

The Effect of Learning Models (Project-Based Learning vs Direct Instruction) on the Skill of Writing Observation-Report Text of the 10th Grade Students

Kusmiyati
Universitas Dr. Soetomo
Surabaya City, Indonesia
kusmiati@unitomo.ac.id

Ni Nyoman Sarmi
Universitas Dr. Soetomo
Surabaya City, Indonesia
ni.nyoman@unitomo.ac.id

Abstract—One of the reasons that Indonesian language subject seems such a boring subject is due to the uninteresting learning model the teachers apply. It results in students; lack of skill in writing observation report. One of the efforts to overcome this problem is to use an innovative learning model, namely the project-based learning model. The research purpose, among others, was to examine the effect of the project-based learning model on high school students' writing skill of observation-report text. The research population covered 44 students of 10th grade. A total of 22 students belonging to experimental class were taught using project-based learning model and 22 students grouped as the control class were taught using direct instruction model. Data analysis used was two-sided t-test. Based on the results of data analysis and hypothesis testing, it was concluded that there was an effect of the project-based learning model on the 10th grade students' writing skill of observation-report text. That was shown from the results of hypothesis testing made use of a two-sided t-test calculated using SPSS 16 software in which the $T_{count} = 3,728 > T_{table} = 2,018$. Based on the test results, it was found out that the post-test mean score of the experimental class was 76.60 while the post-test mean score of the control class was 63.64. The results of calculation indicated that the experimental class taught using the project-based learning model had higher value compared to the control class taught using the direct instruction model.

Keywords—*Project-based learning, Writing Skill, Observation-Report Text*

I. INTRODUCTION

Education is a process to prepare students through activities of learning knowledge, skills, and habits of a group of humans having been passed down from generation to generation through teaching, research and training. Another opinion also said that the definition of education is an effort made systematically to create an effective teaching-learning atmosphere so that students can develop their potential. This is important to do because someone having intelligence, noble character, personality, spiritual strength, and skills beneficial to himself and society needs an education.

The national education development can be viewed from the

development of national curriculum because the curriculum is a determinant of education flow to a narrower direction, namely the level of education units (high, middle and elementary school levels). Since 2006 Indonesia had been using School-Based Curriculum (KTSP). By implementing KTSP, it is hoped that students will not only be smart cognitively, but also have noble behavior and abilities in the real world as the application of the material learned in the classroom so that the goals of KTSP can be maximally achieved and well realized. There are several problems that arise, namely students are still unable to relate what they get to how this knowledge will be used or utilized. Students also find it difficult to understand academic concepts because they are still taught something abstract using lecturing method. One of the fundamental changes in the 2013 Curriculum is the learning model. The 2013 curriculum uses a scientific approach learning model done in five learning steps, namely observing, questioning, experimenting, associating, and communicating / creating networks.

Indonesian language subject tends to be a subject requiring students to read and listen then remember every material having been delivered by the teacher. This is because almost all learning materials of Indonesian language subject in each

chapter have reading text in the form of a story so that it requires students to read more. While learning this subject, what students remember should come from what is read, heard, seen, said, and most of all is from what is done and said.

One of the materials in Indonesian language subject is observation report text. The existing problem related to the material of the Observation Report Text lies in the skill of writing observation report text. This is because students still do not understand what the teacher says. An effective and efficient teaching and learning media is needed in an effort to improve the skill of writing text of observation result. So far, the use of lecturing and assignment methods has not been able to achieve optimal results. Therefore, it is necessary to have a good learning method or model so that students can understand what is being taught by the teacher. There are many learning models that have developed in an effort to improve the quality of educators and the quality of learning at this time. One of the current learning models is the project-based learning model which later can be used by a teacher or educator as a learning model so that it can improve students' skills in writing observation report text.

Project-based learning is a learning model in which the learning process involves students directly through

research activities to work on and complete a particular project. Although the project-based learning model is also said to be an old model, this model has many advantages over other learning models. Therefore, the project-based learning model is widely used and kept on being developed.

Based on observation result, it has been found that the methods often used by teachers in Indonesian language learning are limited to lecturing and group work methods. Therefore, there is a perception that Indonesian is a boring subject because of the lack of learning methods used by teachers. If the project-based learning model can be implemented in Indonesian language learning, it will have important benefits to improve the skill of writing observation report text and can also lead to very active learning.

The above phenomenon was the causal factor that made researchers interested in conducting research to determine whether or not there was an effect of the application of project-based learning models on increasing the 10th grade students' ability in writing observation report text in Indonesian language subject.

The first research objective was to examine the skill differences in writing observation report text between group of students learning using project-based

learning and group of students experiencing direct instruction model (direct learning). The second objective was to examine the effect of Project Based Learning model on the skill of writing observation report text.

II. RESEARCH METHOD

The type of this research was an experimental research made use of a quantitative research approach. Sugiyono (2013: 107) stated that "the experimental research method can be interpreted as a research method used to find the effect of certain treatment on other under controlled conditions". The approach used was quantitative approach applied to answer the formulated research problems. (Sugiyono, 2013: 50).

