

THE IMPACT OF PROBLEM-BASED LEARNING MODELS TO IMPROVE ENGLISH ACHIEVEMENT AT MIDDLE-SCHOOL 2 KARAWANG BARAT

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ABSTRACT

The goal of this article is to investigate whether using problem-based learning models can help middle-school students improve their English learning achievements. The type of research used is classroom action research, carried out in 3 cycles at SMPN 2 Karawang Barat. Each cycle consists of stages of planning, implementation, observation, and reflection. The techniques used are observation technique and test technique. The assessment instrument uses a test sheet and an observation sheet. The results showed that in cycle 1, the average score of 75-80 students can be compared significantly in cycle 2 with an increase in the average score of 80-90. Likewise, cycle 3 shows an increase in value of 90-100. In general, it can be concluded that there is an increase in English learning outcomes for students at SMPN 2 Karawang Barat after learning is carried out through the use of problem-based learning models. As a suggestion, the use of problem-based learning models can be used by teachers or educators to improve learning outcomes, especially in the field of English.

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1. INTRODUCTION

Education, in the broadest sense, is life. It means that education is all learning experiences in various environments that last a lifetime and have a positive effect on individual development. In this case, education is directed at helping students gain meaningful learning experiences in every learning activity they go through in the learning environment (Mann, 2011; Vaughan et al., 2013). This lifelong learning is expected to be able to provide positive values in order to direct the development of students towards progress and be able to make students independent in taking lifelong teaching.

Educators are not only required to have the ability to understand the theory, but an educator must have pedagogic competence (Ladson-Billings, 2008; Richards, 2010; Van Manen, 2016). As stated in Law No. 14 of 2015 concerning Teachers and Lecturers, one of the competencies that must be possessed by a teacher is pedagogic competence. As educators, we must have these competencies in order to be able to deal with students

effectively and efficiently. The PPG in the office places more emphasis on honing the abilities of a teacher. Based on the Law on Teachers and Lecturers, an educator must have four competencies, namely: pedagogic competence, professional competence, social competence, and personality competence. In developing the teaching profession, there are several types of programs have been developed by the Indonesian government. In Law No. 14 of the Republic of Indonesia, Article 2 of 2005 Concerning Teachers and Lecturers, the recognition of the position of a teacher as a professional is evidenced by an educator certificate. Article 4 of Government Regulation Number 74 of 2008 explains that educator certificates for teachers are obtained through professional education programs organized by universities that have accredited education personnel procurement programs, both those organized by the government and the community and determined by the government.

Curriculum changes in Indonesia have undergone several changes (Riadi, 2019; Pajarwati et al., 2021). The process of curriculum change occurs on the basis of the needs and demands of both the community as users of graduates and schools as institutions that produce graduate products. Curriculum changes have no other purpose than to improve the quality of the learning process and the design of learning in schools (Lie, 2007; Tam, 2014). Therefore, curriculum changes are a must in educational institutions in an effort to find a way out of various difficulties towards quality education in order to produce graduates who are innovative, creative, critical, and have responsible personality character.

The 21st century requires educators to teach students by sharing learning models (Rock et al., 2016). There are various models of learning in the world of education, one of which is the problem-based learning model. Problem-based learning is a systematic form of learning activity that applies the concept of skills in the 21st century where teachers act as learning facilitators and students must think critically and uniquely in solving problems innovatively (Gwee, 2009; Barret & Moore, 2010; Muzaini et al., 2022). In its application, students will group and collaborate together to find answers using concepts that are understood by each student (Dawilai et al., 2021; Hadi & Izzah, 2021). The opening questions or problems that are shared must relate to the competencies to be obtained and make students involved so that their thinking is visible. Thus, the problem focuses on the content of skills that will be built in dealing with problems and can be applied again when facing problems (Azman & Shin, 2012; Ali, 2019). Each learning model used has the goal of developing the potential and skills of students, which can be fulfilled if students actively think about learning (Hmelo-Silver, 2004; Perry & Southwell, 2011).

The purpose of PBL learning is to create graduates who can develop their own abilities and can also develop social skills through collaboration (Bell, 2010; Musa et al., 2011; Wurdinger & Qureshi, 2015). So, in addition to getting cognitive abilities, they also get affective and psychomotor abilities when they can solve given problems. The characteristics and cognitive abilities of students in different groups make the socialization spirit of students more effective because they help each other and improve leadership attitudes in learning (Gallagher & Gallagher, 2013; Gallagher, 2015).

Therefore, based on the above concept, this study aims to investigate the effect and role of the problem-based learning model in improving English learning outcomes for high school students.

2. METHOD

The type of research used is Classroom Action Research. