ABSTRACT

This study was an effort of the researcher to know the impact of implementation of self-instructional package of co-operative learning on the creative behavior and attitude of the secondary school students. Johnson and Johnson (2006) comprehensively defined cooperative learning as: a relationship in a group of students that requires positive interdependence (a sense of sink or swim together), individual accountability (each of us has to contribute and learn), interpersonal skills (communication, trust, leadership, decision making, and conflict resolution), face-to-face promotive interaction, and processing (reflecting on how well the team is functioning and how to function even better).

Objectives of the study

The present study has been conducted with the following objectives in view-

1. To prepare a self-instructional package of cooperative learning for secondary school students.
2. To validate the self-instructional package of cooperative learning for secondary school students.
3. To study the effectiveness of self-instructional package of cooperative learning in terms of creative behavior in secondary school students.
4. To study the effectiveness of self-instructional package of cooperative learning in terms of attitude in secondary school students.

Research Hypothesis-

The self-instructional package is effective in the context of its impact on creative behavior of students on the one hand and forming of a positive attitude on the other.
The substantive research hypothesis has been further rendered into null form for its amenability to statistical testing-

1. There is no significant difference between the development of creative behaviour among secondary school students by learning through traditional instructional method and a new self-structured cooperative learning instructional method.

2. There is no significant difference between the development of attitude among secondary school students by learning through traditional instructional method and a new self-structured cooperative learning instructional method.

Variables

The variables involved in this study have been labeled as follows:

**Independent Variable:** Self- instructional package of cooperative learning

**Dependent Variables:** Creative Behaviour and Attitude

**Research Methodology:**

To achieve the objectives of the study researcher developed a package of modules on 10 topics of subject science (on the basis of NCERT & U.P. board book) of class VIIIth and then implement these on the students by making structured cooperative learning groups i.e. SCLG. The group was of 5 students each. Therefore total 60 groups of students were made by the researcher to conduct this study. Before and after the implementation of modules a pre and post test of subjected science was administered.

In the present research a sample consisting of 300 students (300 each of experimental and control group ) was drawn on the basis of cluster sampling approach of class VIIIth selected from 9 schools of Rampur, Moradabad, Sitapur, Raebareli and Lucknow. Keeping in mind the
objectives of the present study, the researcher constituted a stratified simple random sample through lottery system from a cluster of class VIII\textsuperscript{th} students. The present study is quasi-experimental and quantitative in nature. The self-instructional modules of cooperative learning were administered and a factorial pretest - posttest control group, experimental group design was used to assess the impact of cooperative learning technique on attitude and creative behavior of the learners and to evaluate the tenability of the relevant hypotheses of the present problem.

**Tools used in the study:**
The research tools used in the study are self–instructional module of cooperative learning of subject science for class 8\textsuperscript{th} students, a self-constructed pre and post science questionnaire of subject science, one self-constructed Likert type rating scale for the assessment of effectiveness of self–instructional package of cooperative learning, a self-constructed combined verbal and non-verbal creativity test and verbal and non-verbal standardized tests of creativity of Baqer Mehdi, one self-constructed observation schedule for the assessment of creative behavior, one self-constructed observation schedule for the assessment of attitude and one self-constructed Likert type rating scale for the assessment of attitude of class 8\textsuperscript{th} students of secondary schools of U.P.

For analysis of data gathered the statistical techniques of split half and test retest methods of reliability, coefficient of correlation, one way ANOVA or F-Test were used. For the assessment of self-constructed creativity test a rubric was prepared.

**Results & Discussion:**
The findings of the study and their interpretation are as follows:
Discussion in respect of Effectiveness of self-instructional package of cooperative learning

1. The effectiveness of self-instructional package of cooperative learning was measured by the implementation of modules of subject science on the experimental group and by comparing those by the students of control group.

2. The effectiveness of self-instructional package of cooperative learning was measured in the terms of learning gains or achievement of students of experimental group through pre and posttest of subject science and its impact on the attitude of the students.

3. In the pretest the range of marks obtained by the students varied from C.I. 20-30 to 80-90. Most of the students scored between the ranges of 50-60 followed by 60-70.

4. The scores obtained by the student’s in post-test were increased significantly and most of the frequencies shifted between 90-110 class intervals. Maximum frequencies obtained were 104 which lie between 90-100 class intervals followed by 100 – 110.

