

EFFECTIVENESS OF COOPERATIVE LEARNING ON ACHIEVEMENT IN GEOGRAPHY AMONG IX CLASS STUDENTS

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Abstract

This study was conducted to see the effectiveness of cooperative learning on achievement in geography among IX class students. The sample consists of 60 students of class IX studying in two schools of Ludhiana district and these schools are affiliated to Punjab School Education Board, Mohali. The sample was divided into two equivalent groups, one experiment group and other control group which is common for the comparison with experiment group. Each equivalent group contains a sample of 30 students. Data was collected by using self constructed Pre-Test and Post- Test Tool which was questionnaire of Geography for the students. The result revealed that achievement of the students increases more when taught through the cooperative learning method of teaching as compared to traditional method of teaching. So, cooperative learning method of teaching is more effective than traditional method of teaching geography.

Key Words: *Cooperative Learning, Achievement in Geography.*

Cooperative learning is an educational approach which aims to organize classroom activities into academic and social learning experiences. National Curriculum Framework school education-2005 and National Knowledge Commission emphasis on life skills in school education has forced us to think out of the box to find some student centered modes as compared to the teacher centered authoritative modes of transacting the curriculum. There is need of some modes/methods of delivery which should emphasize on the use of innovative teaching-learning activities or student-centered learning strategies. Cooperative learning, Constructivist and Active Learning approaches can be considered as examples of such student-centered learning strategies. Common to these approaches is the construction of knowledge by the learners rather than knowledge being transferred from teacher to student. Construction of knowledge is possible through the collective efforts of all the students. The truly committed cooperative learning group is probably the most productive tool humans have. Cooperative learning is one of the main active group learning pedagogies. Cooperative Learning means "Cooperative learning is group learning activity. It is

organized in such a way that learning is based on the socially structured change of information between learners in groups in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others" (Roger, Olsen and Kagan, 1992). "Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. It may be contrasted with competitive and individualistic" (Johnson and Johnson, 1999). The focus of cooperative learning is to increase the achievement of students. Achievement is the accomplishment of student's ability and performance. Review of related literature revealed that a large number of studies have been conducted on Cooperative Learning Method. Bowen (2000) found that while median students performance in a traditional course is at the 50th percentile, the median student performance in a cooperative learning environment is 14th percentile points higher. Arbab (2003) reported that cooperative learning resulted in higher achievement as compared to routine method of teaching in English. Dheeraj and Kumara (2013) found that mean achievement of the students exposed to

cooperative method differ significantly from the mean achievement of the students taught through traditional method. Iqbal (2004), Ozsoy and Yildiz (2004) and Ahmad (2010) indicated that cooperative learning is more effective teaching method as compared to traditional methods of teaching. A careful review of the above literature revealed that cooperative learning method has significant effect on achievement of students.

Objectives

1. To construct modules in geography (IX class) to be taught through Cooperative learning.
2. To construct an achievement test (pre-test and post-test) in geography.
3. To teach geography with cooperative learning to IX class students.
4. To teach the subject geography with traditional method.
5. To find the effectiveness of cooperative learning method.
6. To compare the achievement of students taught through cooperative learning and traditional method.
7. To find difference in the scores of achievement taught through cooperative learning and traditional method with regard to Gender.

METHOD

Sample:

The present study was an experimental study, which was conducted on 60 students of IX class from the Sant Baba Gurbachan Singh ji Senior Secondary School Sahauli and Camp Khalsa Senior Secondary School Mohie, Ludhiana district of Punjab state. The sample includes male as well as female students

studying in the class IX. The sample was divided into two equivalent groups, one experiment group and other control group.

Measure:

Self-constructed pre-test and post-test was used and Cooperative Learning Modules based on Jigsaw Strategy developed by the investigator for Class IX in the subject of Geography were employed to collect data.

Procedure:

Firstly, two schools were selected by the investigator. Permission was taken from the principles of both the schools. The achievement test in geography was developed by the investigator on the basis of IX class curriculum. Then this test was applied on the selected sample of 60 students of IX class from both of the schools. Students were divided in two equal groups on the basis of achievement test one group was considered as experimental group containing 15 students and the other was control group containing 15 students in both the schools. Then the experimental group was taught with cooperative learning method of teaching and control group was taught with traditional method of teaching. Total 15 lessons were delivered to both the groups in 15 days. The time limit of each lesson was 40 minutes. After 15 lessons again same achievement test (post-test) was administered to both the groups. The scoring of achievement post-test was done. Then the analysis and interpretation of results was done in order to find out the effectiveness of the cooperative learning method of teaching.

Result and Discussion

Table 1: Pre-test Post-test scores of students taught through Cooperative Learning Method and Traditional Method of teaching.

N	Scores	Group	M	S.D.	SDE	t-ratio
30	Post-test	Experiment Group	11.5	2.09	0.54	0.74
30		Control Group	11.9	2.17		
30	Post-test	Experiment Group	26.4	4.81	1.15	3.47
30		Control Group	22.4	4.08		

Table 1 shows the Pre-test scores of students taught through cooperative learning method and traditional method of teaching. Result revealed that t-ratio is 0.74 which is non-significant at both the

levels of significance i.e. 0.05 and 0.01. Hence, there exists no significant difference in the mean scores of pre-test taught through Cooperative Learning Method and Traditional Method of teaching. Hence

both the groups are parallel on the basis of achievement scores in geography. Again, table shows the Post-test scores of students taught through cooperative learning method and traditional method of teaching. Results revealed that the value of t-ratio is 3.47 which is significant at

both the levels of significance i.e. 0.05 and 0.01. So, students achieved more taught through Cooperative Learning Method than Traditional Method. Hence, Cooperative Learning Method of teaching was better than Traditional Method of teaching.

Table 2: Scores of Post-test among Male and Female students taught through Cooperative Learning Method and Traditional Method of teaching.

N	Method	Group	M	S.D.	SDE	t-ratio
15	Cooperative Learning Method	Male	26.53	6.85	2.49	0.05
15		Female	26.4	6.81		
15	Traditional Method	Male	19.7	5.08	2.12	2.53
15		Female	25.06	6.47		

Table 2 shows the post-test scores of male and female students taught through cooperative learning method of teaching. Result revealed that the t-ratio was 0.05 which is non-significant at both the levels of significance i.e. 0.05 and 0.01. Therefore, Cooperative Learning Method of teaching is equally effective for male and female students. But male students perform better as compared to female students. Secondly, table shows post-test scores of male and female students taught through Traditional Method of teaching. Result revealed that the t-ratio is 2.53 which is significant at 0.05 level of significance. Therefore, Traditional Method of teaching was effective for female students and not so for male students.

Conclusion

Achievement of the students increases more in Geography when taught through the cooperative learning method of teaching as compared to traditional method of teaching. Traditional method of teaching is an effective method of teaching but cooperative learning method is more effective than traditional method of teaching.

Achievement of the male students increases more than female students when taught through cooperative learning method. Achievement of the female students increases more than male students when taught through traditional method.

Implications

Students achieve more in geography through cooperative learning method than traditional

method of teaching at secondary school stage. So, cooperative learning method of teaching should be implemented along with traditional method in public as well as government schools to improve the achievement of students.

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