

## A PROBLEM-BASED LEARNING MODEL TO IMPROVE ENGLISH LEARNING OUTCOMES: A STUDY IN MIDDLE-SCHOOL STUDENTS

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### ABSTRACT

Teaching is not just a matter of telling. Learning is not an automatic consequence of contemplating information in the minds of students. Learning requires mental involvement and students' work. Explanation and demonstration alone will not produce lasting learning outcomes. Which can produce learning outcomes, including the activities of contextual learning methods with problem-based learning teaching models. The source of the data for this research is the seventh-grade students of SMPN 1 Sidomulyo Odd Semester for the 2020/2021 academic year, totaling 34 students consisting of 13 male students and 21 female students. The data collected are quantitative and qualitative. Quantitative data is data obtained from formative tests in each cycle. While qualitative in the form of observations in each learning cycle, the data obtained is then converted into success criteria to determine whether student learning outcomes can be seen and how they improve. This study uses two cycles of action research. Each round consists of four stages, namely: design, observation activities, and reflection. From the data obtained in the form of formative test results and observation sheets of teaching and learning activities, it was found that student learning achievement has increased from cycle one to cycle two. In the first cycle, student learning outcomes in the very good category were 29.41%, and in the second cycle, the learning outcomes in the very good category increased to 70.59%. This study concludes that the problem-based learning (PBL) learning model can have a positive effect on the learning outcomes of class VII F students at SMP 1 Sidomulyo, and this learning model can be used as an alternative to learning English.

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## 1. INTRODUCTION

The 2013 curriculum aims to prepare Indonesian people to have the ability to live as individuals and citizens who are faithful, productive, creative, innovative, effective, and able to contribute to the lives of society, nation, state, and world civilization (Komara, 2017; Fanani et al., 2020). The subjects included in each theme include English

language learning, which is a subject that is expected to produce good learning outcomes.

In the 2013 curriculum, learning practices that have been carried out so far only use student books and teacher books (Jazadi, 2015; Ekawati, 2016). The teacher believes that the book is appropriate and good for use in class because it was published by the Ministry of Education and Culture. It turns out that in practice, teachers experience several difficulties, such as materials and assignments that are not appropriate to students' backgrounds. Apart from that, teachers still focus on mastering cognitive knowledge and are more concerned with memorizing material (Hartono et al., 2022; Nur et al., 2023).

Teachers carrying out learning in the 2013 curriculum are still limited by using the lecture method (Hamid et al., 2020; Zannah & Setiawan, 2022), possibly because teachers have not yet mastered the learning methods recommended in the 2013 curriculum. In this curriculum, the English language subjects implemented have not shown maximum learning activities, and few students have achieved results studied with good distinction.

The low ability of students to learn English is influenced by several factors, including teachers only using lecture and assignment methods (Ogilvie & Dunn, 2010; Bahous et al., 2011); the impact is that the learning atmosphere in the class is stiff and the children do not appear cheerful. Based on the results of interviews with several students, the factors of students that also influence the learning outcomes of learning English obtained information that (a) students are too lazy to take part in learning, which is mostly carried out by teachers using lectures' (b) The method that teachers always use is in the form of assignments. Some students admitted that they were bored with assignments that were only theoretical and copied from textbooks.

Text, according to Halliday, a modern English grammar expert, is all forms of language events that can be heard, read, or, in other words, expressed in oral or written communication (Halliday & Matthiessen, 2013; Halliday, 2014). The meaning of the text implies that the text is the embodiment of a very close relationship between language rules and words as representatives of the meaning of the world around the speaker of the language (Halliday, 2014).

Modern English grammar explains that texts occur within the scope of a culture in the form of various social events (Knowles, 2014; Gregory & Carroll, 2018). These social events give rise to ideas or thoughts that serve as communication goals. Furthermore, at the level of communication or conveying ideas, the text is formed by three variables: the person communicating, which is called the tenor; the form of activity being communicated, which is called the field; and the path taken to convey the idea, which is known as the mode. Next, the text is identified according to the purpose of communication in the form of language variants.

To overcome this problem, teachers must try to find ways to solve it. Teachers must be able to use several learning methods, especially in creating learning that is not only teacher-centered but involves students in active learning (Ghafar, 2023; Bergström et al., 2023). One learning model oriented toward implementing the 2013 Curriculum is

the PBL problem-based learning model. PBL is a learning model that prioritizes learning strategies using problems from the real world as a context for students to learn critical thinking and problem-solving skills, as well as to gain essential knowledge and concepts from the material they study (Dabbagh, 2019; Simanungkalit et al., 2019; Anggraeni et al., 2023). In PBL, students are required to be able to solve real problems in everyday life. In other words, PBL teaches students to think critically and analytically, as well as search for and use appropriate learning resources to solve the problems they face.

