The Implementation of Problem Based Learning (PBL) in Students Writing Skills on Analytical Exposition Text

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ABSTRACT

Problem based learning is an approach that makes the students think critically to solve problems. Because in writing a text, students have to make a statement that should be critical. Especially when writing an analytical exposition text in which they should persuade the readers to agree with their statements. Therefore, this study aimed to know whether implementing problem-based learning in analytical exposition text affects the students' writing skills. This quantitative study used pre-experimental method where the writers carried out a pretest and posttest for 36 students as participation. This study was conducted in one of the ULP classes in SMK N 2 Semarang in the academic year 2022/2023. The pretest and posttest data were analyzed using a writing assessment rubric. This study found out if the students' score increased where the mean score pretest was 69.33 to 89.41 for the posttest. So, it was shown that PBL significantly affects students' writing skills in making an analytical exposition test

Keywords: Problem Based Learning, Critical Thinking, Writing

A. Introduction

In Indonesia, students learn English as a foreign language since they are in primary school. They learn it from the basic up to the advanced level because they think learning English is beneficial for them, especially since they are still a kid. In learning English, students will be taught four skills that are reading, listening, speaking, and writing. Unfortunately, some students think that writing is the most difficult skill in English because they elaborate ideas, vocabulary, and grammar structure simultaneously. But in learning writing skills, students will learn how to express their ideas or feelings in a text (Klimova, 2012).

Writing is a way of thinking in transforming ideas and providing students with a wide range of opportunities to get on existing knowledge and beliefs in their writing (Troia, 2014). Therefore, in teaching writing, the teacher should be able to provoke the way students think to be more critical. For example, when the

students learn analytical exposition text. An analytical exposition is an oral or written text designed to convince listeners or readers about the phenomenon surrounding it. The purpose of this text is to convince the reader of the important ideas discussed in the text by developing opinions and arguments to support them (Simaremare & Silalahi, 2021). This type of text can be found in scientific books, journals, magazines, newspaper articles, academic speeches or lectures, research reports, etc. Therefore, in learning analytical exposition text, the students are expected to find reasons and arguments that should be critical.

According to (Yuliana & Gandana, 2018), an analytical explanation is a type of persuasive writing that convinces the audience of the validity of an argument from a one-sided point of view. She also said that the social function of the analytical commentary is to convince readers and listeners by presenting arguments that explain the basic reasons why something is important. She also stated the generic structure of analytical exposition consists of three main parts: thesis, arguments, and reiteration. To produce a good writing product, the students can follow some writing activities. According to (Brown, 2007), writing focuses on finding and organizing ideas, using good punctuation, revising the text, using appropriate grammar, and producing the final product. Therefore, in producing a writing product, students should notice those things. (Harmer, 1998) also stated that students are encouraged to use precise language.

One of the method that might be appropriate in learning analytical exposition text is problem-based learning. Problem-based learning is a student-centered approach in which students learn about a topic by working in groups to solve real problems. This method is the pushing the students to have learning motivation. It also pushes the students to think more critically and find sources to help them solve the problem provided.

Based on (Engle, 1981), problem-based learning is ideal for student-centered and individualized learning. It increased students' problem-solving skills and engaged them in active knowledge acquisition. (Sihaloho et al., 2017) said that PBL helped students develop thinking, problem-solving and intellectual skills,

learn adult roles through experience in simulated real life situations, and become independent and autonomous learners. PBL is one of the learning models designed to learn from problems that require real-world investigations. The benefits that the students got if they participated in the PBL practice were developed creative thinking through brainstorming while forming hypotheses and developing new learning methods from the problem provided (Ersoy & Başer, 2014; Nuswowati et al., 2017; Siew et al., 2017)

In implementing PBL, teachers have to know the characteristic of PBL. Based on (Sihaloho et al., 2017), the characteristics of PBL are 1) Ask questions or problems and develop different solutions to solve problems. 2) Students explore topics from various subjects with a focus on interdisciplinary connections. 3) real-questions: students must analyze, pose questions, form hypotheses and make predictions, gather and analyze information, conduct experiments and draw conclusions. 4) Create and publish their product. Learners are asked to create specific products through hands-on work or demonstrations representing solutions to the problems they discover. 5) Cooperation, student collaboration, most often forming pairs. Therefore, in implementing PBL, the students would develop thinking skills, problem-solving skills, and effective self-directed learning, where the process of solving problems in learning requires thinking, analysis, evaluation and idea generation (Sari et al., 2021).

