

# LEARNING TO WRITE EXPERIMENT REPORT TEXT USING PROJECT-BASED LEARNING METHOD

Mulyani<sup>1</sup>, Teti Sobari<sup>2</sup>\*

<sup>1</sup>SMPN 8 Cimahi, <sup>2</sup>IKIP Siliwangi <sup>1</sup>mulyaniyani616@gmail.com, <sup>2</sup>tetisobari@ikipsiliwangi.ac.id

#### **ABSTRACT**

The problem in this study was the low result/score of students' skills in writing test report texts. One of the alternatives as a solution to this problem is the author applying a project-based learning method or project-based learning (PJBL). The purpose of this study was to determine the increase in students' skills in writing test report texts, after applying the PJBL method. The research procedure uses classroom action research by processing data in a qualitative descriptive manner. The research was started by carrying out pre-action/pre-cycle activities, namely identifying students' skills in writing experimental report texts in class IX B SMPN 8 Cimahi. Based on the results of the pre-cycle, action research was carried out which consisted of two cycles. Each cycle consists of two meetings. The actions in each cycle are carried out in four stages, namely (1) preparation/planning and action, (2) implementation of actions, (3) observation and evaluation, and (4) reflecting on the actions that have been carried out in learning activities. As for the results of this study, students experienced an increase in learning outcomes in writing experimental report texts, namely as follows: Pre-cycle to cycle 1 experienced an increase, achievement of completeness is 68.42. This shows an increase in students' skills in writing experimental report texts from pre-cycle which completed 9 students increased to 26 students in cycle I. Students' skills in writing experimental report texts by applying PJBL increased by 31.58 from the results in cycle I to cycle II. This proves that the PJBL method can improve the skills of class IX B students in writing trial report texts. All 38 students passed with the highest score of 90 and the lowest score of 79.

**Keywords**: students, test report text, writing, project-based learning (PJBL).

### **ABSTRAK**

Masalah yang ada dalam penelitian ini adalah rendahnya hasil/nilai keterampilan siswa dalam menulis teks laporan percobaan. Salah satu alternatif sebagai solusi masalah tersebut penulis menerapkan metode pembelajaran berbasis proyek atau project based learning(PjBL). Tujuan penelitian ini adalah mengetahui peningkatan keterampilan siswa dalam menulis teks laporan percobaan. setelah menerapkan metode PJBL. Prosedur penelitian menggunakan penelitian Tindakan kelas dengan mengolah data secara deskriptif kualitatif. Penelitian diawali dengan melakukan kegiatan pratindakan/prasiklus yaitu mengidentifikasi keterampilan siswa dalam menulis teks laporan percobaan di kelas IX B SMPN 8 Cimahi. Berdasarkan hasil dari prasilkus dilakukan tindakan penelitian yang terdiri atas dua siklus. Setiap siklus terdiri dua pertemuan. Tindakan dalam setiap siklus dilakukan dalam empat tahapan yaitu (1) persiapan/perencanaan dan tindakan, (2) pelaksanaan tindakan, (3) observasi dan evaluasi, dan (4) melakukan refleksi terhadap tindakan yang sudah dilakukan dalam kegiatan pembelajaran. Adapun hasil dari penelitian tersebut siswa mengalami peningkatan hasil belajar dalam menulis teks laporan percobaan yaitu sebagai berikut Prasiklus ke sikulus 1 mengalami kenaikan. capaian ketuntasannya yaitu 68,42. Hal ini menunjukkan adanya peningkatan keterampilan siswa dalam menulis teks laporan percobaan dari prasiklus yang tuntas 9 siswa meningkat menjadi 26 siswa pada siklus I. Keterampilan siswa dalam menulis teks laporan hasil percobaan dengan menerapkan PJBLmeningkat 31,58 dari hasil di siklus I ke siklus II. Hal ini membuktikan metode PjBL dapat meningkatkan keterampilan siswa kelas IX B dalam menulis teks laporan percobaan, siswa yang berjumlah 38 seluruhnya tuntas dengan nilai tertinggi 90 dan nilai terendah 79.

Kata kunci: siswa, teks laporan percobaan, menulis, project based leraning (PJBL).



## INTRODUCTION

A meaningful learning method is learning that is able to provide real experiences for students to carry out learning that is designed, processed, then the final results are analyzed by the students themselves. Some of the problems that exist in learning Indonesian, one of which is the material for writing test report text skills. students should be able to find and solve it both in groups and individually. This is in line with the contents/expectations of the 2013 curriculum that the learning process is developed on the principle of student activity. This is because students as learning subjects must be able to design and solve the problems they face logically and scientifically (Kemendikbud, 2014: 7). But the facts in the field of students' skills in writing test report texts are still low. This is due to several factors. Constraints from students, namely the activity of writing experimental report texts is considered too difficult on the grounds that it must fulfill the elements of writing scientific papers and requires a relatively long time. This was also experienced by several teachers so they conducted research to improve students' skills in writing experimental report texts. Research which discusses the low skills of students in writing test report texts, among others, are as follows.

