

The Effect of Cooperative Integrated Reading and Composition (CIRC) Technique on Students Reading Comprehension

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Abstract- The aim of this research is to find out the differential effect of teaching technique by using cooperative integrated reading and composition (CIRC) and traditional teaching technique on students reading comprehension. The population of the study is the 8th grade students of Junior High School which consist of 187 students and the sample was taken by cluster sampling that consist of 68 students which is divided into experimental and control group. This research is carried by using experimental method and the data was analyzed by using t-test. Result revealed the average score of CIRC technique is 80.76. By using the statistical analysis, the researcher get t_0 is 2.54 where the value of t_{table} is 2.00, it means the value of t_0 observed is greater than the value of t_{table} ($t_0 = 2.54 > t_t = 2.00$). based on the result of the analysis, the alternative hypotesis (H_a) was accepted and null hypothesis (H_0) was rejected. It means that CIRC teaching technique significantly affect students reading comprehension.

Keywords- Cooperative integrated reading and composition (CIRC), students reading comprehension

I. INTRODUCTION

Reading is one of the four language skills that should be mastered by language learners. Reading skill took an important parts in mastering a language, because if someone can not read well, it will be hard to understand the learning material. The aims of teaching English in Junior High school are developing students' competency in oral or written communication in order to get functional literacy information, having the truth and important of English for improving the competences in globalization era and to develop the students' comprehension the relationship between language and social culture.

Understanding or comprehending reading material can be a challenging process, someone can read a text but cannot comprehend the meaning that the text tried to convey. In reading a text or passage, reader may understand each word separately, but linking them together into meaningful ideas often does not happen as it should. These readers can decode the words, but have not developed sufficient skills to comprehend the underlying, deeper meaning of the sentences, the paragraphs, and the entire text.

Developing students reading skills is one of the many purposes of teaching English, but not every students can acquires reading skills at the same rate. In learning reading comprehension, students facing some difficulties, such as: issues with de-coding, poor comprehension and the reading speed. In order to solve those problem and get better result in reading, teacher should use a right technique in teaching reading.

Cooperative integrated reading and composition (CIRC), is one of cooperative teaching technique which is designed to help the students develop metacognitive strategies in comprehending text. CIRC is teaching technique that focus on story-related activities, direct instruction in reading comprehension, and integrated reading and language arts activities. In a team setting, mixed-ability students work together to read, discuss their reading to clarify unknown vocabulary, reread for fluency, understand the main idea, comprehend stories, and work through the writing process linked to the texts that the students are reading (including drafting, revising, and editing one another's writing). Students are rewarded on the basis of the team's performance to provide motivation to work together and help one another.

Based on the explanation above the, the researcher concludes that reading is an important skill that should be mastered in learning English. CIRC teaching technique are expected increase students reading comprehension. That is why the researcher would like to conduct a research which is entitled "The Effect of Cooperative Integrated Reading and Composition (CIRC) on Students Reading Comprehension".

II. REVIEW OF THE LITERATURE

A. Reading Comprehension

Reading comprehension is the product of processes that operate during reading to create a mental representation of the situation described by the text, referred to as a situation model [1]. The resulting mental representation includes information provided by the propositional content of the text that is integrated with the reader's knowledge to provide an evolving understanding of what is read. Reading comprehension is a

process of using syntactic and semantic information found in printed text to reconstruct in the reader's mind [2]. Comprehension refers to the ability to go beyond the words, to understand the ideas and the relationships between ideas conveyed in a text [3]. Effective reading comprehension needs six types of knowledge including semantic knowledge, morphological knowledge, general world knowledge, socio-cultural knowledge, topic knowledge, and genre knowledge[4].

Based on the opinion above the writer concludes that reading comprehension is the process of getting the ideas and the messages that conveyed by the text. The use of effective reading comprehension strategies is the most important means to help readers improve comprehension and learning from text.

Analyzed narrative, social studies, and science texts by sampling from materials appropriate for students from the early primary to the late secondary grades. Narrative texts had challenging words and lexical complexity compensated for increasing sentence complexity with increasing grade. In contrast, social studies texts were found to have high lexical difficulty, high sentence complexity, and low cohesion. That is, cohesive devices to signal causal and temporal relations were often absent in such texts, making comprehension of and learning from social studies texts particularly challenging for secondary school students. The ability to process, track, and remember temporal relations shows developmental, while science texts had high lexical difficulty due to the use of many topic specific terms and concepts. In addition, they contained more causal and clarification cohesive devices than did social studies texts to cue important relations [5].