The problem-based learning model is learning that uses the various thinking abilities of students individually and in groups, as well as in real environments, to overcome problems so that they are meaningful, relevant, and contextual (Anazifa & Djukri, 2017; Hidayah et al., 2021; Hasbi & Fitri, 2023). PBL aims to improve abilities in applying concepts to new or real problems, the desire to learn, and directing one's learning, and skills. The characteristics covered in PBL include (Jones, 2006; Sockalingam & Schmidt, 2011; Suhirman et al., 2020): (1) problems are used as the beginning of learning; (2) usually the problems used are real-world problems presented in an ill-structured manner; (3) problems usually require multiple perspectives; (4) problems challenge students to learn in new learning domains; (5) prioritize independent learning; (6) utilize varied sources of knowledge, not just one source; and (7) learning is collaborative, communicative, and cooperative. The syntax of the problem-based learning model, according to Arends Yoki Ariyana (2019:39), is as follows: (a.) student orientation to problems; (b) organizing students to study; (c). Guiding individual and group investigations; (d) developing and presenting work results; and (e) analyzing and evaluating the problem-solving process.

Therefore, researchers want to make efforts to increase student learning activities and student achievement in learning English. An alternative to improving student learning outcomes is by using the problem-based learning (PBL) learning model. The choice of learning model is considered to be by indications of problems that appear during student learning, which are usually carried out by the teacher. Researchers try to conduct research in the form of classroom action research. To be able to prove this research and provide conclusions about whether the problem-based learning (PBL) model can improve students' activities and learning achievements in learning English.

The hypotheses in this panel research are:

1. Can the application of the problem-based learning (PBL) learning model improve student learning outcomes in the English subject for class VII F students at SMP N 1 Sidomulyo?
2. Can the application of the problem-based learning (PBL) learning model be applied to students in class VII F of SMP N 1 Sidomulyo?

## 2. METHOD

The class action research that will be carried out is class action research using the research model used in the form of a cycle, which refers to the Kemmis and McTaggart models (Kemmis et al., 2014; Al-Obaydi & Rahman, 2021; Putra et al., 2022). This class

action research plan consists of 2 cycles, each with 2 meetings with a time allocation of 2 x 40 minutes. Each cycle carried out consists of planning, action, observation, and reflection.

The implementation of action research is carried out in a spiral that starts from sensing a problem, preparing a plan, carrying out actions, observing, reflecting, re-planning, carrying out actions, and so on. The following are the stages that will be carried out by the researcher: (1) Planning: a plan is the initial stage that the teacher must carry out before doing something. At this stage, the researcher prepares a syllabus, creates a learning implementation plan (RPP) using the PBL model, and prepares an assessment instrument. It is hoped that the plan is forward-looking and flexible enough to accept unexpected effects. (2) Action: This action is the application of the plan that has been made, which can be in the form of one to improve or perfect the PBL model that is being implemented, which consists of initial activities, core activities, and closing activities. (3) Observation: This observation serves to see and document the influences caused by actions in the classroom. Observations are carried out by partner teachers, who observe all activities of both teachers and students. Observations are made based on the observation sheet that has been made. The results of these observations are material for reflection, so the observations made must be able to tell the true situation. (5) Reflection: reflection here includes activities: analysis, synthesis, interpretation, explaining, and concluding. The results and reflections are revisions to the plans that have been implemented, which will be used to improve teacher performance at the next meeting.

The subjects studied were 34 students in class VII F of SMP N 1 Sidomulyo, consisting of 13 male students and 21 female students. Data analysis in action assessment enters the reflection stage. In the reflection stage, the researcher analyzed the results of the exercises for each cycle that had been carried out. The analysis includes:

- 1) Analysis of the actions taken.
- 2) Review and explain the differences between plans and actions that have been implemented.
- 3) intervening, interpreting, and drawing conclusions from the data obtained, as well as seeing the relationship between theories and plans that have been established.