Research by Ahsanul Husna, one of the Indonesian language teachers at SMPN 7 Medan, stated that writing a test report text is a skill that students are less interested in because it is relatively difficult. The difficulty in question is the result of students' skills in writing experimental report texts that do not yet reflect a simple scientific report. The grammar and logic of students' thinking are still sloppy. In response to this, Husna applies the problem-based learning (PBL) method so that students' skills become better. The results of this study indicate an increase in students' skills in writing test report texts; that is, the average pre-cycle is 60, in cycle I the average rises to 66.82 and increases again in cycle II to an average of 78.91). This shows that CAR is successful <a href="https://jurnal.dharmawangsa.ac.id/index">https://jurnal.dharmawangsa.ac.id/index</a>.php/sabilarrasyad/article/view/1184).

The author also experienced the same thing, namely students had difficulty writing reports on experimental results. This condition was experienced by the writer when the students wrote the experimental report text. The results of students' skills in writing experimental report texts were still low. In general, students write experimental report texts only writing the title, tools, materials, and trial results



without paying attention to the structure and language that characterizes the report text. This has an impact on the low score of students' skills in writing report texts. This situation is possible because the writer / teachers are less creative and less innovative in carrying out learning activities. Teachers have not utilized various media and learning methods that are meaningful to students that can be used in writing experimental report texts.

This fact becomes a problem and the author's thoughts because if this is allowed to continue then learning to write a trial report will not work well. As a result, the level of students' skills in writing reports is very low. Based on these problems, a solution is needed so that students' skills in writing test report texts are increasing. One of the alternatives as a solution to this problem, the authors plan to apply the project-based learning method (PJBL) to improve students' skills in writing experimental report texts.

According to Made Wena (2016: 108-118), there are three stages of learning in the PJBL model, namely: the project learning planning stage, the project learning implementation stage, and the project learning evaluation stage. The three stages are a unit that supports and relates to each other, in an effort to optimally achieve the learning objectives of the project. Meanwhile, according to Huda (2013: 271) there are six steps to successful implementation of project-based learning, namely 1) preparing important questions related to a topic of material to be studied; 2) make a project plan; 3) make a schedule; 4) monitoring the implementation of project-based learning (PJBL); 5) conduct an assessment; and 6) evaluation of project-based learning (PJBL). The PJBL model according to Eko Mulyadi, (2015: 387-388) is a learning model that provides opportunities for teachers to manage learning in class by involving project work. Meanwhile, the project-based learning approach is supported by learning theory constructivist. According to Satoto Endar Nayono, et al., (2013: 342) constructivism is a learning theory that has wide support that relies on the idea that students build their own knowledge in the context of their own experiences.

Every learning process always produces learning outcomes. According to Suprijono, (2016: 5) learning outcomes are actions, values, understanding, attitudes, appreciation, and skills. Meanwhile, according to Sudjana (2016: 22) learning outcomes are students' abilities after receiving learning experiences. While the opinion of Jihad (2009:14) learning outcomes are the achievement of changes in behavior that





tend to settle from the cognitive, affective, and psychomotor domains of the learning process carried out in a certain time.

Writing can be considered as a process or a result. Writing is an activity carried out by someone to produce a piece of writing. According to Heaton in St. Y. Slamet (2008:141) writing is a skill that is considered something difficult or difficult and complex. M. Atar Semi (2021:14) reveals the notion of writing is a creative process of transferring ideas into written symbols. Writing skills as a way of communication can be interpreted as a person's ability to convey meaning to other people or readers by using written language so that what is written and conveyed is in accordance with what the author wants.

Experiment report text is generally used to report experimental results, scientific work, or practicum reports. The purpose of the experimental results report text is to provide information to the reader about the experimental results that have been made. The text of the experiment results report is general or universal. While the experiment is a form of research activity to test or prove a theory. So, when combined, the text of the experimental report is a text or written form that functions to convey the results of experimental activities whose purpose is to test or prove a theory.

