The Effect of Compare-Diagnose-Operate (CDO) Strategy to Improve Students’ Writing Ability In Descriptive Text

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Abstract

This study aims to determine the differences in cognitive learning outcomes (in the form of pre-test and post-test scores) of students in class X IPS 1 as a control class and class XI MIPA 3 as experimental class at SMA N 5 Bengkulu Tengah, by providing treatment using the Compare-Diagnose-Operate (CDO) strategy. This type of research is Quasi Experiment. The population is tenth grade students of SMA N 5 Bengkulu Tengah with 368 students. From this population, 37 students were taken as samples. Each class is 17 students XI IPS 1 and 20 students XI MIPA 3. Research data were collected through writing tests and documentation. The results showed a significant change in the experimental class with an average value of 71.85 while in the control class an average value of 52.06. The post-test results show that the Compare-Diagnose-Operate (CDO) strategy can improve students’ writing skills. Thus, the Compare-Diagnose-Operate (CDO) strategy can be one of effective strategy to increase students’ writing ability.

Keywords: Compare-Diagnose-Operate (CDO) Strategy, Writing Descriptive Texts

A. Introduction

There are four aspects of language competence in learning English, namely listening, speaking, reading, and writing. Writing is one of the four foreign language skills that are an integral part of English education. Writing is the act of explaining a language so that the reader can grasp the meaning the writer conveys. Students may create multiple drafts or versions of their writing with a focus on the writing process and gain input from classmates while teaching writing as a process. However, the fresh focus on process must be seen in the prospect of a process-product balance. The ability of students learning English is one of the important things that must be done well because it will affect the ability of students to develop their writing skills.
In general, it is believed that improving writing skills will contribute to the success of students' writing skills. Furthermore, it is true that teaching writing will be influenced by the teaching techniques used by teachers. At SMA Negeri 5 Bengkulu Tengah, teaching writing is divided into several parts, namely: Writing for Sentence Formation, Paragraph Writing, Essay Writing, and Scientific Writing. However, there is a reason why students' writing skills are still not good enough. In practice in the classroom, students often complain that writing assignments are very difficult. Writing turned out to be a scourge for students. In fact, mastery of the material is the basic goal of the teaching and learning process. Mastery of the material is also often used as the main consideration to measure the success or failure of a lecturer in teaching. Byrne categorized three problems that made writing skills difficult to master, namely linguistic, cognitive, and content problems.

Writing is not an easy skill for students to master since learners need to pay attention to things such as content, structure, vocabulary, usage of grammar or expression, and mechanics while writing. For second language learners, Richards and Renandya state that writing is the most difficult ability. The task lies not only in producing and organizing thoughts, but also in converting these thoughts into readable text. The abilities involved in writing are dynamic. Second language authors should pay attention to their preparation and organizing skills as well as their spelling and punctuation skills. So, teachers must be more creative when teaching English classes by using strategies so that students understand the material more easily.

In learning to write, there are many strategies that can be used by teachers, one of which is the Compare-Diagnose-Operate (CDO), which is a technique used individually by students to see and identify where revisions are needed, diagnose problems, and operate then determine and carry out the intended revisions and to guide students through the elements of the revision process so that they cannot access themselves and develop a revision process so that individual elements will be revised and occur regularly at appropriate times. In learning to write the Compare, Diagnose, and Operate (CDO) strategy, it will help students solve problems in writing and the Compare, Diagnose, and Operate (CDO) strategy has benefits when used by teachers and students in the learning process because it can improve students' writing skills. To revise, analyze paragraphs, and simplify the writing process.

Compare, diagnose, and operate (CDO) is an effective approach that can be used, especially in writing classes by learners of English. This technique involves comparing and describing, diagnosing problems and running and implementing revisions. This approach is intended to improve the awareness of students in the writing class.
The researcher noted that, based on the experience of the researcher in learning to write, the instructor had used several techniques and strategies in teaching writing, but some students did not have good skills in producing their written text. Thus, the researcher aims to introduce a methodology by incorporating Compare, Diagnose, and Operate (CDO) in the writing class to help students increase interest in the learning process and to help students write.

On 21 and 22 December 2020, initial findings were made using a teacher interview questionnaire, knowledge was collected, printed books and journals were the teaching tools used by teachers in the implementation of learning. The fundamental problem identified in the writing class is the lack of written comprehension of the students, especially in writing descriptive texts (Preliminary observation, December 21th).

