

# The Effect of Cooperative Integrated Reading and Composition Strategy towards Reading Comprehension at Tenth Grade Students of Vocational High School 1 Muaro Jambi

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**Abstract:** The purpose of this research is to find out the effect of Cooperative and Integrated Reading and Composition Strategy toward student reading comprehension at tenth grade students of Vocational High School 1 Muaro Jambi. The research design in this research was quantitative research design with experimental research approach. The population of this research was tenth grade student and the sample were class XTKJ 1 and XTKJ 2 with simple random technique. The research instrument was test with multiple choice test. The data collection was pre-test, treatment and post-test. The data analysis in this research by using t-test formula. The result of the research was found that the students' ability in reading comprehension in experimental class got mean score 43,85 in pre-test with the maximum score 55 and the minimum score was 30. While in post-test the students got mean 70,14 with the maximum score 60 and the minimum score 85. Then, in control class the students got mean 46,42 in pre-test with the maximum score 55 and the minimum score was 30. While in post-test the students got mean 76,00 with the maximum score 65 and the minimum score was 55. Based on the statistical computation t-test was found that the coefficient of observation = 2,270, where the coefficient of t-table = 1,995. It means that there was significant effect of using Cooperative Integrated Reading and Composition (CIRC) technique. It was indicated that  $H_a$  was accepted and  $H_0$  was rejected. In addition, there is effect of using Cooperative Integrated Reading and Composition (CIRC) technique towards student reading comprehension mastery.

**Keywords:** Reading Comprehension, Cooperative Learning Strategy

**Abstrak:** Tujuan dari penelitian ini adalah untuk mengetahui pengaruh Strategi Cooperative and Integrated Reading dan Composition terhadap pemahaman bacaan siswa kelas X SMKN 1 Muaro Jambi. Rancangan penelitian dalam penelitian ini adalah rancangan penelitian kuantitatif dengan pendekatan penelitian eksperimen. Populasi penelitian ini adalah siswa kelas X dan sampelnya adalah kelas XTKJ 1 dan XTKJ 2 dengan teknik acak sederhana. Instrumen penelitian berupa tes dengan tes pilihan ganda. Pengumpulan data berupa pre-test, treatment dan post-test. Analisis data dalam penelitian ini dengan menggunakan rumus uji-t. Hasil penelitian ditemukan bahwa kemampuan siswa dalam membaca pemahaman di kelas eksperimen mendapat nilai rata-rata 43,85 pada pre-test dengan nilai maksimal 55 dan nilai minimal 30. Sedangkan pada post-test siswa mendapat rata-rata 70,14 dengan skor maksimal 60 dan skor minimal 85. Kemudian pada kelas kontrol siswa mendapatkan mean 46,42 pada pre-test dengan skor maksimal 55 dan skor minimal 30. Sedangkan pada post-test siswa mendapatkan rata-rata 76,00 dengan skor maksimum 65 dan skor minimum 55. Berdasarkan perhitungan statistik t-test diperoleh koefisien observasi = 2,270, dimana koefisien t-tabel = 1,995. Artinya ada pengaruh yang signifikan dari penggunaan teknik Cooperative Integrated Reading and Composition (CIRC). Hal ini menunjukkan bahwa  $H_a$  diterima dan  $H_0$  ditolak. Selain itu, ada pengaruh penggunaan teknik Cooperative Integrated Reading and Composition (CIRC) terhadap penguasaan membaca pemahaman siswa.

**Kata kunci:** Pemahaman Membaca, Strategi Pembelajaran Kooperatif

## INTRODUCTION

Reading is one of the four basic English skills in teaching and learning process as a foreign language. Speaking and writing Reading is a process where a person can learn, such as the introduction of symbols or words to become spoken language. Thus, reading is one way to get written information. Ngabut (2015) states that reading is a complicated process. Further, reading is a complex behavior, which is involving conscious and unconscious use of several strategies, that's include problems solving strategies, and to build a model of the meaning (Zainudin, 2015). Thus, reading is one of the English skills of recognizing and understanding written language in the form of sequences and its transformation into meaningful speech, either as a silent comprehension or by reading aloud.

