



# CHAPTER-II REVIEW OF THE RELATED LITERATURE

# CHAPTER- II

## REVIEW OF THE RELATED LITERATURE

### 2.0.0. INTRODUCTION

The introduction, background of the study, descriptions on the collaborative learning, significance of the study along with the objectives, hypotheses and the delimitations of the present investigation are given in the chapter- I. The present chapter is devoted to the review of related literature. The studies reviewed are related to collaborative learning linked to as many disciplines and in different dependent variables. A thorough review helped in the formulation of the research problem and for the guidance in the research.

The researches done by Akura (2013), Durukan (2011). Alghamdi & Gillies' (2013), Gupta & Ahuja (2014), Khan & Ahmad (2014), Khan, Javaid & others (2015), Pattanpichet(2011) and many other scholars been summarized. A review of research studies related to the collaborative learning has been presented afterwards.

The classification of the studies was done into two parts

- 1) Research studies related to the teaching of English.
- 2) Research studies related to the teaching of other discipline.

A comprehensive review of the available literature was done, so as to find the gaps in the previous studies; also it suggested the necessary background of the study. The theoretical evidences that lead to the identification of the current problem are as follows:

### 2.1.0 Research Studies Related To Teaching Of English Language

Akura(2013) conducted a research on effects of computer-based cooperative learning method on students achievements in English Grammar. A sample of 176 students were selected through Purposive sampling and study adopted Solomon four group design under quasi-experimental research. English Achievement Test (EAT) was used to collect the data and STAD was used as a

cooperative learning strategy. Statistically data was analysed by the use of ttest, ANOVA and ANCOVA. The results from the study show that the CBCLM led to better achievement than the traditional method of teaching.

**Durukan(2011)** studied the effects of cooperative integrated reading and composition(CIRC) technique on reading-writing skills. A total of 45 7<sup>th</sup> grade students have been taken as a sample in this study and they were randomly assigned as experimental and control group .A pre-test-post-test control group design has been used in this study and five days treatment was given. WEAT (written expression achievement test) and RCAT (reading comprehension achievement test) were applied as pre -,post and retention –test to the control and experimental groups to measure the treatment effect on reading–writing skills. Findings reveals that there was a significant difference between the reading and writing skills of experimental and control group and it is in the favour of cooperative method.

Alghamdi and Gillies'(2013) studied the impact of cooperative learning in comparison to traditional learning(small groups) on EFL learners' outcomes when learning English as foreign language. Sample contains 139 10<sup>th</sup> grade male students of age group 14-15 years and they were randomly selected from four boys secondary schools in Al-Baha city. A pre-test, post-test control group design was used as a research design and treatment was given for 12 weeks. Pre-test and post-test English grammar achievement test was used a tool for data collection. Statistically data was analysed by ANOVA. Findings reveals that there is significant difference between the mean scores of the students of experimental and control group. It indicates that the cooperative learning techniques proves to be superior as compared to the traditional Method of teaching.

Gupta and Ahuja(2014) conducted a study on cooperative integrated reading composition (CIRC): impact on reading comprehension achievement in English among seventh graders. A sample of 140 students was selected through random sampling technique. All the 140 students were divided and formed experimental and control group. Students, who belong to middle strata of SES and moderate intelligence level were taken for the present study and

both the were equated on the basis of socio-economic status and intelligence. A pre-test, post-test control design was used in this study and a treatment of 8 weeks was given. Tools for data collection were General Intelligence Test GIT) by Mohsin, Soio-economic status scale (SESS) by Kalia and Sahu and a self developed Reading comprehension achievement test. Mean and S.D's were worked out on the reading comprehension achievement scores and t-test was applied to compare the performance of the two groups. The findings revealed that experimental group outscored significantly control group on post-test showing the obvious supremacy of cooperative learning technique (CIRC) over conventional method of teaching.

Khan, Javaid and others(2015) studied on evaluation of the effectiveness of cooperative learning method versus traditional learning method on the writing ability of the students. This was an experimental study and pre-test, post-test equivalent group was used as a research design. A total of 128 students of class 8<sup>th</sup> of age 13-14 years were selected as a sample and it was divided into two equal groups of 64 students in an experimental group and 64 in a control group. A teacher made achievement test (post-test) was administered to measure the achievement of the student. STAD was used as a cooperative learning techniques for experimental group and a treatment of 56 days has been given to the experiment. In the last the result has been analysed by using t-test and ANOVA and it was found statistically significant at 0.05 level. It shows that cooperative learning was more effective instruction paradigm as compared to traditional method of teaching.

