

# Improving Students' Reading Comprehension by Using CIRC (Cooperative Integrated Reading and Composition)

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## **Abstract**

*The reading competence of Indonesian students is unsatisfactory caused by the inappropriate teaching technique. Reading is a complex cognitive activity so that it needs an appropriate technique in teaching. The objective of this study is to measure the use of Cooperative Integrated Reading and Composition (CIRC) technique to improve students' reading comprehension. The subject of the study were 35 numbers of 11<sup>th</sup> graders of vocational school students. The findings showed that the average of the pre-test and post-test scores were 67.4 and 88.03. The improvement calculation was found 0.632 which was categorized as medium. The calculation of applying the t-test was on rejection area of Ho, showed that the post-test was better than the pre-test. According to the data analysis, the researcher concluded that teaching reading by using CIRC technique is applicable since it helps the students to improve their reading comprehension.*

**Key words:** *CIRC technique, teaching technique, reading comprehension.*

## **Introduction**

English is one of the international languages which is very important to be mastered by most people. In Indonesia, it has been taught in schools from elementary school up to higher education. There are four skills that should be mastered by the students, they are listening, speaking, reading and writing. In fact, the reading competence of Indonesian students is unsatisfactory. One of the causes is the inappropriate teaching technique.

Reading as one of the four language skills is considered to be important for the students in learning English. In order to improve their English vocabulary, they have to read many English texts. Students also should practice more to read English texts as extensively as possible so that they are able to read better and faster. That is why reading is keenly taught in Indonesia.

Based on the recent curriculum, students are expected to understand and respond the meaning of the monolog text or essay accurately, fluently and

acceptably in daily life and to access the knowledge. Through the teaching and learning of reading, the students are expected to be able to comprehend the reading passage they read.

The researcher found that there are some problems when teaching reading in SMK Muhammadiyah 1 Wonosobo. The problems are the students' often find difficulties in finding general information, identifying main idea and specific information, the students' motivation in studying English is low, the students' are hardly able to understand the meaning of words and the relationship among them contained the text and also their vocabulary is poor. It is proof in students' learning mastery.

Based on the observation in the classroom of SMK Muhamadiyah 1 Wonosobo, the researchers found that the students found difficulties in comprehending the text. Students also have less motivation in learning English. The minimum grade of English subject is 68, but in a fact 23 students of 34 students got low marks (under learning mastery) in daily tests and semester test, based on written evidence (grade list). They made a lot of mistakes when answering the questions, finding the synonym and antonym and finding the main ideas of the reading texts. The difficulty of comprehending the text is one the factors that influence the students' failure in the mastery of reading comprehension. Therefore the teacher should choose an appropriate technique in learning teaching to make the students interested when they learn and finally they will easily master the reading comprehension. The teacher also should be able to create the interesting technique by making different materials as they are still in the area of the theme. The students should be given a lot of reading materials, motivation and chance to study together in reading comprehension.

## **Literary Review**

### **The Techniques of Reading**

Reading is a result of the interaction between the perception of graphic symbols that represent language and readers knowledge of language skills. Reading is not information processing but rather than information interpreting. Reading comprehension is not merely a process of exact identification of letters, words,

and ultimately sentences leading to comprehension built from letter to word to phrase to sentence (Goodman, 1967). Reading is the most crucial skill to master for English learners. Students can usually perform at a higher level in reading. Reading comprehension is the process of understanding the message that the author trying to convey by making meaning from the text at hand (Farris, 2004 on Anwar & Januar, 2018).

The Techniques of Reading, Beare (2008, 25) stated that there are four techniques of reading skill used in every language they are as follows:

1. Skimming

It is used to quickly gather the most important information or “gist” we run our eyes over the text and note important information. It is not essential to understand each word when skimming.

2. Scanning

It is used to find a particular piece of information. We run our eyes over the text and look the specific piece of information we need. We use scanning to find the specific details we require.

3. Extensive Reading

It is use to obtain a general understanding of a subject and includes reading longer text for pleasure. Readers are more concerned with the meaning of the text than the meaning of individual words.

4. Intensive Reading

It is use on shorter texts in order to extract specific information. We use intensive reading skill to grasp the details or a specific situation.