In this case, writing skills really need an understanding to make it easier to write a text. By using a strategy, students can understand writing a text that will be written in writing, and balanced with the vocabulary that is owned by the student. If the vocabulary is lacking, it will hinder the writing process.

From the explanation above, the teacher needs to provide the right solution so that the learning objectives related to writing match the students' abilities, so the researcher chooses one of the strategies, namely Compare Diagnose Operate (CDO). The choice of this strategy is due to the suitability of the characteristics mastered by students, namely writing.

Therefore, the purpose of this study is to find out whether this writing strategy can help students to achieve dynamic indicators of writing skills. It is hoped that the systematic analysis used can evaluate the effectiveness of the Compare Diagnose Operate (CDO) Strategy on the writing skills of students at SMA Negeri 5 Bengkulu Tengah in the tenth grade.

Based on the background of the problem above, the author is motivated to conduct research with the title “The Effect Of Compare Diagnose Operate (CDO) Strategy To Improve Students’ Writing Ability In Descriptive Text.” Based on the limitation above that have been explained, the research question of this research is formulated as the following: “Is there any effect on the use of Compare-Diagnose-Operate (CDO) strategy to improve students’ writing ability in descriptive text at the tenth grade?”

B. Research Methodology
The research used a quantitative approach in the form of a quasi experimental method in order to collect the data. In quasi experimental research, the researcher observes the effect on one or more dependent variables and manipulates at least one independent variable and controls for other relevant variables (Gay, LR, 2012:250). The researcher used quasi experimental because the researcher wanted to compare two groups with the treatment in two classes. Schematically, the quasi experimental design can be drawn as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Test</th>
<th>Treatment</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>O1</td>
<td>X</td>
<td>O2</td>
</tr>
<tr>
<td>Control</td>
<td>O2</td>
<td>-</td>
<td>O2</td>
</tr>
</tbody>
</table>

Note:
- X represents the exposure of a group to an experimental variable
- O refers to the process of observation or measurement

In this research, the researcher used quasi experimental research with quantitative approach. The researcher want to know the effect of using Compare-Diagnose-Operate (CDO) strategy towards writing ability of the tenth grade of SMA Negeri 5 Bengkulu Tengah.

Population is not only about the quantity of the subject/object that is going to be learnt, but also involves the whole characteristics of the subject or object. At SMA Negeri 5 Bengkulu Tengah, there are 368 students consisting of 5 class X, 5 class XI and 4 class XII and divided into X MIPA (1,2 and 3) and X IPS (1 and 2), for class XI MIPA (1,2 and 3) and XI IPS (1 and 2), as well as class XII MIPA (1 and 2) and XII IPS (1 and 2).

The sample is a part of the population chosen as representative. Because the design includes pre-experimental, purposive sampling is used to determine the sample. In purposive sampling, sample elements are considered distinctive and representative. Researchers must take sampling decisions from the start in overall planning to take research samples. In this case, the researcher took two class, namely the tenth grade of SMA Negeri 5 Bengkulu Tengah, X MIPA 1 as the experimental class and X IPS 1 as the control class. The researcher decided to divide the two class because in two class they have different abilities in writing English. This effect is known after knowing the significant difference between students who were taught before using the Compare-Diagnose-Operate (CDO) strategy and after the Compare-Diagnose-Operate (CDO) strategy by comparing the pre-test and post-test scores.
Table 3.2
sample of the research

<table>
<thead>
<tr>
<th>No</th>
<th>Class</th>
<th>Control class</th>
<th>Experiment class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X IPS 1</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>X MIPA 3</td>
<td>-</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

(Source: SMA N 5 Bengkulu Tengah (TA. 2020/2021)

The investigator used tests when collecting the data. For all of the samples, the researcher was do the pre-test and post-test. The pre-test was provide control and experimental groups with both. By offering the exam to the learners, the data was be obtained. Pre-test to find out the skill of the students before the care is offered by the learners. In the procedure, the researcher was teach the students without the treatment in the experimental class using the Compare-Diagnose-Operate (CDO) strategy as a media and monitor class. Then, after the students are handled by the Compare-Diagnose-Operate technique, post-test to assess student achievement.