Previous studies that focused on Problem Based Learning (PBL) in improving students' writing skills stated that PBL helps students in writing. (Hairuddin et al., 2018), who conducted a study at SMA N 5 Makasar, found that PBL increased students' writing skills and PBL is suitable for all students' learning styles. (Badriyah et al., 2021) also found that PBL influenced students to develop writing skills. It was proven by the students' writing results where the score was higher after using PBL method instead of other students who were not using PBL method. According to (Zahra & Samsi, 2022), PBL influenced students' writing skills because they received active knowledge and they were also active in class discussion. Thus, this study aims to find out whether Problem Based Learning (PBL) can increase

the student's writing skills, especially in analytical exposition text. But this study focuses on the student's critical thinking, where they have to produce arguments and reasons in the text and they do it in a group. Therefore, this study might motivate other teachers to use PBL in teaching writing, and it can be a reference for other writers in studying PBL.

B. Method

This study was conducted on the tenth-grade students of SMK N 2 Semarang in the academic year 2022/2023. The students were from the ULP program, and the number of population was 36 students. This study was a quantitative study which used pre-experimental design. Pre-experimental design is the simplest form of study design. According to (Matthew DeCarlo, 2018), pre-experimental designs are so called because they are often created before the actual experimentation takes place. The writers wanted to know if their interventions impact a few people before seeking data and spending time on real experiments. Therefore, pre-experimental planning is usually performed as the first step in obtaining evidence for or against an intervention.

The instrument of this study was an observation, and the writers used a rubric writing assessment. The rubric helped the writers assess the students' analytical exposition text. The assessment rubric included several indicators of analytical exposition text: text organization, sentence formation, grammar, vocabulary, mechanic, tidiness and deadline.

In collecting the data, the writers applied two measurements technique, pretest and posttest. Pretest was done before the experiment, and posttest was done after the population got the treatment. Before the technique done, the writers prepared a case that the students had to solve in a form of text, and the students had to do it in a group. At the end of the class, the text evaluation was conducted to assess students' writing skills, and the data obtained were quantitative data on students' performance.

The data on student problem-solving of analytical exposition text in the PBL model were analyzed using parametric statistics. Using parametric statistical analysis by satisfying the assumption test for normal

distribution. The normality test used the Shapiro-Wilk test. Nonparametric statistical analysis was used if the data found were not normally distributed. Data were analyzed using SPSS version 25.0 for Windows.

C.Findings and Discussion

Findings

The study utilized the pre-experimental design to compare the students' writing abilities before and after the treatment. The writers used SPSS to analyze the students' scores. The writers first made sure that the data were normal. The test for normality was used to determine whether the data was normal.

Table 1 Test of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Selisih Posttest dan Pretest	.972	36	.483

Because the amount of the sample was below 100, Shapiro-Wilk was employed to distribute the data. If the sig value was bigger than 0.05, the data could be considered normal; conversely, if it was less than 0.05, it was not normal.

It can be seen on the table 1, the result of normality test based on Shapiro Wilk. It was written that the sig of the difference between pretest and posttest was 0.483. It meant that the sign pretest and posttest results were more than 0.05. It can be concluded that the data distribution was normal, and it can be calculated using a t-test.

The writers used paired sample t-test to calculate the data sampling. Paired sample t-test was used to compare the difference between the two means of the data with the assumption that the data were normally distributed. The paired sample came from the same subject, but each variable was taken in a different situation.