Therefore, according to Nanda (2019) reading comprehension has been considered a predominant problem for vocational high school students in Indonesia. Moreover, Indonesian vocational high school students often have difficulties in reading comprehending of English texts well. The first leading factor of students poor reading comprehension is the lack of motivation, which is students are not interesting in

conducted reading activities due to their learning process. In other words, the students have less motivation to analyze reading passages since they rarely deal with activities in their learning process. Besides, they merely intend to read English texts if teachers give students the assignments.

In contrast to the condition explains above, the newest curriculum of Indonesia, the Curriculum 2013 (K-13) under the Regulation of Ministry of Education and Culture (2013) requires the Indonesian students in the vocational high school level to comprehend several important English texts effectively. Further, in an attempt to apply with the assigned instruction above, this research offers a possible model to deal with poor reading comprehension issue among Indonesian vocational high school students, namely the Cooperative Integrated Reading and Composition (CIRC).

CIRC technique is developed to support traditionally used “skill-based reading class approach. First, reading class are established in the classroom during the process of teaching and learning. Then, the students are paired off within the class. Next, when the teacher works with a reading class, couples try to teach each other meaningful reading and writing skills by using reciprocal learning technique. The students help each other in performing basic skill-building activities (such as oral reading, revising-correcting composition, contextual guessing, summarizing, asking questions, writing a composition based on the story)

In addition, the CIRC technique might be advantageous to address students’ poor reading comprehension issue since it is believed as one of the possible techniques that can be applied to deal with two adverse effects of poor reading comprehension issues which are delineated previously, decreasing learners’ achievement and hindering problem-solving skills (this instance will be elaborated in detail in the literature review part).

## **REVIEW OF RELATED LITERATURE**

### **Reading Comprehension**

Reading is an activity that is carried out by the reader to find out a message conveyed by the reader in a work in the form of written media. When reading, usually sometimes the meaning is explicit. Reading is also an activity or process to obtain information. However, Dijk and Kintsch (1983) in Souburi (2016), defined that reading comprehension as the process of creating meaning from text. The purpose is to get an understanding of the text rather than to acquire meaning from individual words or sentences. Reading is rapid, which means that readers should maintain flow of information at a sufficient rate to make connections and inferences vital to comprehension.

Furthermore, Miller (1990) explains that reading is a process of communication of ideas from one person to another through the medium of writing or printing to seek the ideas behind words. Therefore, reading is very important skill that apply in learning English. Reading comprehension is defined as the activity of extracting and fostering the meaning simultaneously by using engagement and interaction with written language of a text (Nanda, 2019). Therefore, reading comprehension is considered as the process of establishing meaning by coordinating various complex processes, there are a fluency and word reading. Brown (2004), states that seven indicators in reading comprehension which are needed by the students to understand and comprehend the given English texts effectively. These seven indicators are: 1) Main idea, 2) Expression/idiom, 3) Grammatical features, 4) Detail, 5) Excluding fact, 6) Supporting detail, 7) Vocabulary in the context.

### **Cooperative Learning Strategy**

Cooperative learning is a learning strategy designed to educate and strengthen interactions students especially in cooperation between class.in its implementation, this learning method will help students to be more trustworthy of information. Cooperative learning methods have many savings benefits implemented. Among others: 1. Encourage students to be able to express their ideas and compare these ideas with those they have, 2. helps avoid differences between smart students and weak students, 3. can help teachers find sources of information from other sources and also learn from students.

Acording to Slavin (1985), Cooperative learning model are structured, systematic instructional strategies capable of being used at any grade level and in most school subjects. It is one of the good strategies in teaching and learning English at classroom. Furthermore, the positive effects of cooperative learning model on student achievement appear just as frequently in elementary and secondary schools; in

urban, suburban, and rural schools; and in subjects as diverse as mathematics, language arts, social studies, and reading.

### **Cooperative Integrated Reading and Comprehension**

Cooperative integrated reading is one of the learning models where participants are educated to be shared to become a few classes to increase the skills of understanding in reading many cooperative learning models used in a learning, one of the learning models that are applied is the cooperative integrated reading and composition (CIRC).

Thus, (Singh, 2011) Explain that, Cooperative learning is the learning process in which individuals learn in a small class with the help of each other. Cooperative learning gives importance to cooperation as against our present educational system, which is based on competition. In general, team books are published at the end of this process..

According to Durukan (2010) mention that, CIRC technique is developed to support traditionally used "skill-based reading class approach that: First, reading class are established in the classroom. Second, students are paired off within the class. Third, When the teacher works with a reading class, couples try to teach each other meaningful reading and writing skills by using reciprocal learning technique. Further, Agrawall & Nagar (2011) state that , the program consists of three principal elements, Namely: 1) Basal related activities, 2) Direct instruction in reading comprehension, 3) Integrated language arts/writing.

### **RESEARCH METHODOLOGY**

This research is categorized as quantitative research design. According to (Creswell, 2008), quantitative research is a means for testing objective theories by examining the relationship among variables. Furthermore, experimental method is the appropriate method for collecting data and analyzing data to explore the strength of relationships between variable.

This research is used simple random sampling. The sample of this research are tenth grade students of vocational high school 1 Muaro Jambi The classes were X TKJ 1 and X TKJ 2, X TKJ 1 consisting of students has been taught by using Cooperative Integrated Reading and Composition (CIRC) technique includes 30 students and X TKJ 2 students has been taught without using Cooperative Integrated Reading and Composition (CIRC) technique includes 30 students.

The research instrument was the test with multiple choice test. Test is a set question used to measure the achievement or capability of individual class. This research administrated twice: namely, pre- test and post- test.

Technique of data collection was pre-test, treatment and post- test. Experimental classs was the class that received treatment by Cooperative Integrated Reading and Composition technique, while the control class was the class that did not receive treatment without using Cooperative Integrated Reading and Composition technique.

Technique of data analysis in order to find out the difference means of scores of both experimental and control class, t-test was used. Arikunto showed the formula below:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right) \left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

Source :( Arikunto:2013)in wilda ardianti

Where:

t: the effect

Mx: the mean of experimental class

My: the mean of control class

dx2: standard deviation of experimental class

### **FINDINGS AND DISCUSSIONS**

This research introduced and applied the Cooperative Integrated Raading and Composition (CIRC) technique to the students with the several steps namely pre-test, treatment, and post-test. This research was

given pre-test, the research gave test for student. Each test has 5 points, after this research gave the pre-test, this research gave the treatment in several meetings. Then, this research gave a post-test at the last meeting. Regarding to the calculation of pre-test and post-test can be seen in the table bellow

**Table 1. The Result of Pre-test and Post Test of Control Class**

No	Name	Pre- Test Score	Post- Test Score
1	STUDENT 1	40	60
2	STUDENT 2	35	75
3	STUDENT 3	45	85
4	STUDENT 4	50	65
5	STUDENT 5	55	70
6	STUDENT 6	55	70
7	STUDENT 7	55	80
8	STUDENT 8	45	70
9	STUDENT 9	40	70
10	STUDENT 10	45	70
11	STUDENT 11	45	70
12	STUDENT 12	40	70
13	STUDENT 13	35	65
14	STUDENT 14	30	60
15	STUDENT 15	30	60
16	STUDENT 16	55	85
17	STUDENT 17	55	85
18	STUDENT 18	30	65
19	STUDENT 19	30	65
20	STUDENT 20	45	75
21	STUDENT 21	45	70
22	STUDENT 22	45	70
23	STUDENT 23	45	60
24	STUDENT 24	45	65
25	STUDENT 25	55	80
26	STUDENT 26	50	70
27	STUDENT 27	50	75
28	STUDENT 28	55	75
29	STUDENT 29	40	70
30	STUDENT 30	45	60
<b>Total Score</b>		1595	2455

Based on the table above, the total score in control class of pre-test was 1595 and the total score of post-test was 2445. The lowest and the highest scores of pre-test in experimental class were 30 and 55, while in the post-test 60 and 85. Further, it can be seen that the score of post-test in control class is higher than the score of its pre-test

