

## COOPERATIVE INTEGRATED READING COMPOSITION (CIRC): IMPACT ON READING COMPREHENSION ACHIEVEMENT IN ENGLISH AMONG SEVENTH GRADERS

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### ABSTRACT

Cooperative approach presents an example of an “innovative approach” that constitutes a paradigm shift in the area of language teaching. The purpose of this study was to determine the impact of the Cooperative Learning Approach-Cooperative Integrated Reading Composition (CIRC) on the Reading Comprehension Achievement in English among seventh graders. Cooperative Learning was compared with conventional teaching learning classroom structure using an experimental design. 140 students of seventh class were randomly selected out of which 70 students formed Experimental Group (E) and 70 students formed Control Group (C). Reading Comprehension Achievement Test in English and Instructional Material were developed by the investigators themselves. Whole teaching - learning process was carried out for eight weeks only. At the end of the experiment, Reading Comprehension Achievement test in English was given to the subjects. Data were analyzed by using t-test. The findings revealed that Experimental Group outscored significantly Control Group on post-test showing the obvious supremacy of Co-operative Learning Technique (CIRC) over Conventional Method of teaching.

**KEYWORDS:** Co-Operative Learning Strategy (CIRC), Reading Comprehension Achievement

### INTRODUCTION

Cooperative learning (CL) as one of the means of active learning might serve as an appropriate and promising strategy helping to increase learning effectiveness and providing students with the skills of collaborating, cooperating, sharing and socializing. Cooperative learning may be defined as any classroom learning situation in which students of all levels of performance work together in structured groups toward a shared or common goal. According to Johnson, Johnson and Holubc, (1994): "Cooperative learning is the instructional use of small groups through which students work together to maximize their own and each other's learning", In classrooms where collaboration is practiced, students pursue learning in groups of varying size: negotiating, initiating, planning and evaluating together. Rather than working as individuals in competition with every other individual in the classroom, students are given the responsibility of creating a learning community where all students participate in significant and meaningful ways.

Cooperative learning requires that students work together to achieve goals which they could not achieve individually. Cooperative learning is a methodology that employs a variety of learning activities to improve student's understanding of a subject by using a structured approach which involves a series of steps, requiring students to create, analyze and apply concepts (Kagan, 1990). Each member of a team is responsible not only for learning what is taught but

also for helping teammates learn, thus creating atmosphere of achievement. Students work until each group member successfully understands and completes the assignment, thus creating an "atmosphere of achievement" (Panitz, 1996). One reason for improved academic achievement is that students who are learning cooperatively are more active participants in the learning process (Lord, 2001). Gupta & Pasrija (2011) revealed Cooperative Learning as an efficient technique to convert students into active learners in classrooms and it makes teaching-learning more satisfying, momentous, enjoyable and effective. In the field of language, cooperative learning values the interactive view of language, which is known as developed combination of structural and functional views of language. It considers knowledge of appropriate use of language and the ability to structure discourse interactions.

Cooperative learning sees language as a tool of social relations. Students are provided with authentic context for negotiation of meaning through using the language. Cooperative learning facilitates and deepens learning. It results in higher levels of understanding and reasoning, the development of critical thinking, and the increase in accuracy of long – term retention. Cooperative learning is beneficial for second language learners in a number of ways. Small group work enriches the language classroom with comprehensible, developmentally appropriate, redundant, and somewhat accurate input as described by Krashen (1988) as well as promoting frequent, communicative, and referential classroom talk in a supportive, motivating, and feedback-rich environment.

Furthermore, Olsen and Kagan (1992) maintained that cooperative learning offers three major benefits relative to (a) providing a richness of alternatives to structure interaction among students, (b) addressing content area learning and language development needs within the same organizational framework, and (c) increasing opportunities for individualized instruction. McDonell (1992) argued that the cooperative classroom is well-suited for second language learners as it enables them to communicate, collaborate, problem-solve, and think critically. Studies have shown that cooperative learning provides better learning opportunities. It will increase language practice opportunities for participants, promote positive affective climate, and motivate learners. On the other hand, it is widely recognized that reading plays an important role in improving the comprehensive language competence in English learning and is regarded as the core and focus of English teaching. Therefore, English reading counts for a big proportion in English learning. Thus we should take cooperative learning into English reading class.