## **METHOD**

The research method used was class action with a qualitative descriptive approach design, namely explaining/describing the increase in student learning outcomes in writing experimental report texts by applying the project-based learning (PJBL) method. The location in this study was SMP Negeri 8 Kota Cimahi. The source of the data in this study was the learning outcomes of class IX B students in writing experimental report texts using the project-based learning (PJBL) method. The data collection and processing techniques used are documentation studies and describe data on student learning outcomes in writing descriptive texts in the two class action cycles that have been carried out. The data analysis used in this study was a qualitative descriptive analysis which was carried out by describing student learning outcomes in writing experimental report texts by means of: collecting data, processing data, then analysing data, and drawing conclusions.



#### RESULT AND DISCUSSION

#### Result

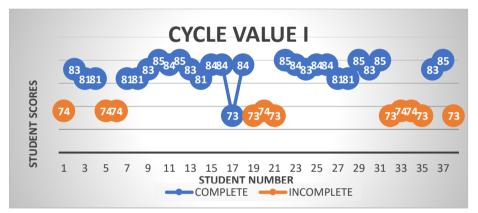
This research consists of two cycles. Each cycle consists of several actions according to the PJBL steps.

Based on the activities that have been carried out, the following results are obtained. The results of observations on students' skills learning activities in writing experimental report texts obtained the following data. The teacher conducts learning according to the lesson plans. The teacher gives explanations and examples of steps in presenting a report text with a project-based plan.

The student learning outcomes in writing experimental report text cycle 1 can be seen in the following graph.

**Graph 1** Data on Student Learning Outcomes in Skills Writing Experimental Report

Text in Cycle I



Based on the analysis of the data presented and graph 1.1 above, it can be seen that the average value of students' skills in writing test report texts is 80.13. As for the score obtained, it can be seen that the highest score is 85 and the lowest is 73. Students who are complete in writing test report skills are students whose scores are  $\geq$ 75. Thus, the completeness achievement is 68.42. This shows an increase in students' skills in writing test report texts from pre-cycles that completed 9 students increased to 26 in cycle I.

Cycle II is an improvement made to weaknesses in cycle I. According to the results of observations and the results of students' skills in writing experimental report texts, in cycle II it can be explained that the teacher in carrying out the learning process is in accordance with the steps in the lesson plans. The teacher explains the learning material for writing experimental report texts by implementing PJBL.



The learning process in cycle II is planned to be better. The improvement plan is: the teacher or researcher must provide interesting feedback so that it is expected that students' critical power will emerge. In addition, the teacher motivates students to be fully involved in the learning process so that collaboration in groups can take place well. The teacher must manage time well. And changing learning strategies so that students are active, critical, and logical in planning to completing project assignments writing test report text so that the results increase.

Student activity data has increased, namely the class atmosphere is more conducive. Even though writing experiment report texts independently/individually, collaboration in groups is better. All students were involved in the discussion process. Afdan and Rama who are still confused want to ask their group. Rahsya and Intan did the same thing, they were active in discussions and willing to accept explanations from friends in their group. Robi's group was seen visiting other groups to exchange ideas. It can be seen that the students wrote the experimental report text seriously but looked enthusiastic and carefree.

An overview of improving student learning outcomes in the skills of writing test report texts is presented in the following graph 2.

**CYCLE VALUE II** 95 8888 888 STUDENT SCROES 90 85 80818180 17 19 23 15 25 STUDENT NUMBER ■ COMPLETE

Graph 2 Student Skill Results Data Writing Text Cycle II Experimental Reports

#### **Discussion**

In order to find out the increase in the results of students' skills in writing test report texts from pre-cycle to cycle I and from cycle I it increased in cycle II, it can be explained as follows.



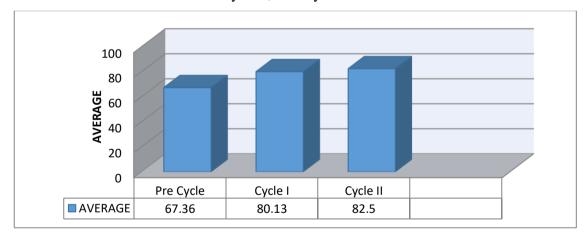
This classroom action research was conducted in two cycles with the aim of improving students' skills in writing experimental report texts according to predetermined criteria by applying the PJBL method.

The learning process in cycle I still found many shortcomings in the way the teacher did so that learning did not show a good atmosphere and results. Some students were still confused, awkward, and unskilled in writing correct structures and reports based on data and facts from existing experiments. As a result, the acquisition of students' skill scores in writing test report texts is still low and unsatisfactory.

Cycle I activities ended with reflection to improve the deficiencies so that plans and implementation of improvements can be determined in cycle II. The goal is that learning in cycle II creates a comfortable, enjoyable, and meaningful atmosphere so that the value of students' skills in writing test report texts can increase from pre-cycle, cycle I, to cycle II.

