

THE EFFECT OF COOPERATIVE INTEGRATED READING AND COMPOSITION (CIRC) MODEL ON READING ACHIEVEMENT OF DESCRIPTIVE TEXT AT GRADE X STUDENTS OF SMK NEGERI 1 TANJUNG BALAI IN ACADEMIC YEAR OF 2016/2017

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ABSTRACT

This study aims to investigating the effect of cooperative integrated reading and composition model on Reading Achievement of Descriptive Text at Grade X Students of SMK Negeri 1 Tanjungbalai in 2016/2017 Academic Year. This study was conducted in experimental design. The population of this research was taken from the grade X students of SMK Negeri 1 Tanjungbalai. There are two classes, namely class X NKPI² and X TKPI totaling 98 students. The sample of this research was at grade X NKPI² as an experiment group, there are 20 students as a sample, and X TKPI as a control group, there 20 students as a sample. So, the totalling of this research were 40 students. The data was analyzed by using t-test formula. The result of the analysis shows the observed value is higher than t-table ($2,55 > 2,00$) at level of significance 0,05 with the degree of freedom 38. It means that the alternative hypothesis (H_a) is accepted and null hypothesis (H_o) is rejected. Based on the findings of this study, it was found that there is a significant effect of Cooperative Integrated Reading and Composition Model on reading achievement of descriptive text.

Key Words : Effect, Cooperative Integrated Reading and Composition Model

I. INTRODUCTION

Language is the most significant thing for daily life as a tool of communication all over the world. English is well known international language, all of people in the world compete to mastering English. Today, English is applied as one of the materials which are taught in every school level. English has important roles in the world therefore, students need to be sufficiently equipped with English communicative skills, both oral and written. Patel and Jain (2008:31) state that Language is used to

communicate thoughts and ideas. It is essential for survival and development as human being. It is a result of cultural experience. It is also a system of phonetic, grammar and vocabulary.

Commonly, English has four skills those are listening, speaking, reading and writing. In learning English the students have to master four the skills. One of those skill which has to be mastered by the students is reading skill. Reading is the most important activity in any language class. Reading is not only a source of information and a

pleasurable activity but also as a means of consolidating and extending one's knowledge of the language. Reading is very necessary to widen the mind, gain and understanding of the foreign culture. Reading is certainly an important activity for expanding knowledge of a language. (Patel and Jain, 2008:114).

Reading a message in the text is the goal of reading in a language. In fact, Students' achievement in reading descriptive texts seen as less effective. Students still low knowledge in understanding what is descriptive text and its usefulness. It is caused by several factors including: The first, students are got difficulty to identify the information in generic structure of descriptive text like Identification, and description. The second, students are not really understand about language features on descriptive text. The third, students are less interested in reading descriptive text. The last, most of students' are lack of vocabulary. This is affecting students in class X SMK Negeri 1 Tanjungbalai in 2016/2017 Academic Year.

Referring to the opinions presented above teaching situation is needed to select the teaching reading materials and the most innovation teaching model, in order to encourage the student's motivation for reading lesson especially for reading descriptive text. Thus, this research attempts to select the teaching materials by using a reading descriptive text and applying an appropriate teaching model that is Cooperative Integrated Reading and Composition (CIRC) Model in class X SMK Negeri 1 Tanjungbalai

in 2016/2017 Academic Year. This model is considered the most effective and appropriate one for teaching students achievement in reading descriptive text. CIRC is derived from cooperative learning which facilities the students to comprehend the reading text given more easily. The students are taught to work together within the groups to achieve the goal of reading descriptive text.

Based on The Scope of the Study is focused on the text type or genre of reading descriptive text by using Cooperative Integrated Reading and Composition (CIRC) model at grade XNKP² students of SMK Negeri 1 Tanjungbalai in 2016/2017 Academic Year.

Based on the Formulation of the Study "Is there any effect of Cooperative Integrated Reading and Composition (CIRC) model on reading achievement of descriptive text at grade X of SMK Negeri 1 Tanjungbalai in 2016/2017 Academic Year?"

II. THEORITICAL FRAMEWORK

Achievement is the result, the successfulness, the extent or ability, the progress in learning educational experiences that the individual indicates it in relation with his/her educational learning.

Construct the reading activity around a purpose that has significance for the students, the purpose of reading are: to get the main idea, obtain specific information, understand most or all of the message, enjoy a story, or decide whether or not to read more.

Recognizing the purpose of reading will help students select appropriate reading strategies.

In addition to the main purpose of reading, an activity can also have one or more instructional purposes, such as practicing or reviewing specific grammatical constructions, introducing new vocabulary, or familiarizing students with the typical structure of a certain type of text.