Observation data on learning activities and outcomes during teaching and learning activities were analyzed using percentages (%), namely calculating the number of frequencies that appeared during the learning activity process according to the type of overall achievement frequency multiplied by 100%.

$$P = \frac{f}{N} \times 100 \%$$

Information:

P = Percentage

f = The number of percentages of teachers or students who appear

N = Total percentage

Apart from that, to analyze data about students, drawing is used, conclusions based on percentages. The percentage of student responses is defined as the frequency of students who give the same answer divided by the number of students multiplied by 100% with the formula:

$$P = \frac{n}{N} \times 100 \%$$

Information:

P = Percentage

n = number of percentages that appear

N = Total percentage

To determine success in the learning process, a thorough evaluation is needed. The criteria used to measure learning success and failure can be observed through student activity in the learning process, and the evaluation of student learning activities and success is the extent to which students understand and understand social function material, text structure, and linguistic elements. The criteria for measuring the level of achievement of learning success in numeracy are declared to have achieved the learning objectives if the total number of students who are able to master the very good category is 68%.

### 3. RESULTS AND DISCUSSION

From the observations obtained through improving teaching and learning activities and classroom action research, which was carried out in two cycles with four meetings by observing student activities and student work results with formative assessment, it can be stated that the problem-based learning (PBL) learning model is very effective in increasing student activity and learning outcomes.

The following is a recapitulation of data from research on student activities and learning outcomes using the problem-based learning (PBL) learning method at each meeting, presented in Table 1.

**Table 1.** Student Learning Results in the second lesson

No	Student's name	KKM	Cycle I		Cycle I	
			Student scores	T/TT	Student scores	T/TT
1	Aditia Bayu Setyo	70	60	T	80	T
2	Assifa Noor Syawala	70	80	T	80	T
3	Cipta Nabila Zahra	70	90	T	90	T
4	Dafa Arianto	70	90	T	90	T
5	Deska Sendy Pangestu	70	80	T	90	T
6	Destifa Mahesa Ayu	70	90	T	70	T
7	Giza Ain Zelig	70	90	T	90	T
8	Hengky Dicky Pratama	70	90	T	100	T
9	Jimmy Nicolas Bano	70	90	T	90	T
10	Joko Sesuno	70	90	T	90	T
11	Kaisa Al Barkah	70	90	T	90	T

No	Student's name	KKM	Cycle I		Cycle I	
			Student scores	T/TT	Student scores	T/TT
12	Kartono	70	90	T	90	T
13	Kinanti Amanda Putri	70	60	TT	90	T
14	Muhammad Nur A.	70	90	T	80	T
15	Muhammad Rizki Alfian	70	70	T	90	T
16	Muhammad Zidan	70	60	TT	80	T
17	Mujiman	70	60	TT	90	T
18	Nia Ramadan	70	70	T	90	T
19	Nizar Hadid Wibowo	70	70	T	90	T
20	Nuria Asyifa	70	60	TT	90	T
21	Raissa Al Ghifari	70	80	T	80	T
22	Raldo Agisca Alfarel	70	70	T	90	T
23	Rialdie Jakhu Lieansyah	70	70	T	100	T
24	Rindu Ramadhani	70	70	T	80	T
25	Ruan Aprilianti	70	60	TT	100	T
26	Ruben Jaksion	70	70	T	90	T
27	Satria Daffa Pratama	70	60	TT	90	T
28	Siri Murnita	70	80	T	90	T
29	Tulus Saputra	70	70	T	90	T
30	Usy Rahmadani	70	70	T	90	T
31	Vivi Patin Nurisa	70	70	T	80	T
32	Widia Cahya Ningtyas	70	60	TT	90	T
33	Xenia Aura Intan	70	70	T	70	T
34	Zaskia Amanda	70	60	TT	70	T
Amount			2530		2960	
Average			74		87	
Complete			25	73,53	34	100,00
Not Completed			9	26,47	0	0,00

**Table 2.** Recapitulation of Student Learning Outcome Values

KKM	Value Range	Cycle I			Cycle II		
		The Number of Students	Percentage	T/TT	The Number of Students	Percentage	T/TT
70	90 – 100	10	29,41	T	24	70,59	T
70	80-89	4	11,76	T	7	20,59	T
70	70-79	11	32,35	T	3	8,82	T
70	0-69	9	26,47	TT	0	0,00	TT
Amount		34	100 %		34	100 %	

Information:

