

The Implementation of Compare-Diagnose-Operate (CDO) Strategy on Students Writing Skills in Narrative Text

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Abstract. The high school students also have matters that they have to face in writing a narrative text. The students need a strategy to handle the problems. This research aims to get the result of the implementation of Compare-Diagnose-Operate Strategy (CDO Strategy, hereafter) on students' writing skills in narrative text. The population was the tenth-grade students of MA Annajah Jakarta. The sample was 42 students that chosen by purposive sampling technique and was divided into the controlled class and the experimental class. The instruments were writing essay test which was given before the treatment and after the treatment. The treatment was the CDO Strategy. The data of the test were analyzed by using the normality test, the homogeneity test, and T-Test. The result of the test score from both classes showed that the controlled class was higher than the experimental class. However, the gained score of the experimental was higher than the controlled class ($190 > 35$). In addition, t-observe value was higher than t-table value ($2.52 > 1.68$) in the significant 5% (0.05). The Cohen's level of significance also displayed that the calculation of effect size is 2.7, which was higher than 1.00. Thus, the statement means that there is the effectiveness of using CDO Strategy on students' writing skills in the narrative text at the tenth grade of MA Annajah in academic year 2018/2019.

Keywords: Writing of Narrative Text, Compare-Diagnose-Operate Strategy, CDO Strategy

1. Introduction

Writing is one of the English skills that must be learned by the tenth grade students, according to the Curriculum in 2013. One of the texts that the tenth-grade students must be mastered is narrative text. Unfortunately, writing is not easy for them because of the result of Nanda's data analysis provided that high school students often make errors in writing [1]. The highest percentage of students' error in writing belonged to grammatical error (51.93%). The second significant error was punctuation 16.02 %. The next one was in spelling (8.90%), word choice (8.61%), and capitalization (8.01%). Lastly, the poor organization was the least error that the students made in writing (6.53%). The highest average frequency of errors in writing a

narrative text that made by the tenth graders was in using grammar, and the lowest average frequency of errors was in selecting vocabulary.

Based on the researcher's observation at MA Annajah, when teacher asked the tenth-grade students to create a narrative text, many of them still confuse to assemble the words in their minds and then pour them in written form. Besides problems in the pre-writing stage, the other problems also arised in post-writing stage. After the students reread their writing result and say, "This is not what I meant". They were not satisfied with their writing result because they found some errors after they reread the text. Most of those errors were also caused by their lack of rigor in writing, mainly forgetting to change verb 1 to verb 2.

Luthfiyati et al. explains that besides problems in writing commonly, the high school students also have matters that they have to face in writing a narrative text [2]. The highest average frequency of errors in writing a narrative text that made by the tenth graders was in using grammar, and the lowest average frequency of errors was in selecting vocabulary. The narrative text has several language features and general structures that must be learned and understood by students.

Revision is the strategy that can be used to solve such issue. The revision utility is composed of three recursive mental operations that will work through self-regulated methods in phases. Each stage is named by Scardamalia and Bereiter as 'Compare', 'Diagnosis' and 'Operate', and the general strategy is called CDO [3]. Compare means compose a narrative text based on what is in the mind of students. Diagnose means students inspect errors in their narrative text by themselves, and operate means students fix the problems and write the revised text [4] [5].

Sherman (2011) describes some advantages for students to use CDO Strategy, such as:

1. Students have to consider the relation of the overall purpose of the paper, repair their sentences, then decide on and execute any necessary changes.
2. CDO Strategy created significant difference in the number and quality of revisions in students' stories and essay.
3. CDO Strategy made revising easier for the students [6].

Golley (2015) argues that CDO Strategy will aid the students to see where they entail making revisions through their revision process. Besides using CDO Strategy individually, this revising strategy can be done in pairs. It focuses on revising the content of the piece and on editing the mechanics of the piece. With this strategy, the student switches their writing in pairs, and they revise each other's work [7] [8].

From this explanation, we can conclude that revising is an important part of writing for students to overcome those problems because the students cannot make good writing instantly. One of the revision strategies that can be conducted based on those problems in a classroom is the CDO Strategy.

The problems that have been formulated in this study were whether the implementation of the CDO Strategy is effective to help the students produce better in writing a narrative text.

This paper has the substance about the literature review of writing narrative text and CDO Strategy, the methodology, the stages to implement the CDO Strategy in writing a narrative text, the results and the suggestions of the research, and the last is the conclusion of the research.