The instrument was use in this research is writing test. Test is a set of stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned. The test is will use to find out the ability of students’ writing descriptive text after learning by using Compare-Diagnose-Operate (CDO) strategy. The researcher will ask the students to write descriptive text. The pretest and posttest is about writing descriptive text. The researcher will give the pretest and posttest to both control and experimental groups.

Observation is a technique or way of collecting data by making observations of ongoing activities, these activities can be related to the way the teacher teaches, students learn the principal who is giving direction, personnel in the field of staff who are in a meeting and so on. Observations can be carried out in a participatory or non-participatory manner. As a data collection method, ordinary observation is defined as systematic observation and recording of the elements that appear in a symptom on the object of research. The visible element is called data or information which must be properly and completely observed and recorded. This method is used to see and observe directly the situation in the field so that the researcher gets a broader picture of the problem being studied. This technique is used to see the ways the teacher teaches during the learning process carried out by the English subject teacher. Through this research, the researcher saw firsthand how the interaction between teachers and students during the implementation of learning. Researchers also used an observation guide. The data that will be taken through this method are: information on how students participate
in learning, methods, strategies used by the teacher in learning, tools and resources for
learning English.

At the first meeting, the researcher gives a pre-test to the students. There the researcher
explained the topic or wrote it down in the board. When the students are regarded understand
about the topic, the researcher conveyed the lesson objective for that meeting; at the end of
the class, the students were expected to be able to write a descriptive text before being taught
the treatment.

After gaining the pre-test, the researcher gives treatment by Compare-Diagnose-Operate. The purpose of treatment is to help students in understanding Writing text, especially in simple descriptive text. The experimental class was taught by Compare-Diagnose-Operate. This strategy consisted of three steps; those were Compare, Diagnose, and Operate.

First, the researcher applied Compare: 1) The researcher was give the students a story
map and ask them to fill it as the draft of descriptive text. 2) After the researcher explained
about the material of descriptive text. 3) Then, the researcher was ask the students to write a
descriptive text based on what is in the students’ mind. 3) After that, the students reads the
text carefully and comprehensively. 4) Then, the researcher was ask the students to find the
differences between what the author meant to write and what was written. 5) The teacher
gave the students 11 opinions for mentioning the mismatch.

Second, the researcher applied the next step that was Diagnose, 1) The students
diagnose why those differences happened. 2) The researcher asks the students to determine a
clear reason for the differences that the students found in comparing step. 3) They must check
and fix the errors in the text without deleting the mistakes.

Finally, the researcher applied the third step, that was Operate, 1) The researcher asks the
students to solve the problem and evaluates whether or not the change is good for writing. 2)
The students make changes needed by using one of six opinions. Then, they will rewrite the
revised text. 3) Finally, the researcher can see the result of the students’ writing in a
descriptive text.

The post-test is given to the students after conducting the treatment of using Compare-
Diagnose-Operate toward students’ writing ability. Similar to pre-test, The researcher will
give a conclusion about descriptive text.

In the last phase of this analysis, the investigator was analyze the results. The researcher
was use t-Test formula to the effect of the treatment in evaluating the results, the researcher
was make the student writing skill category based on the material, organization, vocabulary, language use / grammar, and mechanics score feature. Before analyzed using t-Test, to know whether the data distributed normally normal or not, the researcher do the normality and homogeneity first. The investigator was use the Statistical Package for Social Science (SPSS) 25version software to analyze the results. Furthermore, the researcher was found out the means score and standard deviation of the pre-test and post-test to see the differences.

C. Results and Discussion

1. Results

In this chapter, the result and discussion of the research were presented. The result showed that the effect of using Compare- Diagnose-Operate (CDO) strategy at tenth grade students of SMAN 5 Bengkulu Tengah was increased. The findings also included the result of the study that showed whether there was significant differences of students’ writing descriptive text between the experimental class and control class who were taught using Compare-Diagnose-Operate (CDO) strategy and those who were not. The result of the research were obtained based on the data analysis. After getting the data, the data were analyzed by using SPSS 25 version software.

The Result of Descriptive Writing Test

This section describes and analyzes the test before and after treatment. The pre-test and post-test were given to the students in the experimental group and control group. The pre-test was given to the student before the experiment was conducted and the post-test was given at the end of the experiment.