There are many techniques in reading, some of them are :

1. Scanning

Scanning is a technique used to find specific information by looking at the text to find information we need.

2. Skimming

Skimming is used to quickly gather the most important information, or the gist of the text. When we conduct skimming of a certain text, run our eyes over the text and nothing important information.

3. Intensive Reading

Intensive reading is used on shorter texts in order to extract specific information. It includes very accurate reading for detail.

4. Extensive Reading

Extensive reading is used to obtain a general understanding of a subject and includes reading longer texts for pleasure, as well as business books.

Reading is a process that negotiates the meaning between the text and its reader. The reading process involves three stages, they are ;

- a. The first is the **pre-reading** stage, which allows the reader to activate background knowledge, preview the text, and develop a purpose for reading.
- b. The second stage occurs **during reading**, when the reader makes predictions as they read and then confirms or revises the predictions.
- c. The final stage occurs **after reading** and allows the reader to retell the story, discuss the elements of a story, answer questions and/or compare it to another text.

Descriptive text is a kind of text which presents information about something specifically. Its purpose is to describe and reveal a particular person, place, animal or thing.

Wardiman, et. al. (2008) states that specifies the generic structure of descriptive text into two parts, they are:

1. introduction is the part of paragraph that introduces the character; and
2. description is the part of paragraph that describes the character.

Cooperative Integrated Reading and Composition (CIRC) Model 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.

Assessment of reading should hold students accountable for how they used time in class for reading. This study is used question-answering format like multiple-choice with four-option answer to get the result of students' reading achievement in descriptive text.

III. RESEARCH METHOD

This research was conducted at grade X of SMK Negeri 1

Tanjungbalai in 2016/2017 Academic Year. The population of this research was the tenth grade. The population consist of five classes which consist of 98 students. The research applies proportionate stratified random sampling, this technique is used when the population has members or elements that are not homogeneous and stratified propotionately. It consists of 40 students randomly selected to represent the population. For the sample of this research, 40 students are taken out from the population. The researcher takes 2 class as a sample. They are: X NKPI² and XTKPI.

Table 3.3 Category Value

No	Rated	Category
1	80-100	Very Good
2	70-79	Good
3	60-69	Enough
4	50-59	Less
5	0-40	Not Good

The reasearch design used an experimental research, to find out the students' achievement in reading by using Cooperative Integrated Reading and Composition (CIRC) Model. There are two groups of students, namely control group and experimental group. The

experimental group was taught by using Cooperative Integrated Reading and Composition (CIRC) Model and control group was taught Conventional Model. Both groups are given pre-test and post-test. The design is as follows:

Table 3.2 The Procedures of Experiment in Experimental Group and Control Group

Group	Post-test	Treatment	Post-test
Experimental Group	X ₁	Cooperative Integrated Reading and Composition Model	Y ₁
Control Group	X ₂	Conventional Model	Y ₂

IV. DATA AND DATA ANALYSIS

Table 4.1 The Score of Experimental Group in Pre-test and Post-test

No	Initial of students	Pre-test (X)	Post test (Y)	X ²	Y ²	XY
1	AS	70	80	4900	6400	5600
2	AR	65	85	4225	7225	5525
3	AZ	75	90	5625	8100	6750
4	AI	70	85	4900	7225	5950
5	AR	70	80	4900	6400	5600
6	DW	60	70	3600	4900	4200
7	FS	65	80	4225	5600	5200
8	FYT	70	85	4900	7225	5950
9	I	75	85	5625	7225	6375
10	M	60	85	3600	7225	5100
11	MAP	55	65	3025	3575	3300
12	MPK	70	80	4900	6400	5600
13	MR	70	80	4900	6400	5600
14	MRS	60	80	3600	6400	4800
15	MRA	70	80	4900	6400	5600
16	R	65	75	4225	5625	4875
17	RA	75	90	5625	8100	6750
18	RP	65	75	4225	5625	4875
19	T.FM	75	90	5625	8100	6750
20	W	55	70	3025	4900	3850
OVERALL		∑X=1350	∑Y=1605	∑X²=91850	∑Y²=130600	∑XY=109050

From the data which have been collected, the highest and the lowest pre-test score in experimental group

were 75 and 55. While in the post-test were 90 and 65.