Khan and Ahmad (2014) they investigated on evaluation of the effectiveness of cooperative learning method versus traditional learning method on the reading comprehension of the students. A sample of 128 students of Government Comprehensive High School Rawalpindi of age group 13-14 years were selected and all students were randomly selected from all three sections of 8<sup>th</sup> class of the school. In a cooperative group students were divided into low, high and average students. A pre-test, post-test equivalent group was used as an experimental design. Group was separated on the basis of results of pre-test score. The score of the test was used to equate the group. Treatment of planned cooperative learning (STAD) was provided to

experimental group while control group was taught by using traditional method. The data were analysed by following statistical procedures i.e. Mean, SD, AND significance of the difference between means i.e. t-test. Findings of the study reveals that cooperative learning was more effective instructional paradigm for English as compared to the traditional method of teaching.

Pattanpichet(2011) He studied the effect of using collaborative learning to enhance students' English speaking achievement. The sample of the study was 35 undergraduate students and a "Pre-test, post-test design" was used as a experimental design. Researcher used five research instruments these are an oral test with a scoring rubrics, scoring sheets, a quantitative asking the students' view on collaborative learning taken from Brown (2008), a student's diary, a semi-structured interview. The data was analyzed by frequency, mean, SD, t-test ,effect size (Hedge's) and content analysis. Findings of the study reveals that improvement of the students' speaking performance and positive feedback from the students on the use of collaborative learning activities.

### 2.2.0. Research Studies Related to teaching of other Disciplines

Angadi and Darga (2015) conducted a study on effect of cooperative learning on academic achievement of 9<sup>th</sup> standard students in Mathematics. A sample of 60 students were selected through Purposive sampling .Students were divided equally on the basis of students' previous class achievement as pretest scores. A Pre-test, Post-test equivalent group was used as a research design. At the end of the treatment a teacher made post-test was administered to measure the overall achievement in mathematics and knowledge, comprehension and application components. The data was analysed through test at 0.05 level .The result of the study indicate that cooperative learning method was more effective for mathematics as compared to the traditional learning method.

**Dheeraj and Kumari (2013)** investigated the effect of cooperative learning on achievement in Environmental Sciences of school students. The sample comprises 60 students. In this study a randomised two groups post-test design was used as a research design. In this study two types of tools were used. They were instructional tools in the fonn of unit wise lesson plans along with

teaching aids, and measuring tools in the form of teacher made achievement test and a 3 point self made scale were used to study the impact of the method. The data was analysed through t-test and chi-square test is applied to interpret the 3 point scale. Findings revealed that Cooperative learning has a significant impact on the achievement in EVS II of class V students it also found that students' learning is very joyful under cooperative learning system.

Tran, VanDat (2013) studied the effects of student team achievement division(STAD) on academic achievement, and attitudes of Grade 9<sup>th</sup> secondary school students towards Mathematics. This was an experimental research and a pre-test, post-test non equivalent comparison group design" was used as a research design. A convenient sampling and a total of 74 students (40 girls and 34 boys) were used as a sample. A 40 question self made items on general knowledge of Algebra and Geometry were used as a tool .The data was analysed with the help of t-test for independent samples. The study concluded that cooperative learning was effective in improving the academic achievement level of participating students, and in promoting the positive attitudes of students towards mathematics in the level of high schools.

Gambari and Olumorin (2013) investigated the effectiveness of video-Based cooperative learning strategy on high, medium and low academic achievers Purposive sampling was used as a sampling technique because there was the need of computer for conducting experiment again from this 120 senior secondary mathematics students were selected randomly using stratified random sampling. A Pre-test, post-test experimental control group design was employed in this study. Four levels of independent variable (cooperative, competitive, individualistic and control groups) and three levels (high, medium and low) were investigated on students' performance in Mathematics. Video Instruction package (VIP) on mathematics and Geometry Achievement Test (GAT) were used as treatment and test instruments' respectively. ANOVA and Scheffe test were used as a data analysis techniques. Findings revealed that there was significant difference in the performance of the groups in favour of cooperative learning strategy.