The researcher relates the Mc Namara Theories' above with the Junior High School curriculum in Indonesia, and found that narrative text is learned in grade eight of Junior high school class. The researcher put the narrative text as the learning material in teaching reading comprehension taught by CIRC teaching technique.

B. Cooperative Integrated Reading and Composition (CIRC)

Cooperative integrated reading and composition (CIRC) technique, one of the learning techniques based on cooperation, is designed to develop reading, writing and other language skills in the upper grades of primary education [6]. CIRC is a cooperative learning program that involved a series of activities derived from reading comprehension and writing ability [7]. Based on the opinions above the writer concludes that CIRC is a cooperative teaching technique that concern on developing students reading and writing ability.

In this teaching technique, heterogeneous groups work with different reading levels, reading to each other, predicting, practicing spelling and vocabulary. CIRC is a school-based program that targets reading, writing, and language arts. The three principle program elements are direct instruction in reading comprehension, story-related activities,

and integrated language arts/writing instruction. Each student works with another student.

There are some steps of practicing CIRC in the classroom:

- 1) forming a group that consist of 4-5 students that are heterogeneous, 2) teacher gives text or discourse depend on the learning material, 3) students read the text each other and works in group to find the ideas of the text, 4) presenting the discussion result, 5) teacher and the students conclude the learning result together.

Durukan presents some steps in implementing CIRC technique in classroom [8]:

1. Introduction by teacher: Firstly of all, teacher shares basic information with classroom.
2. Group work: 4 or 5 student groups were established. Worksheets and other materials prepared by teacher were handed out to group members. Depending on the content of the work, students can collectively answer the questions and answers can be checked by each member and conveyed to other groups. Other members also control the answers and the process continues this way.
3. Assessment: Depending on the features of the selected technique, skills or information learnt by students in relation to course content are assessed by students individually or cooperatively.
4. Detection of successful groups: Individual and group assessment of the student scores are entered on a group scoreboard and the resulting scores are summed. The group with the highest final score is rewarded.

The aim of this study is to find out the differential effect of teaching technique by using cooperative integrated reading and composition (CIRC) and traditional technique on students reading comprehension.

The researcher hypothesized that there is a significant differential effect of teaching technique by CIRC and traditional teaching technique on students reading comprehension.

III. RESEARCH METHOD

A. Research Method

Experimental quantitative method was applied in the present study. Experiment is a scientific investigation in which the researcher manipulates one or more independent variable, control any other relevant variable(s) [9]. This research was conducted to find out the differential effect of teaching technique with CIRC and traditional teaching technique on students' reading comprehension. In conducting the research the writer made two groups. The first group is the experimental groups, while the second group is the control group. the first group is reading comprehension taught by using CIRC technique, and the second group is reading comprehension taught by traditional teaching technique. the researcher use control pre- test and post- test as design of the research.

Participants were 68 of eighth grade students of junior high school named SMP Negeri 3 Padang Bolak, recruited by using cluster sampling. Total population is 173 students. Data collection was carried out by using test, the writer administered 5 oral test and 15 multiple choice tests. The experimental and controls group taught by using the same material about reading comprehension. After collecting the data, the data were analysis by using descriptive analysis and inferential analysis. To compare the two result of the case such as one – shot case study, the data is analysis by using “t” test.

B. Research Procedure

1. Procedures related to the experimental group

The pre- test are admistered before conducting the treatement to the experimental group. After conducting the pre test, the researcher scoring the students answer. After get the students score, the researcher gives the treatments to the experimental group, the steps of CIRC teachnique in experimental group as follows:

- a. Teacher introduces CIRC method and explain about narrative text
- b. Teacher divided students into groups consists of eight groups taking into consideration various student characteristics such as sex, achievement, interest, skills, age and culture.
- c. Students accept the passage of narrative (Beauty and The Beast)
- d. Students read to each other the passage.
- e. Students (each group) find main idea, predicting how stories will end, summarizing stories to each other.
- f. Students (each group) also draft, revise, and edit one other’s work and prepares to publish their writing.
- g. Students (each group) deliver the delegation in front of the class to retell their reading.
- h. Students gave chance to ask or respond toward other presentation
- i. Students helped by the teacher if they face problem
- j. Students and the teacher evaluate each group’s contribution to the work of the class
- k. Teacher gives students test

In the first week of implementation the researcher implemented the CIRC teaching teachnique by using Narrative text as learning material. In the second week the researcher implemented the CIRC teachnique, by using the same steps in the first week but the researcher using recount text as the learning material.