2. Literature review

2.1 Writing a narrative text

Rakhmi says that writing a narrative text is the activity that the writer writes about the action or the incident occurred in the chronological sequence that has a particular commencement and an inevitable ending. Other than that, the text can be in the form of written or spoken. Rakhmi also mentions that there is some necessity of writing a narrative text to fit with the goals. They are:

1. It is combined by developing a central idea.
2. It attracts the reader's into action and makes them feel as if they are at the events.
3. It acquaints about 5W+1 H into the context (what, when, where, why, who, and how).
4. It is coherent. The transitions show changes in character, place, and time.
5. The narrative follows a chronological sequence with the occurrences in a timeline.
6. It develops to a climax that is the most tense moment when the ending is shown, or the important occurrence becomes obvious [9].

2.2 CDO Strategy

The Understanding of Compare-Diagnose-Operate (CDO) Strategy. The students certainly have some problems with writing a text. The difficulties like in describing the ideas in writing, and they are not able to write well because of poor vocabulary and wrong word choices. They are also still confused about dealing with complex English vocabulary. Chen mentions four major problems that faced by EFL students in writing, as follows:

1. Students have difficulties with vocabulary because of their lack of vocabulary, so it is difficult for them to write their ideas correctly.
2. Students find the challenges to produce and expand ideas become supporting details in writing paragraphs.
3. Students have difficulties in grammatical structure, including mistakes in word forms, parts of speech, and subject-verb agreement.

Students have problems in mechanics, which include the punctuation, capitalization, and spelling [10].

CDO is a strategy in writing a narrative text which has three stages. There are compare means compose a narrative text based on what is in the mind of students. Diagnose means students inspect errors in their narrative text by themselves, and operate means students fix the problems and write the revised text.

Procedure of CDO Strategy. CDO Strategy have some procedures to do; they are:

Compare. In this stage, the teacher will give the students a story map and ask them to fill it as the draft of narrative text after the teacher explained about the material of the narrative text. Then, the teacher will ask the students to write a narrative text based on what is in the students' mind. After that, the student reads the text carefully and comprehensively. Then, the teacher will ask the students to find the differences between what the author meant to write and what was written. The teacher gave the students 11 opinions for mentioning the mismatch.

Diagnose. The students diagnose why those differences happened. The teacher asks the students to determine a clear reason for the differences that the students found in comparing step. They must check and fix the errors in the text without deleting the mistakes.

Operate. The teacher asks the students to solve the problem and evaluates whether or not the change is good for writing. The students make changes needed by using one of six opinions. Then, they will rewrite the revised text. Finally, the teacher can see the result of the students' writing in a narrative text. During the process, the teacher will help and monitoring the students.

Thus the procedures of CDO Strategy are compare what was intended with what was written, diagnose the errors, and operate or rewrite the text as the revised text.

The advantages of CDO Strategy. Sherman describes some advantages for students to use CDO Strategy, such as:

1. Students have to consider the relation of the overall purpose of the paper, repair their sentences, then decide on and execute any necessary changes.
2. CDO procedure has created a significant difference in the number and quality of revisions in students' stories and essay.
3. Students also indicated that the CDO Strategy made revising easier for them [11].

According to Waters and Schneider, 10 of 12 participants (85%) showed that the use of CDO is it made the process of revising easier and relieved their skills to improve their stories. Furthermore, there was an enhancement in the number of non-surface (i.e., a word, phrase, and T-unit changes) meaning-preserving revisions and non-surface revisions that generated in textual improvement.

Writing by Using CDO Strategy. In the revision section, the student is listening and following along as their peer reads their paper. The listener tells their peer what the paper was about and what they adored the most about it. Then they will read the paper on their own and make notes throughout the paper such as explication and number of detail. Afterward, they will distribute their recommendations with their peer. Whereas in editing steps, the student will check the paper, such as errors in sentences, capitals, punctuation, and spelling. Then they will share their ideas with their peer. This strategy would be a beneficial strategy for all 29 students to revise their writing. This strategy permits the students to work together in pairs and gives them a chance to talk through their writing and get feedback. Peer revising through this CDO Strategy will also aid students to learn to revise papers on their own since they will be practicing revising papers in pairs. It will also help students learn to team up with others and will let them see the advantage of working together while revising their writing.