### **The Definition of Cooperative Integrated Reading and Composition (CIRC)**

Cooperative Integrated Reading and Composition (CIRC) is a comprehensive program for teaching reading and writing in the upper elementary grades. Students work in four-member cooperative learning teams. They engage in a series of activities with one another, including reading to one another, making prediction about how narrative stories will come out, summarizing stories to one another, writing responses to stories and practicing spelling, decoding and vocabulary. They also work together to master main ideas and other comprehension skills. During language arts periods, students engage in writing drafts, revising and

editing one another's work and preparing for publication of team books. Some previous studies of CIRC program have found positive effects on students' reading skills, including improved scores on standardized reading and language tests (Anwar & Januar, 2018; Adri & Haryudin, 2019; Azhari, et al, 2019). By applying CIRC, the research reveals that teaching strategies differ significantly from one another in their effect on the students' reading ability (Mubarak & Sofiana, 2017). The application of the model CIRC can improve student learning outcomes, especially reading skills of understanding, showed a considerable increase in value and target indicators in addition to improving learning outcomes also increase the activity of students during the learning process (Azhari, et al, 2019)

According to Slavin (2005, 156) CIRC consists of three important substances, those are based activity, direct teaching to understand the story, and the act integrated of language and writing. In all the activity, the students are working by the heterogenic team. All the activity must be follow the regular cycles which is involve the teacher presentation, exercise team, independent exercise, pre-assessment, and test. The importance substances of CIRC are, Reader group means if the teacher uses the reader group, the students should be divided by the heterogenic ability. It consists of three or four students based on their reading ability who are chosen by the teacher. And the second one is Team, the students are divided in pair or trio in the reading group. Furthermore, they are divided into the team which consists of pairs from two reading groups or level to discuss their reading, to clarify unknown vocabulary, to re-read for fluency, to understand the main idea, to comprehend stories and to work through the writing process.

The reading activity includes of some activities such as:

1. Partner Reading

The members of group are given the task to read the text in rotation. When one of the students read, then the others listen to her/him and evaluate the pronunciation. So, the mistake can be corrected straightly.

2. Story Structure and Related Writing

In this activity students are given a question related to the text which emphasizes on the question related to the generic structure, such as: character, setting,

problem and problem solution. While the activity of reading, students are stopped suddenly to be examined their skill predicting. Finally, students discuss the text read.

a. Word Out Loud

The teacher asks the students in each group to find the difficult words in the text then the teacher lists those words. The students have to imitate loudly the words pronounced by the teacher together.

b. Word Meaning

After finding the difficult words, students have to find actively the meaning of those words, and then they have to build into a sentence even a paragraph.

c. Story re-tell

The teacher asks the students to arrange the summary of the text and then re-tell in group. After finishing all the activity of story re-tell, the teacher and the students discuss about the text to conclude the content of the text.

d. Spelling

Each student has to checks their friends' spelling through the list of words presented at the beginning of learning process. It is better for them to use disappearing list strategy in determining the words given in group.

e. Test

At the end of the activity, students are given the comprehension test about the text and they have to write the meaningful sentences for each vocabulary, they have to read the list of read loudly to the teacher individually. The result of the test and evaluation from each member in one group, to find the mean and the group who has the highest mean is the winner and deserves the reward.

## **Research Methodology**

The study applied experimental research method, where the research subjects were given a pre-test before being given the treatment and giving post-test after the treatment. The researchers carried out this research to find out whether using CIRC technique is effective in improving students' reading comprehension or not. The subject of the research was the second grade students of SMK Muhammadiyah 1 Wonosobo in the Academic Year 2020/2021. The researchers

chose one class as the subject that is XI AKL 1, because the students of this class have low attention and difficulties to comprehend reading text. The total students are 35 people which consist of 10 male and 25 female students. Because of the Covid-19 pandemic, the research was conducted via online by using school academic website and also Google Meeting.

The data in this research was got from test; those were Pre test and post test to the students about the students' comprehension related to the text. The study applied experimental research method, where research subjects were given a pre-test before being given the treatment.

**a. Pre test**

The indicators of pre-test, which was carried out in the form of reading test, were as follows:

| NO | INDICATOR  | ITEMS |
|----|--|-------|
| 1  | Students are able to find the meaning of the word. (Skimming)    | 1, 2  |
| 2  | Students are able to find detail information. (Scanning)         | 3     |
| 3  | Students are able to find the main idea. (Skimming)              | 4     |
| 4  | Students are able to find specific information. (Scanning)       | 5,6   |
| 5  | Students are able to find point of the text. (Intensive reading) | 7     |

In each indicator, the researcher gave score 10 for students who can answer the questions based on the indicator above. So, the students who can answer all questions correctly, they will get score 100.