Parveen, Mahmood, and others (2011) studied the effect of cooperative learning on academic achievement of 8<sup>th</sup> grade students in the subject of Social Studies. A total of 35 students were selected as a sample and matched them on the basis of their annual examination at social studies score. The Pretest, Post-test control group design was chosen for the experiment. A self constructed pre-test, post-test achievement test were prepared as a tool. The material used for teaching the experimental group consisted of lesson plans, worksheets and Quizzes designed to implement cooperative learning strategy. The data was analysed through t-test. Findings reveals that cooperative learning was not found to be a better instructional strategy than routine method of instruction.

Parveen(2012) studied the effect of cooperative learning of achievement of students in General Science at secondary level. A sample of 36 female students has been taken and they were matched on the basis of their annual examination at general science scores. A pre-test, post-test control group design was chosen for the experiment. Self constructed achievement test was used as a pre-test as well as post- test for data collection tool and lesson plans, worksheets, quizzes were used as a teaching learning material for experiment. The data were analysed through Mean, SD and t-test at 0.05 significant level. The main result of the study was that cooperative learning method is superior to traditional method in general science achievement of 9<sup>th</sup> Grade students.

Tran (2014) investigated the effects of cooperative learning on the academic achievement and knowledge retention. A total of 110 first year primary education students was selected as a sample through sampling and a treatment of 8week has been given. Pre-test, post-test non equivalent comparison—group design was used in this study. A one-way ANOVA analysis was performed to compare the means of the pre-test scores between the groups before the treatment. An independent samples t-test was used to compare the groups post-test and retention test scores at 0.05 level. Findings reveals that cooperative learning group achieved significantly higher scores on the achievement and knowledge retention post-test than did students who were instructed using lecture-based teaching

Zakaria, Solfitri and others(2013) investigated the effect of cooperative learning on secondary school students' Mathematics achievement. This study contains 61 students as a sample and quasi-experimental as an experimental design of the study. A mathematics open-ended questions on cooperative learning achievement test was used as a tool for data collection. Pre-test were used to determine the equality of the two group. Statistically the data was analysed through t-test and it was found statistically significant at 0.05 level of significance. Findings of the study revealed that cooperative learning can increase Mathematics achievement and students in the cooperative group were able to increase their understanding and to develop their self confidence.

Yusuf(2014) investigated the effects of collaborative learning on chemistry students' academic achievement and anxiety level in balancing chemical equation in secondary school chemistry. A sample of 80 students were randomly selected from two senior secondary schools. Quasi-experimental pre-test, post-test research design was used in this study and the treatment for six week has been given for the experimental and control group. A chemistry achievement test and students anxiety scale questionnaire were used as the instruments for data collection and statistically data was analysed through t-test. Findings of the study revealed that collaborative learning has significant effect on academic achievement of the students.

### 2.3.0. Critical Appraisal

In the light of above researches it is concluded that cooperative learning method is found to be significantly effective in terms of achievement in reading-writing, achievement in grammar, reading comprehension, writing ability, achievement in spoken language and it also has significant effect on achievement of other disciplines. Akura(2013) conducted a research on effects of computer-based cooperative learning method on students achievements in English Grammar. The effects of cooperative integrated reading and composition(CIRC) technique on reading-writing skills was studied by Durukan(2011). Gupta and Ahuja(2014) conducted a study on cooperative integrated reading composition (CIRC): impact on reading comprehension achievement in English. Some studies focused on the effect of collaborative

learning on knowledge retention and students anxiety( Tran,2014; Yusuf,2014). It is largely accepted that collaborative learning and achievement are related directly. Researches have also studied the effect of cooperative learning on various aspects of achievement. Teaching language by collaborative learning has specific assence as language learning. Language learning requires free environment to communicate and interact and collaborative learning gives the opportunity to the learner to participate actively in collaborative learning activities so the above researches is in the favour of superiority of collaborative learning method. The previous researches have been conducted in abroad under controlled conditions by the researchers. The sampling used in the researches is randomized. Different designs have been utilized by different researchers so as to get as authentic results as possible. Some of the researches are conducted on single group design. The present study seeks to consider all the conditions which may affect the study.

### 2.4.0. Conclusion

Above research studies shows that the studies conducted by the researchers have focused on limited dimensions of the language teaching and now the dire needs in English language teaching in Indian context, teaching of grammar should be integrated with language teaching so the present research is directed in this area.