**Table 2. The score of pre-test and post-test in Experimental Class**

No	Name	Pre- Test Score	Post- Test Score
1	STUDENT 1	35	70
2	STUDENT 2	35	65
3	STUDENT 3	40	75
4	STUDENT 4	50	75
5	STUDENT 5	50	75
6	STUDENT 6	50	80
7	STUDENT 7	55	80
8	STUDENT 8	55	80
9	STUDENT 9	35	60
10	STUDENT 10	45	80
11	STUDENT 11	45	75
12	STUDENT 12	40	80
13	STUDENT 13	30	65
14	STUDENT 14	45	75
15	STUDENT 15	45	75
16	STUDENT 16	55	80
17	STUDENT 17	55	80
18	STUDENT 18	50	85
19	STUDENT 19	55	85
20	STUDENT 20	45	85
21	STUDENT 21	45	75
22	STUDENT 22	45	80
23	STUDENT 23	45	80

24	STUDENT 24	45	75
25	STUDENT 25	55	75
26	STUDENT 26	55	70
27	STUDENT 27	30	60
28	STUDENT 28	40	70
29	STUDENT 29	45	75
30	STUDENT 30	45	75
<b>Total Score</b>		1625	2660

Based on the table 5 above, the total score in experimental class of pre-test was 1625 and the total score of post-test was 2660. The lowest and the highest scores of pre-test in experimental class were 30 and 55, while in the post-test 60 and 85. Therefore, it can be concluded that the score of post-test in experimental class is higher than the score of its pre-test

Based on the result of the data, this research calculated the hypothesis test. It was analyzed by applying t-test formula.

$$T = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

$$t = \frac{25,1 - 29,2}{\sqrt{\left(\frac{2324,3 + 1557,2}{35 + 35 - 2}\right)\left(\frac{1}{35} + \frac{1}{35}\right)}}$$

$$t = \frac{-4,1}{\sqrt{\left(\frac{3881,5}{68}\right)\left(\frac{2}{35}\right)}}$$

$$t = \frac{-4,1}{\sqrt{\left(\frac{7763}{2380}\right)}}$$

$$t = \frac{-4,1}{\sqrt{3,2617}}$$

$$= t = \frac{-4,1}{1,806}$$

$T_{table} = N - 1$   
 $= 35 - 1$   
 $= 34 = 1,995$   
 $2,270 > 1,995$

Thus, there is significant effect of students reading comprehension after conducting the research and analyzing the data from the test and students' score of pre-test and post-test. Based on the result of the calculation above, it was found that the students' ability in reading comprehension when this research taught by using Cooperative Integrated Reading and Composition (CIRC) got mean score 43,85 in pre-test with the maximum score 55 and the minimum score was 30. While in post-test the students got mean 70,14 with the maximum score 60 and the minimum score 85.

In addition, the effect of student in reading comprehension when this research taught without using Cooperative Integrated Reading and Composition (CIRC) got mean 46,42 in pre-test with the maximum score 55 and the minimum score was 30. While in post-test the students got mean 76,00 with the maximum score 65 and the minimum score was 55. Based on the statistical computation t-test was found that the coefficient of observation = 2,270, where the coefficient of t-table = 1,995. It means that there was significant effect of using Cooperative Integrated Reading and Composition (CIRC) technique. It was indicated that Ha was accepted and H0 was rejected.

## **CONCLUSIONS**

Based on the research finding and discussions, this research concluded that there was a significant effect of Cooperative Integrated Reading and Composition (CIRC) technique towards students reading comprehension mastery at tenth grade student. The total scores of experimental class in pre-test ( $\sum X1$ ) = 1625 and the total scores of experimental class in post-test ( $\sum X2$ ) = 2660. It means the score of experimental class increased 2660 points. The total scores of control class in pre-test ( $\sum Y1$ ) = 1595 and the total scores of control class in post-test ( $\sum Y2$ ) = 2455. It means there is effect of using Cooperative Integrated Reading and Composition (CIRC) technique towards student reading comprehension mastery.

The use of CIRC in teaching reading activities proves an effective way to improve the students' reading comprehension. It shows that the students are easier to understand the content of the text. The students become more active in reading activities. They enjoy in joining the lesson. They are more interested, enthusiastic, and active during the teaching and learning process. Therefore, it implies that CIRC can be used as one of alternative technique that is effective in teaching learning English especially in reading at tenth grade students of vocational high school.

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