Table 4.2 The Score of Control Group in Pre-test and Post-test

No	Initial of students	Pre-test (X)	Post test (Y)	X ²	Y ²	XY
1	AP	70	70	4900	4900	4900
2	AR	55	65	3025	4225	3575
3	AM	50	65	2500	5625	3250
4	BS	70	80	4900	6400	5600
5	EP	60	60	3600	3600	3600
6	GR	70	75	4900	5625	5250
7	GA	75	85	5625	7225	6375
8	IT	70	80	4900	6400	5600
9	IM	55	60	3025	3600	3300
10	H	60	70	3600	4900	4200
11	J	45	55	2025	3025	2475
12	J	65	65	4225	4225	4225
13	MA	75	85	5625	7225	6375
14	MAA	65	75	4225	5625	4875
15	PR	60	70	3600	4900	4200
16	S	70	85	4900	7225	5950
17	S	60	75	3600	5625	4200
18	TK	55	65	3025	4225	3575
19	W	60	80	3600	6400	4800
20	Y	60	70	3600	4900	4200

OVERALL	$\Sigma X=1255$	$\Sigma Y=1435$	$\Sigma X^2=80025$	$\Sigma Y^2=104475$	$\Sigma XY=91150$
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From the data which have been collected, the highest and the lowest pre-test score in control group were 75 and 45. While in the post-test

were 85 and 60. From two tables above, it can be seen that the score of experimental group is the highest than control group.

Table 4.3 The Differences Scores Between Pre-Test and Post-Test of the Experimental Group

No	Initial of students	Pre-test (X)	Post test (Y)	Y-X
1	AS	70	80	10
2	AR	65	85	20
3	AZ	75	90	15
4	AI	70	85	10
5	AR	70	80	10
6	DW	60	70	10
7	FS	65	80	15
8	FYT	70	85	15
9	I	75	85	10
10	M	60	85	15
11	MAP	55	65	10
12	MPK	70	80	10
13	MR	70	80	10
14	MRS	60	80	15
15	MRA	70	80	10
16	R	65	75	10
17	RA	75	90	25
18	RP	65	75	15
19	T.FM	75	90	20
20	W	55	70	15
OVERALL		$\Sigma X=1350$	$\Sigma Y=1605$	$\Sigma Y-X=270$

Based on the analysis above, it can be seen that the students' score in the post-test is higher than the students' score in pre-test. It means that the student's achievement in reading descriptive text by using

cooperative integrated reading and composition model is effective. Meanwhile, the mean of differences score between pre-test and post-test experiment group is 270.

Table 4.4 The Differences Scores Between Pre-Test and Post-Test of the Control Group

No	Initial of students	Pre-test (X)	Post test (Y)	Y-X
1	AP	70	70	0
2	AR	55	65	10
3	AM	50	65	10
4	BS	70	80	15
5	EP	60	60	0
6	GR	70	75	5
7	GA	75	85	15
8	IT	70	80	10
9	IM	55	60	5
10	H	60	70	10
11	J	45	55	10
12	J	65	65	0

13	MA	75	85	10
14	MAA	65	75	10
15	PR	60	70	10
16	S	70	85	15
17	S	60	75	10
18	TK	55	65	10
19	W	60	80	20
20	Y	60	70	10
OVERALL		$\Sigma X=1255$	$\Sigma Y=1435$	$\Sigma Y-X=185$

Based on the analysis above, it can be seen that the students' score in the post-test is higher than the students' score in pre-test but there is no significant effect to the students' score. Meanwhile, the difference score between pre-test and post-test of control group is 185. It means

that the difference of the students' achievement in experimental and control group was higher than before.

To know the validity of Experiment Group, this research used coefficient correlation product moment formula as :

$$r_{xy} = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N \Sigma X^2 - (\Sigma X)^2\} \{N \Sigma Y^2 - (\Sigma Y)^2\}}}$$

Explanation:

- r_{xy} = The correlation coefficient between X variable and Y variable
- ΣXY = Number of multiplication result of the score of X and Y
- ΣX = Total score of X
- ΣY = Total score of Y
- N = Number of students or respondents

$$r_{xy} = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N \Sigma X^2 - (\Sigma X)^2\} \{N \Sigma Y^2 - (\Sigma Y)^2\}}}$$

$$r_{xy} = \frac{20(109050) - (1350)(1605)}{\sqrt{\{20(91850 - (1350)^2)\} \{20(130600) - (1605)^2\}}}$$

$$r_{xy} = \frac{2181000 - 2166750}{\sqrt{\{(1837000) - (1822500)\} \{(2612000) - (2576025)\}}}$$

$$r_{xy} = \frac{14250}{\sqrt{(14500)(35975)}}$$

$$r_{xy} = \frac{14250}{22839,38}$$

$$r_{xy} = 0,62$$

From the calculation of the test validity of the test was 0,62. So it can be concluded that the test was valid.