5. A self-constructed Likert type five point rating scale for the assessment of effectiveness of self-instructional package of cooperative learning was administered on the students of experimental group and control group after the implementation of modules. The data obtained was compared by the use of one way ANOVA and the F-Ratio obtained as 74.59 at 0.05 level, which was found statistically highly significant. The obtained data appeared to approve the achievement of objective of the study.

6. The data obtained appeared to prove that the use of self- instructional modules of cooperative learning was found very effective for the students of secondary schools of U.P. in terms of learning gains, which brought a positive change in the attitude of the students towards innovative teaching method of cooperative learning and the peer group.
Discussion in respect of Impact of self- instructional package of cooperative learning on creative behavior

1. The data obtained by the self-constructed combined verbal & non-verbal creativity test of experimental and control groups was calculated and compared by the use of F-Ratio. The F-Ratio obtained for this data was 88.94 at 0.05 level. The value obtained was statistically extremely significant. The findings of the study seems to provide a positive hint regarding the use of self –instructional modules of cooperative learning and appear to prove that it was found beneficial for the students and an impact of cooperative learning method on the development of creative behaviour in the students of class VIIIth of secondary schools was appeared.

2. The data obtained from all the three standardized separate Non-Verbal and Verbal Creativity Tests of Baqer Mehdi was calculated and compared by the use of F-Ratio. The values obtained were 84.62 and 91.64 respectively at 0.05 level. The results obtained from all the three tests were highly significant. This was strongly attributed to the fact that there was an impact of package on the development of creative behaviour in the students of class VIIIth of secondary schools.

3. The self-constructed observation schedule of creative behavior has been used by the researcher and with the help of teachers and principal of the school; grades were awarded to all the 60 SCL groups of students. Grades given, were defined as A+ = Excellent, A= Very Good, B= Satisfactory, C= Needs Improvement. The observations recorded were also favored to the impact of self-instructional package of cooperative learning on the creative behavior of students.

Discussion in respect of Impact of self- instructional package of cooperative learning on attitude

1. The data obtained by the self-constructed Likert type rating scale of attitude was calculated and compared by the use of F-Ratio. A highly
significant value **29.46** was obtained at 0.05 level. It appeared to prove that there is an impact of cooperative learning method on the development of positive attitude in the students of class VIIth of secondary schools towards cooperative learning teaching method and the peers.

4. The self-constructed observation schedule of attitude has been used by the researcher and with the help of teachers and principal of the school; grades were awarded to all the 60 SCL groups of students. Grades given, were defined as A+ = Excellent, A= Very Good, B= Satisfactory, C= Needs Improvement. The observations recorded were also found in favour of the impact of self-instructional package of cooperative learning on the attitude of secondary school students of U.P.

**Generalization, Educational Implications, Suggestions and Conclusion:**

The findings of the study were very much encouraging. The impact of cooperative learning technique on the creative behavior as well as on attitude of the students was found remarkable. The significant difference was established between the creative behavior and attitude of the students of control and experimental groups, and the findings were appeared to applicable on a larger population with great confidence and surety.

Due to the implementation of self-instructional modules of cooperative learning achievements and interest in academics were found increased, which appeared to develop a positive impact on attitude of students towards scholastic as well as on co-scholastic aspects.

The findings of the present research have **important implications for re-engineering and re-shaping the whole school education system in a more effective way.** The findings of this research are also appeared to helpful in contributing immensely in restructuring and to strengthen the teaching-learning process by using an innovative strategy of cooperative
learning. So curriculum and activities can be designed in such a manner so that students can get better opportunities to learn by doing themselves and a realistic learning can occur in the students.

According to the researcher more researches related with the cooperative learning technique in the Indian socio-cultural environment, to study the impact of cooperative learning method on various variables like multiple intelligence, motivation, personality, emotional intelligence, emotional balance, stress management etc. on different variants like rural, urban, male/female and the students of different SES, to study the use and importance of self-Instructional modules on the students of different categories, age groups and their applicability for different courses and for the development of various skills among students are needed to conduct.

**Keywords:** CI= Class Interval, CL= Co-operative Learning, SCLGs= structured co-operative learning groups, SCL group=structured co-operative learning group, SIPCL= self-instructional package of co-operative learning, SES= Socio- economic status