21%, 56%, 82% increase has been achieved per male Evelyn ,Jacob,Lory,Rottenbrns,Sondra, Patric and Edyth wheeler (1996) found eight different kinds of instances that provided L 2 learners with opportunities for acquiring academic English and in five kinds of opportunities to L 2 learners received input and output in a) Difficult academic concepts b) para academic knowledge c) Lexical and Conceptual exploration d) Homonyms e) communication skills etc.

Considering the global importance of co-operative learning and being teacher educators the researchers attempted to conduct pilot study on cooperative learning at Acharya Jawadekar college of Education Gargoti and the results of the study proves that cooperative learning will be helpful at any level for book writers, syllabus planners, subject, Experts and most important for teachers to teach and learner to learn.

**RESEARCH PROBLEM**

Effect of cooperative learning on achievement level of B.Ed. students a study.

**OBJECTIVES**

1. To study the achievement of students in understanding traits of resourceful teacher.
2. To recognize leadership and communication skill of the trainee teachers.
3. To determine drawing and presentation skill of the students.
4. To study the Nutritional effects of cooperative learning.

**HYPOTHESIS**

There is no significant difference between achievement level of student taught through cooperative learning and conventional method of teaching.

**RESEARCH PROCEDURE**

The researcher has used single group. Pre test, post test, experimental design. The sample of 67 student teachers was used for the study. Pretest was conducted to ascertain achievement level of students through conventional method before the experimental treatment. One unit from paper NO. 5 has been taught for two days (4 hours) using four

cooperative learning structures. i.e. pair discussion share, think pair share, Group Discussion leader share, and pair discussion write share. The researcher has played the role of consultant and participant observer cum recorder. One reporter was also appointed to record the situational changes, communication skills, leadership roles etc. At last post test of 10 marks has been conducted to test the achievement level of the student teachers simple tabulation technique as well as means, S.D., and "t" value of pre and post test has been calculated to find the significance level at 0.01 level and 0.05 level. The R.D. can be represented as follows :

**SAMPLE**

67 student teachers studying at Acharya Jawadekar College of Education of Gargoti have been selected for the study.

**VARIABLES**

Independent variable -

Cooperative learning

Dependent variable -Students achievement scores in pre & post test

Control Variable

a) B.Ed. syllabus b) time schedule

c) Post test.

**TOOLS**

Achievement Test

Creative writing Test.

Observation inventory

T - test.

**SCOPE AND DELIMITATIONS**

The research study is delimited to 67 students studying at AJCE Gargoti and one unit from B.Ed. syllabus and Four cooperative learning structures only. Though the study is delimited as such it is helpful for teachers, teacher educators, planner to implement cooperative learning at various levels for further studies.

DATA ANALYSIS  
PRE-TEST

| N. | Marks obtained out of 10 |   |      |       |       |      |   |   |   |       |
|----|--------------------------|---|------|-------|-------|------|---|---|---|-------|
|    | 10                       | 9 | 8    | 7     | 6     | 5    | 4 | 3 | 2 | 1     |
| 67 | -                        | - | 3    | 34    | 25    | 5    | - | - | - | -     |
| %  |                          |   | 4.47 | 50.74 | 37.31 | 7.46 |   |   |   | 100 % |

POST-TEST

| N. | Marks obtained out of 10 |       |       |       |      |       |   |   |   |       |
|----|--------------------------|-------|-------|-------|------|-------|---|---|---|-------|
|    | 10                       | 9     | 8     | 7     | 6    | 5     | 4 | 3 | 2 | 1     |
| 67 | 19                       | 13    | 12    | 9     | 4    | 10    | - | - | - | -     |
| %  | 28.35                    | 19.40 | 17.91 | 13.43 | 5.97 | 14.92 |   |   |   | 100 % |

**FINDINGS**

- 28.35 % students have scored 100 % marks
- 19.40 % students have scored 90 % marks
- 17.31 % students have scored 80 % marks
- 13.43 % students have scored 70 % marks
- 5.97 % students have scored 60 % marks
- 14.92 % students have scored 50 % marks

Mean S.D. and 't' value of pre and post test scores.

| Treatment            | N  | Means | S.D. | Calculated t value |      |
|----------------------|----|-------|------|--------------------|------|
| Cooperative learning | 67 | 8.06  | 1.75 | 0.01               | 0.05 |
| Conventional method  | 67 | 6.52  | 0.70 | 2.57               | 1.96 |

**NUTRITIONAL EFFECTS**

- Cooperative learning enriches the content knowledge of B.Ed. Students.
- Cooperative learning develops and communicative and leadership skills of the students.
- Cooperative learning develops problem solving skill of the students.
- Cooperative learning develops self esteem and self confidence of the learners
- Cooperative learning creates burden free atmosphere in the class room.
- It helps in socio emotional development of the learners.
- It develops presentation skills of the students.
- It develops positive thinking, habit of listening others, joint accountability, positive attitude and makes the untalktive students to talk in the group these are nutritional effects of Cooperative learning.

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