The Description of Pre-test Score and Post-test Score in the Experimental Group

<table>
<thead>
<tr>
<th>Table 4.1</th>
<th>Descriptive Statistic of Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Pre-Test of experimental class</td>
<td>20</td>
</tr>
<tr>
<td>Post-Test of experimental class</td>
<td>20</td>
</tr>
</tbody>
</table>

According on the table above in the experimental class that uses a sample (N) of 20 students, the minimum pre-test value is 48 and the maximum value is 75 so that it gets an
average of 62, 30. Meanwhile the minimum post-test value is 59 and the maximum value is 84 so that it gets an average of 71, 85.

![Figure 4.1](image1)

**Figure 4.1**
Graph for Pre-test score of experimental group

![Figure 4.2](image2)

**Figure 4.2**
Graph for Post-test score of experimental group

Based on figure 4.1 and 4.2, the post test score was higher than the pretest scores. It means teaching writing descriptive text by using Compare- Diagnose-Operate (CDO) strategy increased the students writing descriptive text.

The Description of Pre-test Score and Post-test Score in the Control Group

**Tabel 4.2**
Descriptive Statistic of Control Group

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test of control class</td>
<td>20</td>
<td>44</td>
<td>70</td>
<td>55.12</td>
<td>7.390</td>
</tr>
<tr>
<td>Post-Test of control class</td>
<td>20</td>
<td>30</td>
<td>75</td>
<td>52.06</td>
<td>12.147</td>
</tr>
</tbody>
</table>

According on the table above in the control class that uses a sample (N) of 17 students, the minimum pre-test value is 44 and the maximum value is 70 so that it gets an average of 55.12.
55, 12. Meanwhile the minimum post-test value is 30 and the maximum value is 75 so that it gets an average of 12, 147.

**Figure 4.3**
**Graph for Pre-test score of control group**

![Histogram for Pre-test score of control group]

**Figure 4.4**
**Graph for Post-test score of control group**

![Histogram for Post-test score of control group]

Based on figure 4.3 and 4.4, it was showed that the post-test and pre-test score were relative the same. The highest frequency on pre-test was on average category. Meanwhile, the highest frequency on post-test was on good category. It meant the score of the student’s writing descriptive text increased gradually.

**The Normality and Homogeneity of the Data**

Homogeneity and normality of the data should be measured before analyzing the data. Test normality is used to find out whether the score distributed normally or not. If the significance > 0.05, it means the test distribute normally. If the significance < 0.05, it means the test is not distribute normally. The Kolmogorov-Smirnov test was used to measure the data because the data of each group less than 37 data.

**The Result of Nomality Data Test of Pre-Test Score**
Based on the data above, the Kormogorov-Smirnov test of the pre-test in the experimental class showed that the significance was 0.159. It was higher than 0.05. It meant that the data obtained were considered normal.

The histogram of the normal data of pre-test score of experimental class can be seen on the figure below:

![Histogram](image)

**Figure 4.5**
The Histogram of the Students’ Pre-test of the Experimental Class

The Kormogorov-Smirnov test of the pre-test in the control class showed that the significance was 0.200. Since 0.200 > 0.05, it concluded that the data obtained were considered normal.

The histogram of the normal data of pre-test score the control group can be seen on figure:
The Histogram of the Students’ Pre-test of the Control Class

The Result of Nomality Data Test of Post-Test Score

Tabel 4.5
Test of Normality of Post-Test Scores in the Experimental Group

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>.100</td>
<td>17</td>
</tr>
</tbody>
</table>

The Kormogorov-Smirnov test of the post-test in the experimental group showed that the significance was 0.200. Since 0.200 > 0.05, it concluded that the data obtained were considered normal.

The histogram of the normal data of post-test scores of the experimental group can be seen on figure:

![Histogram of Students' Pre-test of the Control Class](image)

**Figure 4.6**

The Histogram of the Students’ Pre-test of the Control Class

Tabel 4.6
Test of Normality of Post-Test Scores in the Control Group

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>.165</td>
<td>17</td>
</tr>
</tbody>
</table>

The Kormogorov-Smirnov test of the post-test in the experimental group showed
that the significance was 0.200. Since 0.200 > 0.05, it concluded that the data obtained were considered normal.