**b. Post test**

The indicators of post-test, which was carried out in the form of reading test, were as follows:

| NO | INDICATOR  | ITEMS   |
|----|--|---------|
| 1  | Students are able to find the meaning of the word. (Skimming)    | 1, 2, 3 |
| 2  | Students are able to find detail information. (Scanning)         | 4       |
| 3  | Students are able to find the main idea. (Skimming)              | 5       |
| 4  | Students are able to find specific information. (Scanning)       | 6       |
| 5  | Students are able to find point of the text. (Intensive reading) | 7       |

In each indicator, the researcher gave score 10 for students who can answer the questions based on the indicator above. So, the students who can answer all questions correctly, they will get score 100.

## Finding and Discussion

This study was conducted in finding out the use of CIRC technique to improve students' reading comprehension. The data were obtained through the result of the reading test. In gathering the data of this study, there were 2 types of test, they were: pre-test and post-test, conducted in order to get the actual data. The pre-test was given before conducting the treatment. After being given the pre-test, the students were given treatment by using CIRC technique. The post-test was conducted after giving 3 times treatment by using CIRC technique. The pre-test and post-test scores were presented on the following table:

Table 2  
Pre Test and Post Test Score

| PRE TEST |      |       | POST TEST |      |       |
|----------|------|-------|-----------|------|-------|
| NO       | CODE | SCORE | NO        | CODE | SCORE |
| 1        | KT-1 | 65    | 1         | EK-1 | 100   |

|                             |       |             |                             |       |             |
|-----------------------------|-------|-------------|-----------------------------|-------|-------------|
| 2                           | KT-2  | 80          | 2                           | EK-2  | 100         |
| 3                           | KT-3  | 50          | 3                           | EK-3  | 93          |
| 4                           | KT-4  | 55          | 4                           | EK-4  | 75          |
| 5                           | KT-5  | 60          | 5                           | EK-5  | 100         |
| 6                           | KT-6  | 65          | 6                           | EK-6  | 93          |
| 7                           | KT-7  | 85          | 7                           | EK-7  | 93          |
| 8                           | KT-8  | 95          | 8                           | EK-8  | 100         |
| 9                           | KT-9  | 60          | 9                           | EK-9  | 70          |
| 10                          | KT-10 | 75          | 10                          | EK-10 | 100         |
| 11                          | KT-11 | 50          | 11                          | EK-11 | 70          |
| 12                          | KT-12 | 70          | 12                          | EK-12 | 93          |
| 13                          | KT-13 | 60          | 13                          | EK-13 | 100         |
| 14                          | KT-14 | 60          | 14                          | EK-14 | 93          |
| 15                          | KT-15 | 65          | 15                          | EK-15 | 100         |
| 16                          | KT-16 | 75          | 16                          | EK-16 | 70          |
| 17                          | KT-17 | 55          | 17                          | EK-17 | 65          |
| 18                          | KT-18 | 65          | 18                          | EK-18 | 93          |
| 19                          | KT-19 | 75          | 19                          | EK-19 | 70          |
| 20                          | KT-20 | 95          | 20                          | EK-20 | 100         |
| 21                          | KT-21 | 80          | 21                          | EK-21 | 93          |
| 22                          | KT-22 | 50          | 22                          | EK-22 | 70          |
| 23                          | KT-23 | 65          | 23                          | EK-23 | 100         |
| 24                          | KT-24 | 55          | 24                          | EK-24 | 70          |
| 25                          | KT-25 | 85          | 25                          | EK-25 | 93          |
| 26                          | KT-26 | 60          | 26                          | EK-26 | 100         |
| 27                          | KT-27 | 80          | 27                          | EK-27 | 93          |
| 28                          | KT-28 | 75          | 28                          | EK-28 | 93          |
| 29                          | KT-29 | 60          | 29                          | EK-29 | 100         |
| 30                          | KT-30 | 60          | 30                          | EK-30 | 70          |
| 31                          | KT-31 | 70          | 31                          | EK-31 | 100         |
| 32                          | KT-33 | 75          | 32                          | EK-32 | 70          |
| 33                          | KT-27 | 65          | 33                          | EK-33 | 86          |
| 34                          | KT-28 | 60          | 34                          | EK-34 | 100         |
| 35                          | KT-29 | 60          | 35                          | EK-35 | 65          |
| S                           |       | 2360        | S                           |       | 3081        |
| n <sub>1</sub>              |       | 35          | n <sub>1</sub>              |       | 35          |
| $\bar{x}_1$                 |       | 67.428571   | $\bar{x}_1$                 |       | 88.0285714  |
| s <sub>1</sub> <sup>2</sup> |       | 141.7226891 | s <sub>1</sub> <sup>2</sup> |       | 174.8521008 |



|                |             |                |             |
|----------------|-------------|----------------|-------------|
| s <sub>1</sub> | 11.90473389 | s <sub>1</sub> | 13.22316531 |
|----------------|-------------|----------------|-------------|

In order to examine the treatment effect on the students' improvement in reading comprehension by using CIRC technique, the following formula were applied

$$g = \frac{\text{post test average score} - \text{pre test average score}}{100\% - \text{pre test average score}}$$

$$g = \frac{88.03 - 67.42857}{3257.1\%}$$

$$= 0.632$$

Improvement category

High =  $g > 0,7$  or in percentage  $g > 70$

Medium =  $0,3 < g < 0,7$  or in percentage  $30 < g < 70$ .

Low =  $g < 0,3$  or in percentage  $g < 30$

Based on the the above calculation, the improvement of the students' reading comprehension by CIRC technique was categorized as medium.

In order to identify the significant difference between the experimental and control groups, the means of the two groups should be compared. The following are the data of the means difference test.

### Hipotesis

$$H_0 : \mu_1 \leq \mu_2$$

$$H_a : \mu_1 > \mu_2$$

### Hipotesis Test

The following is the hipotesis test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

$H_0$  rejected if  $t > t_{(1-\alpha)(n_1+n_2-2)}$

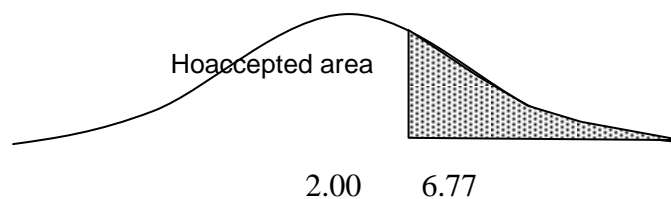
|                        | Post Test | Pre Test |
|------------------------|-----------|----------|
| Score                  | 3081      | 2360     |
| n                      | 35        | 35       |
| —                      |           |          |
| x                      | 88.03     | 67.43    |
| Varians ( $s^2$ )      | 182.3395  | 141.7227 |
| Standard deviation (s) | 13.50     | 11.90    |

Afterwards, the t-test formula was applied to measure the significant difference between the pre-test and post-test as follows:

$$t = \frac{88.03 - 67.43}{\sqrt{\frac{182.33}{35} + \frac{141.722}{35}}} = 6.77$$

The calculation of  $\alpha = 5\%$  with  $dk = 31 + 31 - 2 = 60$ , it was found that

$$t_{(0.95)(48)} = 2.0003$$



Because t count is in the rejection area of  $H_0$ , it can be concluded that the post-test is better than the pre-test.

## Result

Based on the data gathered, the result of average pre-test and the post-test were 67.43 and 88.03 . From this result, it was found that after giving treatment by

applying CIRC technique in teaching reading, there was an upgrading in the average of the students' score into 20.6 points. Based on the scores, it could be seen that the score of the post test is higher than the pre-test. The calculation of the improvement also showed that there's a medium improvement of the students' score. It was also found that there is a relationship between X and Y, which is 6.77. After analyzing the data, it can be concluded that there is a significant difference between the students' reading comprehension before and after treatment using CIRC technique. The results of this study proved that the use of CIRC technique was a good alternative to improve the English writing recount skills of the 11<sup>th</sup> graders of Muhammadiyah Vocational School.

## **Conclusion**

According to the findings, it can be concluded that teaching learning process by CIRC technique is effective to help the students in improving their reading comprehension. There was an improvement of English reading comprehension of the students of SMA Muhammadiyah Wonosobo who are taught by using Cooperative Integrated Reading and Composition (CIRC) technique. In teaching reading the teacher was expected to use Cooperative Integrated Reading Composition technique as one of the alternatives in increasing students' comprehension reading ability. Teacher should prepare the materials needed in teaching English and give more various techniques in the class in order to make the student enjoy to engage the teaching and learning process. The students should be given the various technique in order to be enthusiastic in learning English process to get more and more knowledge and master English well. The students were expected to read English text continuously to improve their ability in comprehending the English text and also enrich their vocabulary.

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