To know the validity of the Control Group, this research used coefficient correlation product moment formula as :

$$r_{xy} = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N \Sigma X^2 - (\Sigma X)^2\} \{N \Sigma Y^2 - (\Sigma Y)^2\}}}$$

$$r_{xy} = \frac{20(91150) - (1255)(1435)}{\sqrt{\{20(80025) - (1225)^2\}\{20(104475) - (1435)^2\}}}$$

$$r_{xy} = \frac{1823000 - 1800925}{\sqrt{\{(1600500) - (1575025)\}\{(2089500) - (2059225)\}}}$$

$$r_{xy} = \frac{22075}{\sqrt{(25475)(30275)}}$$

$$r_{xy} = \frac{15575}{27771,48}$$

$$r_{xy} = 0,79$$

From the calculation of the test validity of the test was 0,79. So it can be concluding that the test was valid.

To find out the reability of Experimental group, the formula is as follows :

$$r_{11} = \frac{2 \times r_{1/21/2}}{(1 + r_{1/21/2})}$$

Explanation:

r_{11} = instrument reability

$r_{1/21/2}$ = product moment correlation ($r_{1/21/2} = r_{xy}$)

$$r_{11} = \frac{2 \times r_{1/21/2}}{(1 + r_{1/21/2})}$$

$$r_{11} = \frac{2 \times 0,62}{1 + 0,62}$$

$$r_{11} = \frac{1,24}{1,62}$$

$$r_{11} = 0,76$$

The Reability of Control Group

$$r_{11} = \frac{2 \times r_{1/21/2}}{(1 + r_{1/21/2})}$$

$$r_{11} = \frac{2 \times 0,79}{1 + 0,79}$$

$$r_{11} = \frac{1,58}{1,79}$$

$$r_{11} = 0,88$$

The calculation of reability of experiment group and control group showed that the test was 0,76 and 0,88 the reability is high. So, it means that the test can be said as the reable test.

Technique for Analyzing Data This research use t-test formula for analyzing the data, t-test perfomed as follows:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{X_2 + Y_2}{N_x + N_y - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Explanation :

Mx = Mean of experimental group

My = Mean of control group

X₂ = The deviation score of experimental group

Y₂ = The deviation score of control group

N_x = The total sample of experimental group

N_y = The total sample of control group.

Before calculated the data using t-test formula, the researcher has to find Mean and standard Deviation of Each groups.

To get the mean and standard deviation of experimental group, the researcher using the formula as follows:

$$Mx = \frac{\sum X}{N}$$
$$Mx = \frac{1350}{20}$$

$$Mx = 67,5$$

$$SDx = \sqrt{\frac{\sum X^2}{N}}$$
$$SDx = \sqrt{\frac{91850}{20}}$$
$$SDx = 67,7$$

To get the mean and standard deviation of control group, the researcher using the formula as follows:

$$My = \frac{\sum y}{N}$$
$$My = \frac{1255}{20}$$

$$My = 62,7$$

$$SDx = \sqrt{\frac{\sum X^2}{N}}$$

$$SDx = \sqrt{\frac{80025}{20}}$$

$$SDx = 63,2$$

Based on the calculating above, it showed that the mean of experiment group is higher than the mean of control group. After get mean and standard deviation of each group, and then analyzing the data by using t-test formula :

$$t = \frac{Mx - My}{\sqrt{\left(\frac{X_2+Y_2}{N_x+N_y-2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

$$t = \frac{67,5 - 62,7}{\sqrt{\left(\frac{67,7+63,2}{20+20-2}\right)\left(\frac{1}{20} + \frac{1}{20}\right)}}$$

$$t = \frac{4,8}{\sqrt{\left(\frac{130,9}{38}\right)\left(\frac{2}{20}\right)}}$$

$$t = \frac{4,8}{\sqrt{(3,44)(0,1)}}$$

$$t = \frac{4,8}{1,88}$$

$$t = 2,55$$

After analyzing the data into t-test, it was score that t-score was 2,55 , if this consulted to critical score product moment degree of freedom (df) $N_1+N_2- 2$, it means that $20+20-2 = 38$. So, the critical of t-table with the significant 0,05 was 2,00. The researcher conclude that t-score > t-table.

The researcher had been successfully. So, hypothesis Nihil (Ho) was rejected and hypothesis Alternative (Ha) was accepted. It reveal that hypothesis using cooperative integrated reading and composition model on reading achievement of descriptive text is effective because get higher scores 71,8

than without using cooperative integrated reading and composition model.

There are differences in the reading achievement among students taught by cooperative integrated reading and composition with taught by conventional. Students who used cooperative integrated reading and composition model with a sample of 20 students obtain an average value of 80,3 , while the students who used the conventional way with a sample of students obtain an average value of students.

V. CONCLUSION

The students are get achievement in reading descriptive text. It means Cooperative Integrated Reading And Composition (CIRC) Model give significant effect on students in learning. It makes the students activity in learning process more active, students are easy to understand about the material, students can be more confident to give their opinion, students are active in do the discussion with their classmate, and then students can be more interested to study.

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