The histogram of the normal data of post-test scores of the experimental group can be seen on figure:

![Histogram](image)

**Figure 4.8**
The Histogram of the Students’ Post-test of the Control Class

**The Result of Homogeneity of Variances Test**
The result of homogeneity of variances test can be seen on table 4.7

**Table 4.7**

<table>
<thead>
<tr>
<th>Score</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.853</td>
<td>1</td>
<td>35</td>
<td>.034</td>
</tr>
</tbody>
</table>

The test homogeneity of variances showed that the significant were 0.034. Since 0.034 was lower than alpha level of 0.05, it concluded that the variances of every test were heterogenous.

**The Statistical Analysis Result**

To verify the hypothesis proposal, the researcher applied the statistical analysis. The tests are T-test and independent sample t-test. T-test which is paired t-test was used to find out whether there were significant differences in student’ writing descriptive text before and after the treatment in both experimental and control group, meanwhile independent sample t-test was used to find out whether there was significant differences between experimental group and control group. The researcher used Statistical Package for Social Science (SPSS) 25 program for windows in order to find the paired sample t-test and independent sample t-test.
Paired Sample T-Test Analysis
Statistical Analysis on the Result of Pre-test and Post-test in the Experimental Group

Table 4.8
Paired Samples Statistics of Experimental Group

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Paired Samples Statistics of Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>Pre-Test</td>
</tr>
<tr>
<td>Post-Test</td>
<td>71.85</td>
</tr>
</tbody>
</table>

Based on the table above, the mean of writing pre-test of the experimental group was 62.30 and the standard deviation was 8.285. Meanwhile, the mean of post-test in the experimental group was 71.85 and the standard deviation was 6.854.

Table 4.9
Paired Samples Test of Experimental Group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pre-Test</td>
<td>Post-Test</td>
<td>-9.550</td>
<td>5.424</td>
<td>1.213</td>
<td>-12.088</td>
<td>-7.012</td>
</tr>
</tbody>
</table>

From the table above, the result of paired sample difference in mean between pre-test and post-test of writing in the experimental group was -9.550 with standard deviation 5.42 at the significant level of 0.05 and degree of freedom (df) 19 and the value of t-table for two-tailed test was 0.000.

In addition, based on the result above, it show df 19 with a significant level (0.05). In both calculations F count > F table and the significance is 0.000 < 0.005. It means that the independent variable has an effect on dependent variable simultaneously in experiment class.

Thus, it could be seen that t-obtained significant two tailed, 0.000 < 0.05. It means that the researcher hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. It means that there was significance influence in experimental group.

Statistical Analysis on the Result of Pre-test and Post-test in the Control Group

Table 4.10
Paired Samples Statistics of Control Group

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Paired Samples Statistics of Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>Pre-Test</td>
</tr>
<tr>
<td>Post-Test</td>
<td>52.06</td>
</tr>
</tbody>
</table>


The result of paired samples statistic above, the mean of pre-test in the control group was 55.12 and the standard deviation was 7.390. Meanwhile, in post-test the result of mean was 52.06 and the standard deviation was 12.147.

**Tabel 4.11**

**Paired Samples Test of Control Group**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 2 Pre-Test</td>
<td>3.059</td>
<td>8.692</td>
<td>2.108</td>
<td>-1.410</td>
<td>1.451</td>
<td>16</td>
<td>.166</td>
</tr>
<tr>
<td>Post-Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of the paired sample t-test, paired sample difference in mean between pre-test and post-test of writing skills in the control group was 3.059 with standard deviation was 8.692 and t-obtained 1.451 at the significance level of 0.05 and the degree of freedom 16 and the value of t-table two tailed test was 0.166.

In addition, based on the result above, it show df 16 with a significant level (0.05). In both calculations F count > F table and the significance is 0.166 > 0.005. It means that the independent variable hasn’t an effect on dependent variable simultaneously in control class.

Thus, it could be seen that significance two-tailed was 0.166 was lower than the 0.05. It meant that the researcher hypothesis (Ha) was rejected and the null hypothesis (Ho) was accepted. It means that there wasn’t significance influence in control group.