2.3 Conceptual Framework

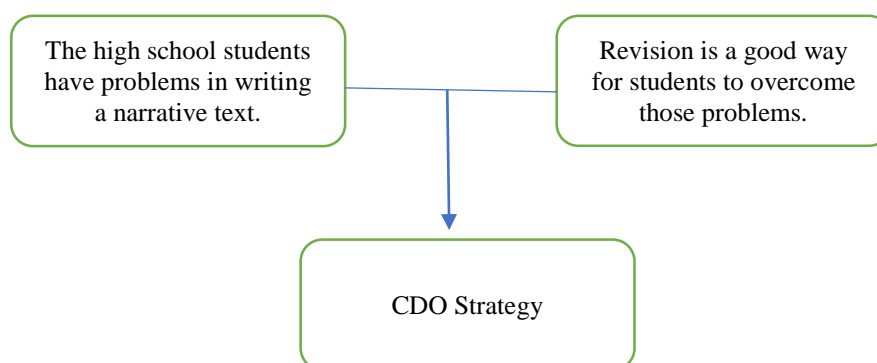


Fig. 1. Conceptual framework of the relationship between students' writing problems and the revision strategy as the alternative solution

3. Methodology

This research was held by using quantitative research as the method and quasi-experimental as the design of the research, thus the researcher determined two groups as samples of the research; experimental class and controlled class. On the sampling technique, the researcher chose purposive sampling. The researcher used a test as the instrument of collecting the data. The form of the instrument was an essay writing test. The researcher gave a pre-test and a post-test to the experimental class and the controlled class. The test was written in the form of narrative text after the teacher treated the students how to write a narrative text by using the CDO Strategy. The population of this research was the 42 tenth grade students of MA Annajah.

4. Data Analysis and Result

From the normality test, it is shown that the standard deviation of the pre-test in the experimental class is 3.818 and the standard deviation of the post-test is 5.678. Meanwhile, the standard deviation in the pre-test of controlled class is 6.6963 and the standard deviation of the post-test is 7.304. Therefore, the data that the researcher did by using SPSS showed that both classes are distributed normally. Then, based on the homogeneity test the value of Sig. Levene's test for equality of variances for the post-test scores is 0.001 which concluded that the variance of the post-test scores from the controlled class and the experimental class is not homogeneous.

Based on the calculation that the researcher did manually, the degree of freedom (df) is 40 and the critical value of the df 40 or t-table by using the degree of significance 5% is 1.68. Moreover, the t_{observe} is 2.52. It means that there is effectiveness of using CDO Strategy on students' writing skills in narrative text. In addition, the Cohen's level of significance shows that the calculation of effect size is 2.7, which is higher than 1.00.

By the result of t-test and the effect size, it indicates that the null hypothesis is rejected, and the alternative hypothesis is accepted. It stated that there is a significant difference between the students' score who implemented the CDO Strategy in writing narrative text and the students' score who did not implement the CDO Strategy in writing narrative text at the tenth grade of MA Annajah.

5. Discussion and Recommendation

5.1 Discussion

Based on the research findings, the researcher got the data that focused on the implementation of using CDO strategy on students' writing skills in narrative text. Build upon what Rahmatunisa says that the students have internal problems in writing [12]. The problems are grammatical problems, word choice, and cognitive problems. Mary's statement is almost the same as Ariyanti's statement. She said that the highest percentage of students' error in writing belonged to grammatical error (51.93%) and the least error that the students made in writing (6.53%).

By using CDO Strategy, the students can solve those writing problems. It happened when the students finished their writing, and they reread their text repeatedly to compare whether

the text that they have written matches with the real meaning that they wanted to write. If there were a word or sentence that was not in accordance with the meaning that they intended, the students would replace the word or sentence with the correct one. After that, the students reread their text in sequence and carefully to diagnose and check the errors. In diagnosing the errors, they checked the punctuation and capitalization first. In this stage, they realized that they made mistakes in punctuation and capitalization. Then, they encircled the errors of the punctuation and capitalization. Then, they checked the errors of grammar, especially in changes from verb-1 to verb-2. They found many verb-1 that have not been changed to verb 2. The students also found errors in word changes that should be an irregular verb, but instead, they added -ed like the regular verb. Then, they encircled the errors of the grammar. Lastly, they checked the errors of the word choice. The students checked whether the words that they have used are in accordance with the usage or not. Some of them made mistakes in distinguishing 'his' and 'her'. Then, they encircled those wrong words. After correcting the mistakes, the students rewrite the text based on the result of their correction as the revised text.

Furthermore, the result of this research is also in line with Sherman's statement about the advantages of using CDO Strategy on students' writing skills [13]. The first advantage is the students have to consider to repair their sentences, then decide on and execute any necessary changes. The second one is CDO procedure has created a significant difference in the quality of revisions in students' writing. The last advantage is the students also indicated that the CDO Strategy made revising easier for them. It also happened when the researcher gave them a post-test. Many of them created the framework of ideas first as the draft; then they developed the ideas became to the paragraph. After they wrote the whole of the text, they reread their text again to check the errors. If they found the errors, they deleted the errors and changed them to become the right one. The researcher also checked the students' writing result in each treatment — the quality of the students' writing results as better at each treatment. The number of writing errors was diminishing because of they were more careful in writing. Other than that, many of the students also argue that CDO Strategy eased them to do the revision because the CDO Strategy has clear stages in revising the writing.