Table 2 Paired Sample T-Test

Paired Differences	
	Paired Pretest-Posttest
Mean	-20.083
Std. Deviation	5.390
Std. Error Mean	.898
T	-22.357
Df	35
Sig. (2-tailed)	.000

From the table 2, the significance value (2-tailed) was less than 0.05 and it indicated a significant difference between the variables. If the significant value (2-tailed) was more than 0.05, it indicated that there is no significant differences between the

variable. This data showed that the significant value (2-tailed) was less than 0.05. Therefore, there is a significant differences between the variable before the treatment given and after the treatment given.

Table 3 Test Statistics

Test Statistics	
	Posttest-Pretest
Z	-5.246[b]
Asymp. Sig. (2-tailed)	.000

It can also be seen from the table that the Asym sig (2-tailed) was smaller than 0.05. This data means that H0 was rejected and Ha accepted.

Discussion

The data analysis results showed that the use of Problem Based Learning in writing analytical exposition text was significantly different. It was proven by the students' pretest and posttest scores of writing an analytical exposition text. Analytical exposition is a text that is used to persuade the readers about a topic by giving arguments (Yuliana & Gandana, 2018). Providing the arguments in analytical exposition text mean that the students had to find and organize ideas (Brown, 2007) to convince the readers.

In doing the study, the writers conducted pretest and posttest to measure the student's ability in writing skills. In the pretest session, the students were asked to make an analytical exposition in a group before they were given the treatment. The pretest results proved that the students had not created the text maximally. They just tried to explain a topic that was related to the problem in the text without trying to solve the problem they got from the writers. After knowing the students' results, the writers gave the treatment to the students. Firstly, the writers explained the concept and example of PBL, and gave the analytical exposition materials to the students. Then, the writers gave the students a problem and asked them to share their opinion or thoughts. The students' opinions would be evaluated by the teacher because, in analytical exposition text, the arguments or opinions should be critical. It was because analytical exposition text is to persuade the readers that the topic is important. It was in line with (Sihaloho et al., 2017), who said that PBL helped students

develop thinking, problem-solving and intellectual skills. In persuading the readers, the arguments should be critical and make sense.

After the writers gave the treatment to the students using PBL, the students were asked to create an analytical exposition with their group in the posttest. Here, the students tried to solve the problem by brainstorming. Not only that, but the students also exchanged their ideas with their group mattes through discussion. In this process, the students were improving their thinking skills because they had to find critical and factual arguments. It was in line with (Ersoy & Başer, 2014; Nuswowati et al., 2017; Siew et al., 2017), who said that the students who participated in a learning process that used PBL would develop creative thinking by brainstorming while the students were making the arguments from the problem provided. (Sari et al., 2021) also stated that by using PBL, the students would develop thinking skills, problem-solving skills, and generate ideas.

Following to the posttest, the writers evaluated the posttest result and compared it with the pretest result. In the pretest result, the students only explained the problem, while in the posttest session, the students tried to make arguments and gave the reason for the arguments based on the problem given. So, it showed that the results were different, where the posttest results were increased. It produced the mean of the pretest and posttest. It produced the pretest was 69.33, and the posttest was 89.41. The PBL treatment helped the students gain more critical thinking, creative thinking, problem solving skills, and writing skills. It can be conclude that PBL can increase students' writing skills, whereas some previous studies have found the same thing. It was supported by (Hairuddin et al., 2018), who found that PBL improves students' writing skills. (Badriyah et al., 2021) also found that PBL influenced students to develop writing skills because, in this case, the students have to write what they thought. The students' writing results proved it after using PBL method

D. Conclusion

In conclusion, this study is used to prove that the implementation of Problem Based Learning (PBL) helps students increase their writing skills. It is proven by the students' posttest results, which significantly differed in

students' analytical exposition. The data showed improvement from the mean score pretest, 69.33, to 89.41 for the posttest. It means that there were significant differences before and after the PBL treatment. Based on the data, the writers hope it will help and inspire others to use PBL in the learning process with the students, especially in learning writing. The writers also suggest to further writers use PBL in other texts and other skills.

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