## **COOPERATIVE LEARNING AND READING SKILL**

Reading is one of four language skills that has important role for the students. One's academic success has a strong correlation with reading. One who has a good achievement in classroom usually like to reading. That is the reason why the reading ability should be built as early as possible. In reading, learners are actively responsible for making sense and catch the ideas of the texts. Reading has different way in interaction with the readers because the writer is not available. That interaction will see in getting all the information from the writer. Brown (1982) says that a person must be able to understand what the author writes in order to be an effective reader. It means that the readers have to catch the information which writer writes so that it can be seen the benefits in doing reading. Academically, reading is one of the most important skill. Reading can be defined as the ability to get understanding from written text. L2 reading can best be understood as a combination of skills and abilities that individuals bring to bear as they begin to read (Grabe, 1991). Reading skill is assumed to be improved and enhanced by means of the application of the cooperative learning techniques. Reading comprehension was also seen as the construction of the meaning of a written text through an interaction between

the reader and the text. Jacobs and Hannah (2004), in integrating cooperative learning techniques with reading aloud, found that not only can they promote language learning, but they also promote active citizenship. Apple (2006) holds that cooperative techniques make EFL learners to be more active in the language classroom. Cooperative learning allows them to use language in different ways.

Cooperative learning creates more effective classroom climate in which collaboration towards a common goal plays an important role in emotional and linguistic development. In much the same vein, Faryadi (2007) compared the effect of cooperative learning with individual learning and concluded that cooperative learning enhances learner's emotional and social performance and improves their academic accomplishment dramatically. In addition, Adeyemi (2008) found that students exposed to cooperative learning strategies performed better than their counterparts in the other groups. Stevens et al. (1987) observed on achievement test reading comprehension, language expression, and language mechanics scale, CIRC students gained significantly more than control students, averaging gains of almost two-thirds of a grade equivalent more than control students. Ames and Murray (1982) also found that students working in cooperative groups experienced the so called 'process gain', that is, new solutions and ideas result from the group cooperative effort of sharing and generating information. This type of gain does not occur when students work individually. Reading can't separate with writing. Good reading texts provide good models for writing, and provide opportunities to introduce new topics and to study language (vocabulary, grammar and idioms). Co-operative Integrated Reading and Composition (CIRC) as one of the main task types advocated by CL proponents is an effective means of reaching satisfying conclusions with reading.

## COOPERATIVE INTEGRATED READING & COMPOSITION (CIRC)

CIRC is a comprehensive approach to instruction in reading, composition, and spelling for upper grades of elementary level. In CIRC Reading, students are taught in reading groups and then return to mixed ability teams to work on a series of cooperative activities, including partner reading, making predictions, identification of characters, settings, problems and problem solutions, summarization, vocabulary, spelling and reading comprehension exercises. CIRC provides a structure to help teachers and students succeed in helping all students become effective reader. Ziba Javadi Rahvard (2010) validates the effect of cooperative learning on the reading comprehension performance in EFL classes. Arthy (2012) investigated the relative effectiveness of Small Group Interaction Techniques in Enhancing Reading Comprehension Skills and concluded that cooperative learning to be an effective method for improving reading comprehension. The purpose of the present study was to determine the impact of the cooperative learning strategy; Cooperative Integrated Reading Composition (CIRC) on Reading Comprehension achievement in English among seventh grade students.

The following research objectives were formed to carry out the plan of the study.