Besides related with Sherman's statement, this research also corresponded with the research by Dwipayogo (2019) who studied about CDO Strategy implemented in teaching writing skill on the descriptive text in tenth grade students at Senior High School 6 Kediri [14]. The result was that the CDO strategy had a significant effect on the students' writing ability at tenth-grade students of SMAN 6 Kediri. The first reason is that CDO Strategy supported the students to arrange the written product, give the correction about the ideas, and choose the appropriate words by themselves. So, they can make their product in a well-written form includes content, structure, vocabulary, grammar, and mechanics. Other than that, CDO strategy helped the students to increase their writing ability, especially for their ability to write the content, structure, vocabulary, grammar, and mechanics. Dwipayogo's data also showed that the result of t-test was 10.003 at the degree of freedom 30 and the t_{table} 2.045. The t-score was higher than the t_{table} ($10.003 > 2.045$).

Meanwhile, the result of this research showed that the students who have taught by the teacher and used CDO Strategy on their writing skills in the narrative text are effective. It proves in the students' score who have taught and applied CDO Strategy on their writing skills in the narrative text had a good increase than before using CDO Strategy. Total of the gained score in this experimental group is 190. The mean of the students' score is 71.4, with the lowest score is 65, and the highest score is 85. The score was better than before using the CDO Strategy. The mean of the scores is 63, with the lowest score is 45, and the highest score

is 75. Further, based on the mentioned t-test result, there was a significant effect of using CDO Strategy on Students' Writing Skills in Narrative Text.

However, the teacher must pay more attention to students when doing the treatment, especially when carrying out the treatment in pairs. The teacher must pair the students who is higher or strong in writing with the students who is lower or weak in writing. So, the stronger students will still be stronger, and weak students will come to be stronger because they are affected by learned together with the strong student. The researcher suggested that because in this researcher, the researcher paired students based on the location of their seats, not based on the level of writing skills. It made the standard deviation both classes in post-test was higher than pre-test. In the controlled class, the standard deviation in pre-test was 6.696, and it increased in post-test to 7.304. While in experimental class, the standard deviation in pre-test was 3.818, and it increased in post-test to 5.678.

5.2 Suggestion

After getting the result of the study, the researcher gives some suggestion as follows:

Students. For students, they should be more active, careful, patient, and focus on the learning process. Because in using CDO strategy, there are stages that the students have to do sequentially.

Teachers. For the teachers who want to use this strategy in teaching and learning process, they should be more pay attention to the students and must guide all the students carefully in implementing the treatment. The teacher must ensure all the students to do the CDO strategy sequentially so that there are no missed steps, especially in practicing the diagnosis the errors in their text. In addition to paying attention to students in doing the treatment individually, teachers must ensure that groups or students in pairs have different skill levels.

Further researcher. This research can also be a good reference for the next researchers who want to conduct the same research that related to teaching writing, especially about the narrative text. For the researcher who wants to conduct a similar topic, the researcher suggests the further researcher to research with another type of text such as recount text or descriptive text.

5.3 Conclusion

In accordance with the previous chapters, the researcher concludes that implementing the CDO Strategy as the strategy was effective to improve the students' writing skills in the narrative text at the tenth-grade students of MA Annajah in the academic year 2018/2019. It can be evidenced from the total of the gained score in the experimental group or by using CDO Strategy was 190. The mean of the students' scores was 71.4, with the lowest score was 65, and the highest score was 85. The score was better than before using the CDO Strategy. The mean of the score was 63, with lowest scores was 45, and the highest score was 75. It was a progress that was better than the controlled group who did not use the CDO Strategy. After calculating the data by using T-test manually with two means of two groups, the researcher found that t_{observe} was 2.52 and t_{table} was 1.68, so t_{observe} was higher than t_{table} . It means that H_0 was rejected and H_a was accepted. In addition to calculating the effect size of the CDO Strategy by Cohen's measurement on students writing skills in the narrative text was high effect size. However, the standard deviation of both classes from the pre-test to the post-test in the normality test by using SPSS 24 had increased. In experimental class, the normality was an increase from 3.818 to 5.678. It happened because the spread of the students' writing level was

uneven when doing the treatment in pairs and in groups. Because of that, the students who were weaker in writing skills will be weaker, and the students who were strong in writing skills will be stronger.

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