**Graph 3** Increasing the Average Score of Test Report Text Writing from Pracycle,

Cycle I, and Cycle II

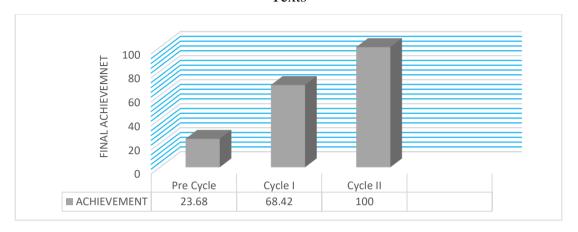


The graph above shows an increase in the average value from pre-cycle to cycle I of 12.79% and again increased from cycle I to cycle II of 2.37%.

While the increase in learning completeness is presented in the following graph.



Graph 4 Improvement of Skills Mastery Students in Writing Experimental Report **Texts** 



## **CONCLUSION**

Conclusions based on analysis of research data. namely the application of the PJBL method can improve students' skills in writing test report texts. The process of improving the results of students' skills in writing experimental report texts by applying the PJBL method, namely as a problem solving or an alternative learning so that students' understanding, activity, and skills in writing experimental report texts can increase significantly. Students become active and critical in processing data and facts from trials so that they can be put into a logical report text. The activeness of students from cycle I to cycle II has increased from 6 students who are active to 31, while the rest have shown to be active and willing to do learning to write test report texts without depending on the opinions of others.

Thus, the students' skills in writing experimental report texts by applying the PJBL method can be increased and satisfying. This proves that based on research data, then the application of the method PJBL can improve students' skills in writing test report texts.

Some suggestions that can be made include; the project-based learning (PJBL) method can be used by teachers so that learning becomes interesting for students. Learning with the project-based learning method can help increase student activity. The learning process with the project-based learning method can be used for all levels both for cognitive, affective, and psychomotor aspects.



#### REFERENCES

- Eko Mulyadi. 2015. Application of the Project-based learning model to improve the performance and achievement of physics learning in SMK students. Journal of Technology and Vocational Education. Yogyakarta: UNY.
- Husna, A. 2021. Penerapan Model Pembelajaran Berbasis Masalah terhadap Kemampuan Menulis Teks Laporan Hasil Percobaan oleh Siswa Kelas IX-4 SMP Negeri 7 Medan Tahun Pembelajaran 2019/2020. *Jurnal Pendidikan dan Ilmu Pendidikan*, 6(1), 96 104. Retrieved from <a href="https://jurnal.dharmawangsa.ac.id/index.php/sabilarrasyad/article/view/1184/pdf">https://jurnal.dharmawangsa.ac.id/index.php/sabilarrasyad/article/view/1184/pdf</a>
- Jihad, Asep. 2009. Learning Evaluation. Yogyakarta: Multi Pressindo.
- Kosasih, Engkos and Endang Kurniawan. 2018. Types of Text (Function, Structure, and Language Rules of Indonesian Subjects). Bandung Yrama Widya.
- Muslihudin. 2011. Tips for Success in Conducting Classroom and School Action Research. Practical Guide for Teachers and Education Personnel. Bandung: Rizqi Press.
- RI Ministry of Education and Culture. 2015. Indonesian Teacher's Book Knowledge Forum. Jakarta: Ministry of Education and Culture RI.
- Semi, A. (2021). Fundamentals of Writing Skills. Bandung: CV. Angkasa.
- Saraswati Bakti Journal Vol. 10 No. 01. March 2021 ISSN: 2088-2149, e-ISSN: 2685-3302.
- Satoto Endar Nayono, N. E. (2013). Development of Project Learning Models. Based Learning in Computer Aided Design Courses. Journal.
- Sudjana, Nana. 2016. Assessment of Teaching and Learning Process Results. Bandung: Pt. Rosdakarya youth.
- Suprijono, Agus. 2009. Cooperative Learning Theory and Application of PAIKEM. Yogyakarta: Student Library.
- Sujana, I. M., & Elma Rahayu, N. P. (2023). Penerapan Model Pembelajaran Project Based Learning (PJBL) untuk Meningkatkan Hasil Belajar Siswa Kelas X Perhotelan B3 pada Mata Pelajaran Seni Budaya Berkreasi Seni Tari dari Karya Seni Bentuk Lain Di SMK Negeri 3 Denpasar. *Jurnal Ilmu Pendidikan dan Kearifan Lokal*, 3(3), 142–147. Retrieved from <a href="https://jipkl.com/index.php/JIPKL/article/view/51">https://jipkl.com/index.php/JIPKL/article/view/51</a>.
- Wena, Made. 2016. Contemporary innovative learning strategies: an overview of East Jakarta: Bumi Aksara.