2. Procedures related to the control group

In the first week, the pre- test are administered in control group. In this group, the learning process are managed by using traditional teaching method. The researcher tell the student the obectivities of the lesson, and the teacher prepared

the lesson plan, with the same material as the experimental group.

After the implementation, experimental and control group students were applied post-test.

IV. FINDINGS

After conducting the pre test in both groups and scoring the students’ answer, its found that the the highest score of the experimental group is 95 and the lowest score is 60. The mean of experimental group in pre test is 72.67, the median 70 and the mode also 70. The data in control group in pre test showed that highest score is 87 and the lowest score is 45. The mean of control group in pre test is 73.14, the median is 57 and the mode is 80.

After collecting the data in pre test, the researcher implemented the teaching teachnique in both groups. the first group experimental group taught by CIRC teaching teachnique while the second group, control group taught by using traditional teaching teachnique. Then the researcher administered the post test for both groups and scoring the students’ answer, the data showed that the highest score of experimental group is 95 and the lowest score is 60. The mean of experimental group is 80.76, the median is 70 and the mode of experimental group is 85. The data in control group showed that the highest score of control group is 91, and the lowest score is 45. The result of the research get 75.23 as the mean of the control group, the mode is 80 and the median is 57.

Table 1. experimental – control group Mean and Standard Deviation

Groups	Pre test		Post Test	
	Mean	S.D	Mean	S.D
Experimental	72.67	8.52	80.76	8.98
Control	73.14	8.55	75.23	8.67

After calculated all the data, its found that the standard deviation of experimental group is 8,98 while its standard error is 1,56. The standard deviation of the control group is 8.67 and standard error is 1.51. to test the hypothesis the writer use t-test.

$$\begin{aligned}
 t_o &= \frac{m_1 - m_2}{SE_{m_1 - m_2}} \\
 SE_{m_1 - m_2} &= \sqrt{(SE_{mx})^2 + (SE_{my})^2} \\
 &= \sqrt{(1,56)^2 + (1,51)^2} \\
 &= \sqrt{2,43 + 2,28} \\
 &= \sqrt{4,71} \\
 &= 2,17 \\
 t_o &= \frac{m_1 - m_2}{SE_{m_1 - m_2}}
 \end{aligned}$$

$$\begin{aligned} &= \frac{80,76 - 75,23}{2,17} \\ &= \frac{5,53}{2,17} = 2,54 \end{aligned}$$

After calculated the data it was found the value of t_{test} is 2.54, while the sample are 68 students where $N_1=34$ students and the $N_2 = 34$ students. So, $df (N_1+N_2)-2=(34+34) - 2 = 68-2 = 66$. The writer take the nearest df that is 70. The value of the calculation and the t_{table} at 5% significant level of number 70 is 2.00. After knowing the value of the calculation and t_{table} both of the value are compared. It is found that t_0 calculation is bigger than t_{table} ($t_{\text{test}} > t_{\text{table}} = 2.54 > 2.00$). It means that cooperative integrated reading and composition (CIRC) significantly affect students reading comprehensions. The result of this research showed that there is a significant differential effect of teaching method with CIRC and traditional teaching technique on students' reading comprehension and CIRC technique is better than traditional teaching technique on students reading comprehension.

The result of this research found that the CIRC teaching technique is significantly affect students reading comprehension. There is a significant difference between the score that the students get in CIRC and traditional class. Compared to the research that conducted by Durukan in 2011, he conducts a research which is entitled, Effects of Cooperative Integrated Reading and Composition (CIRC) Technique on Reading-Writing Skills. The findings of his research found that CIRC technique and traditional method are effective on reading comprehension and writing expression skills; however, CIRC technique used in the experimental group is more effective for achievement and retention level than the traditional method.

V. CONCLUSION

The use of CIRC technique proves to be effective to in teaching reading comprehension. There is a significant effect teaching reading comprehension to students by using CIRC teaching technique. Students' reading comprehension taught by CIRC is categorized good by get mean 80,76.

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