- To compare the mean achievement scores of two groups Experimental (E) and Control (C) in English Reading Comprehension of seventh graders to be taught through co-operative learning strategy CIRC and conventional method before experimental treatment.
- To compare the mean achievement scores of two groups (E and C) in English Reading Comprehension of seventh graders taught through co-operative learning strategy CIRC and conventional method after experimental treatment.

- To compare the mean gain achievement scores of two groups (E and C) in English Reading Comprehension of seventh graders taught through cooperatives learning strategy CIRC and conventional method.

## HYPOTHESES

- H<sub>01</sub>:** There is no significant difference in the mean achievement scores of two groups (E and C) in English Reading Comprehension of the seventh graders taught through co-operative learning strategy CIRC and conventional method before experimental treatment.
- H<sub>02</sub>:** There is no significant difference in the mean achievement scores of two groups (E and C) in English Reading Comprehension of the seventh graders taught through co-operative learning strategy CIRC and conventional method after experimental treatment.
- H<sub>03</sub>:** There is no significant difference in the mean gain achievement scores of two groups (E and C) in English Reading Comprehension of the seventh graders taught through co-operative learning strategy CIRC and conventional method.

## METHODOLOGY

The present study used a pretest-posttest method as a basis for its design and was carried out in a 8-week time period. Both groups were equated on the basis of socio-economic status & intelligence. As measuring tools, Reading Comprehension Achievement test in English was administered to students, as both a pretest and a posttest.

## SAMPLE

A sample of 140 students was selected through random sampling technique. All the 140 students were divided and formed experimental group (E) and control group (C). Students, who belong to middle strata of socio-economic status and are of moderate intelligence level were taken for the present study.

## TOOLS USED

- **General Intelligence Test (GIT) by Mohsin** was used to measure the intelligence of students. It is verbal intelligence test made for students of age group 9-15 years. It consists of 156 items under 6 sub-tests. These items pertain to logical reasoning, analogies, similarities, odd-one out and language ability. The time limit for this test is 40 minutes. The reliability of the test by split-half method is 0.95 and by test-retest method is 0.89. The validity of this scale was determined by finding correlation of scores with those on the standardized tests.
- **Socio-Economic Status Scale (SESS) by Kalia and Sahu** was used to measure the socio-economic level of students. The reliability calculated by test-retest method was found to be 0.89. For determining the validity, correlation of scores on this scale with other standardized scale was found to be 0.85.
- **Reading Comprehension Achievement Test:** To measure Reading Comprehension achievement in this study, the investigators developed a Reading Comprehension achievement test. The items in this test were determined according to the lessons of prose. The coefficient of reliability of the test measured by test-retest method was 0.90. The test was found to possess high content validity.

- **Instructional Material:** Co-operative Learning Lesson Plans, Worksheets, and Formative Tests in English were developed by the investigators to execute the Instructional Treatment. All the instructional material was subjected to two types of evaluation, self evaluation and expert appraisal. Self evaluation was carried out to check the relevance of the content matter to the objectives of the study. In the expert appraisal, comments and suggestions of subject Experts were taken. All the experts had a close agreement that selected content matter was according to objectives of the study.

## PROCEDURE

The whole experiment was conducted in the three phases.

### Pre Phase

In this phase, students were administered to intelligence test and socio-economic status. After that all the students of two groups (E, and C) were administered achievement test in reading comprehension in English developed by the investigator.

### Treatment Phase

In this phase, all the students of experimental group were taught English through co-operative learning strategy CIRC and students of control group were taught through conventional method for eight weeks. In the present study, the independent variable instructional treatment was varied at two levels as shown below:

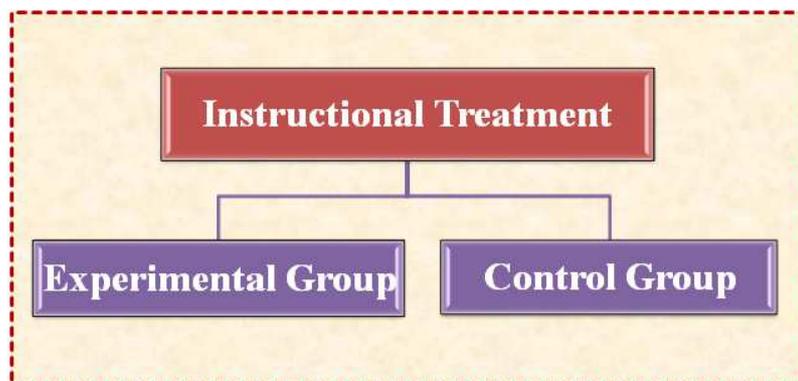


Figure 1: Instructional Treatment and its Levels

### Post Phase

In this phase, all the students of all the two groups were again administered through achievement test in reading comprehension in English to know the effect of co-operative learning strategy CIRC on their achievement. A comparison was made to study the effect of instructional treatment on scholastic achievement in Reading comprehension in English of seventh grade students in relation.

### Statistical Techniques Used

- Means and S.D.'s were worked out on the Reading Comprehension achievement scores.
- t-test was applied to compare the performance of two groups.

### Data Analysis and Interpretation

The present experiment was conducted to examine the impact of co-operative learning strategy CIRC on the Reading Comprehension Achievement performance among the seventh graders. The objectives of the study were to compare the mean pre-test achievement scores, mean post-test achievement scores, mean gain achievement scores of the two groups (E and C) of seventh graders. t-test was applied on the Reading Comprehension Achievement scores and the results have been given in Table 1. The mean pre-test achievement scores, mean post-test achievement scores and mean gain achievement scores are presented graphically in figure 2 respectively.

**Table 1: 't'-Values for Mean Achievement Scores in English Reading Comprehension for Experimental (E) and Control (C) Group**

	Group	N		Mean		S.D.		't'- value
Pre-Test Achievement Scores	E vs C	70	70	19.03	18.93	2.10	1.83	0.80 (NS)
Post-Test Achievement Scores	E vs C	70	70	38.44	30.17	3.43	2.25	17.22**
Gain Achievement Scores	E vs C	70	70	19.9	12.92	2.79	2.49	15.86**

NS=Not Significant \*\* Significant at 0.01 level

't'-value (0.80) vide Table 1 for the difference in pre-test scores of the two treatment groups was found to be not significant. Thus hypothesis  $H_{01}$  'There is no significant difference in the mean Reading Comprehension achievement scores of two groups (E and C) in English of the seventh graders taught through co-operative learning strategy CIRC and conventional method before experimental treatment' stands retained. It leads to the conclusion that there is no significant difference in the mean Reading Comprehension achievement scores of the two groups (E and C) i.e. initially Experimental Group and Control Group were similar in their performance.



**Figure 2: Mean Achievement Scores in English Reading Comprehension for Experimental (E) and Control (C) Group**

It is evident that 't'-value (17.22) vide Table 1 for the difference in mean Reading Comprehension achievement scores of Experimental Group and Control Group in post-test is highly significant at 0.01 level which reveals that Experimental Group performed better than Control Group in post-test on Reading Comprehension achievement in English. Thus hypothesis  $H_{02}$  'There is no significant difference in the mean Reading Comprehension achievement scores in English of two groups (E and C) of the seventh graders taught through co-operative learning strategy CIRC and conventional method after experimental treatment' is rejected. Thus the subjects exposed to co-operative learning strategy CIRC of

teaching scored higher than the subjects taught by conventional method of teaching. It can be concluded that CIRC method is more effective than conventional method in raising the Reading Comprehension achievement in English.