**Independent Sample T-test Analysis of Students’ Writing Descriptive Text**

**Tabel 4.12**

**Independent Sample Test**

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
</tr>
</tbody>
</table>
The independent sample showed the comparison of post-test of experimental group and control group displayed the difference between both scores. It was identified that t count 6.223. From the data, it was concluded that alternative hypothesis (Ha) was accepted and null hypothesis (Ho) was rejected. It mean that was significant influence in writing skills of descriptive text scores between the students who were taught by using Compare-Diagnose-Operate (CDO) strategy and those who were not.

2. Discussion

Experimental and control group were same in their initial level of writing skills as indicated by the writing pre-test were given before the treatment. The mean score of pre-test in experimental group was 62.30 and the mean score of control group was 55.12. Statistical analyzing has revealed that there was no significant influence in their pre-test scores of writing skills. In other words, the treatment Compare-Diagnose-Operate (CDO) strategy were started similar level writing skill.

The findings in this study are supported by research conducted by Irwan and Fitriana which entitled Teaching Writing Texts Through Compare-Diagnose-Operate Strategy for Senior High School Students. They are expected to assist teachers in overcoming problems in teaching writing and increase students” ability. Then, Cindy Sherman also conducted a research with the title The Effects of Strategy Instruction with a CDO Procedure in General Education Settings. The conclusion of her research showed that there was a significance effect of students writing achievement which was taught by Compare-Diagnose-Operate (CDO) strategy. Based on the previous studies above, the previous researchers used the Compare-Diagnose-Operate (CDO) strategy to increase students writing ability. The difference of those researches is that the researcher used writing persuasive text as the instrument of this research which the previous researchers were using descriptive text.

Based on the result of the study, the following interpretations were presented to strengthen the value of the study. After doing the post-test, the result showed a statistically significant influence in writing skills between the students who were taught using Compare-Diagnose-Operate (CDO) strategy and those who were not. The mean score of the post-test experimental group was 71.85. It was higher than the mean score of the post-test of control group that was 52.06. The results supported the theory by Scardamalia and Bereiter about Compare-Diagnose-Operate (CDO) strategy which enables students to make easier revision,
hence the scores of students given treatment were significantly higher. Compare-Diagnose-Operate (CDO) strategy allowed the students to compare their writing to other students, then diagnose their writing such the grammar, the function of punctuation, and the organize of the paragraph, finally they write their writing into the new one after did those steps. It was concluded that the Compare-Diagnose-Operate (CDO) strategy gave significant contribution in improving students’ writing persuasive text.

The mean post-test of experimental group was compared to the mean of control class. The result showed that sig. (2-tailed) or p-value (0.000) was less than α-value (0.05). It can be concluded that there was significant influence in writing skills by using Compare-Diagnose-Operate (CDO) strategy.

Finally, using Compare-Diagnose-Operate (CDO) strategy could be one of the ways in teaching to develop writing skills in descriptive text. Most of tenth grade in experimental group had better development and improvement in their post-test scores compared to their pre-test scores. It related to the theory Scardamalia and Bereiter that implementation of Compare-Diagnose-Operate (CDO) strategy can improve students writing skills. At the students in control group were not get the treatment of Compare-Diagnose-Operate (CDO) strategy, the result of the young learners post-test score were not significantly improved. The students in control group get lower score in the post-test. The result of this research showed that using Compare-Diagnose-Operate (CDO) strategy gave significant difference in improving tenth grade students’ writing ability. However, it took time to make get used to this strategy because this technique was new for them. The finding of this research is in line with Cindy (2011) who found that CDO could improve students’ writing ability.

D. Conclusion

Based on the result and discussion stated on the previous chapter, It can be concluded that there was a significant effect in writing descriptive text toward the students who were taught by using the Compare-Diagnose-Operate strategy and those who were not. The students in the experimental group could improve their writing descriptive text significantly. It can be seen from the analysis of the data gathered during the experiment and after the experiment.

Based on hypothesis test results through t-test assisted by SPSS 25 showed the value 0.000 > 0.05. Thus, Ho: there is no significant influence of using the Compare-Diagnose-Operate (CDO) strategy on students’ writing ability was rejected and Ha: there is a
significant influence of using the Compare-Diagnose-Operate (CDO) strategy on students’ writing ability was accepted. It concluded that there is a significant influence of using the Compare-Diagnose-Operate (CDO) strategy on students’ writing ability and students taught with conventional method.

References


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