In this research, the experimental group was treated using a project-based learning model while the control group was treated using direct instruction model. In addition, this research used quantitative form, which was a research emphasizing on result whose data were in the form of numbers and then processed using statistical calculation.

Location and Time of Research

The research took place at SMA ISLAM PARLAUNGAN Sidoarjo located on 2 - 4 Berbek I Street - Waru, Sidoarjo.

The location was chosen because it had all the supporting aspects for the research to run well. The research was conducted in February 2020. It was carried out during learning activities in the classroom.

Data Collection Technique

Data are collection of facts or figures or anything that can be trusted to be true so that it can be used to make decision (Sulaiman, 2002: 4). In this research, data collection was carried out by applying the following methods: 1. Observation which was to determine the situation and the process of implementing learning activities taking place in class. These activities were related to the way teachers teach and students learn. In this research, the ones that were observed were high school students. 2. The test method refers to Arikunto's opinion (2006: 150) that the test is a series of questions or exercises and other tools used to measure the skill, knowledge, intelligence, abilities or talent possessed by individual or group. The test methods used in this research were test methods divided into two, namely the pre-test and post-test which were in the form of subjective test.

Data Analysis Technique

The data analyzed in this research were quantitative data. Therefore, statistical analysis was applied to analyze

the data. The stages of data analysis carried out were as follows: The normality test was used to determine whether the sample comes from a normally distributed population or not so that significant data were obtained. Test for Homogeneity of Variance was also carried out to determine the similarity of the sample variance, namely heterogeneous or hypothesis testing about variance was also carried out. Meanwhile, T-test was carried out to determine the hypothesis test in this research. The T-test was conducted for both project-based learning and direct learning models

III. FINDING AND DISCUSSION

The data collection of pre-test scores in this research was carried out by collecting the scores of the initial test as the data. The pre-test scores were used to observe the similarity of initial ability between students in experimental class and students in control class. The data of pre-test scores were then analyzed by using a two-sided t-test in which prerequisite tests had previously been carried out, namely the normality test and the variance homogeneity test using SPSS 16 software. Seen from the test result using the two-sided t-test, the t-count value was $-0.292 = < 2.018$ so that H_0 is accepted, meaning that there was no

significant difference in students' initial abilities between the experimental class and the control class.

After it was found out that there was no significant difference in initial ability between students in experimental class and students in control class, the research was continued by carrying out treatment using the Project-Based Learning model to the students in the experimental class and the direct-instruction model to the students in the control class. Then a post-test was carried out to determine the differences of ability to write a text on observation report between the students in the experimental class and the students in the control class. From the test results, it was also found out that the post-test average score of the experimental class was 76.60, while the post-test average score of the control class was 63.64. It indicated that the experimental class taught using the project-based learning model had higher score than the control class taught using the direct learning model.

The application of the project-based learning model to the students in the experimental class had an effect on the students' ability to write the observation report text. This was due to the fact that in project-based learning, the students were guided to find the root of the problem and

describe it in the form of written observation report. Students became more active in doing discussion in groups to solve problems given by the teacher. In this learning model, the teacher was active in accompanying and directing the students.

Meanwhile, the direct learning model used in the control class also had an effect on the students' skill of writing observation report text. However, based on the researchers' observations, the increase of the students' skill of writing observation report text in the control class taught using the direct learning model was not as significant as the increase of students' skill in the class taught using the project-based learning model. It was because learning process was still centered on the teacher so that the material was still not evenly conveyed. There were many things showing that the material was not absorbed by students, including the lack of students' paying attention to the teacher when the teacher delivers the material, students' less enthusiasm in participating in the teaching and learning process. Students were also less able to solve a problem in a given exercise because students were only motivated by the example of solving the problem given by the teacher.

Based on the research findings, it could be seen that the project-based

learning model was better than the direct learning model because there were differences in the ability to write text on observation report between students taught using the project-based learning model and students taught using the direct learning model. Therefore, it can be concluded that there was an effect of the project-based learning model on the 10th grade students' skill of writing observation report text.

IV. CONCLUSION

Based on the result of data analysis and hypothesis testing using the -t test calculated using SPSS 16 software, the result obtained was the value of $t\text{-count} = 3.728 > t\text{ table} = 2.018$ so that H_0 was rejected and H_a was accepted. It indicated that the project-based learning model had an effect on the students' skill of writing the observation report text. From the test result, it was also known that the post-test average score of the experimental class was 76.60, while the post-test average score of the students in the control class was 63.64, meaning that the students in experimental class taught using the project based learning model had higher score than the ones in the control class taught using the direct learning model because there were differences in the skill of writing of the observation

report text between students taught using the project-based learning model and those taught using direct learning model. Therefore, the conclusion that could be put forward in this research was that there was an effect of the application of the project-based learning model on the 10th grade students' skill of writing observation report text.

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