It can further be depicted from the Table 1 that 't'- value (15.86) for the difference in the mean gain Reading Comprehension achievement scores of students of Experimental Group and Control Group is significant at 0.01 level. Thus hypothesis  $H_{03}$  'There is no significant difference in the mean gain Reading Comprehension achievement scores of two groups (E and C) in English of the seventh graders taught through co-operative learning strategy CIRC and conventional method' is rejected. The findings that students instructed through co-operative learning achieved higher score than those instructed through traditional methods are in tune with conclusions drawn by various researches abroad as well as within the country. Whicker et al. (1997) investigated that students in co-operative learning group had significant higher test scores than students in the comparison group. Collins and Elbedour (2003) revealed the positive effects of co-operative learning groups while Thangarajathi and Viola's (2007) also concluded that positive and significant difference was found in the favour of co-operative learning method.

Mehra and Thakur (2008) reported that co-operative learning yielded positive effects on achievement and retention. Mohammadi and Salimzadeh (2009) investigated the effects of cooperative learning strategy training on reading comprehension and found statistically significant differences between control and experimental groups. Similarly Kaul (2010) also revealed that co-operative learning method is more effective than traditional teaching methods. Chabra and Tabassum (2010) revealed about efficacy of the co-operative learning as knowledge building situations in the Indian higher education classroom whereas Topping, Thurston, Tolmie, Christie, Murray and Karagiannidou (2011) established that use of co-operative learning increases pupil formulation of propositions, explanations.

Wenjing Zuo (2011) revealed the positive effects of cooperative learning on improving college student's reading comprehension. Isfatul, Yeni (2012) also examined the effect of Implementation of Cooperative Integrated Reading and Composition Technique to Teach Reading Narrative Text at Eleventh Grade and found its positive effects on student's reading skill. Gupta & Pasrija (2012) revealed the positive effect of co-operative learning strategy STAD on the Mathematical achievement and retention among students.

## CONCLUSIONS

- No significant difference was found in the Reading Comprehension achievement scores of experimental group and control group of seventh graders in English to be taught through co-operative learning strategy CIRC and conventional method before experimental treatment.
- The post-test Reading Comprehension achievement scores in English of experimental group and control group of seventh graders differ significantly in favour of experimental group. This implies that students who are taught English through co-operative learning strategy CIRC show significant improvement in their Reading Comprehension achievement than the students who received instructions through conventional method.
- The mean gain Reading Comprehension achievement scores in English of experimental group and control group of seventh graders differ significantly in favour of experimental group. This suggests that students who are taught English through co-operative learning strategy CIRC benefited more in their Reading Comprehension achievement than the students who received instructions through conventional method of teaching.

Cooperative Learning is an effective technique to implement into reading classes. This student-centered approach changes the one-way operation in traditional classroom and creates harmonious atmosphere by establishing active cooperation among students.

It provides EFL learners with opportunities to acquire a foreign language through group interaction and discussion where their stress will be reduced by working in small groups and their motivation to learn will be enhanced greatly. The change from passive reception into active cooperation and exploration arouses their interest and involvement in classroom activities to improve their reading competence as well as their language skills.

### **Educational Implications**

Changing from traditional competitive classroom to a co-operative one does not slow down student's achievement, but significantly improves achievement as it is evident from the findings of the study. Co-operative learning strategies provide teachers with effective ways to respond to diverse students by promoting Reading Comprehension achievement. In the present study, co-operative learning strategy CIRC was found more effective than conventional method of teaching with respect to student's Reading Comprehension achievement in English.

Co-operative learning strategies prove practical and more acceptable to students. Sometimes students are not able to understand what teacher is explaining to them due to some reasons and they don't ask again due to hesitation. But in groups, they can get explanation of the same topic in simple words and attain greater achievement and important skills such as critical thinking, creative problems solving and synthesis of knowledge can easily be accomplished through co-operative group activities. Inculcating a cooperative environment in the classroom teaches children how to work as a team, and also shows them that learning is much more fun when everyone shares in it. A conducive environment with no threat of competition will allow the child to blossom and achieve his full potential in a relaxed atmosphere. Thus we need to evolve strategies to make the teaching-learning process productive with healthy.

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