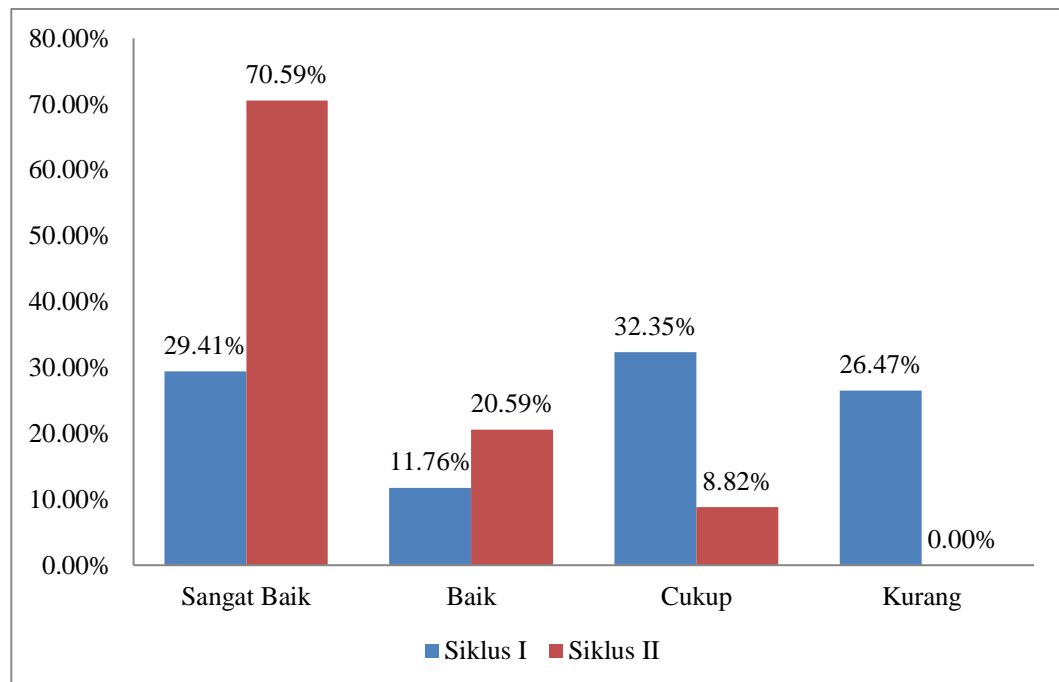
T = Complete

TT = Not Completed

B = Good

C = Enough

K = Less



**Figure 1.** Recapitulation of student learning outcomes data at the end of the cycle

Based on the data above, the discussion of the results of this research is as follows:

1. The results of the first cycle of research based on data results in the learning process in this first cycle show that the learning process of social function material, text structure, and linguistic elements shows that the level of student learning outcomes in the classical very good category is still below standard, namely from 10 students with a percentage of 29.41%, so it is necessary to carry out the second cycle again.

2. The results of the second cycle of research improved student learning outcomes in the very good category in social function material, text structure, and linguistic elements in class VII F SMP N 1 Sidomulyo, namely from 10 students with a percentage of 29.41% in the initial condition, student learning outcomes in the very good category changed to 24 students with a percentage of 70.59%.

Problem-based learning is a learning model that prioritizes learning strategies using problems from the real world as a context for students to learn critical thinking and problem-solving skills, as well as to gain essential knowledge and concepts from the material they study (Khoiriyah & Husamah, 2018; Magaji, 2021; Tan, 2021). In problem-based learning, students are required to be able to solve real problems in everyday life. Problem-based learning teaches students to think critically and

analytically, as well as search for and use appropriate learning resources to solve the problems they face (Kek & Huijser, 2011; Nargundkar et al., 2014).

#### 4. CONCLUSION

Based on the results and discussion, it can be concluded that learning English using the Problem-Based Learning (PBL) learning model in class VII F of SMP N 1 Sidomulyo is

1. The use of the problem-based learning (PBL) learning model, can improve student learning outcomes in English for class VII F students at SMP N 1 Sidomulyo in the odd semester of the 2020/2021 academic year. This can be proven from data on student learning outcomes in cycle I, where student learning outcomes in the very good category were 29.41%, and in cycle II, learning outcomes in the very good category increased to 70.59%.
2. Through the use of the problem-based learning (PBL) learning model, it can increase learning activities in the English subject of class VII F students at SMP N 1 Sidomulyo in the odd semester of the 2020/2021 academic year. This can be proven from observation data from cycle I, where activities in the very frequent category were 30.88%, and in cycle II, activities in the very frequent category increased to 70.59%.

Based on the research that has been carried out, it is recommended that future researchers make improvements.

- a. Carrying out learning through the problem-based learning (PBL) learning model can increase learning activities in the English subject of class VII F students at SMP N 1 Sidomulyo.
- b. Use interesting learning methods so that students are actively involved in learning and can improve student learning outcomes so that teachers do not encounter problems.
- c. Create and design good learning that refers to the applicable curriculum to increase learning activity and student learning outcomes.
- d. Collaborate with fellow teachers to observe and provide input so that the learning process can improve.

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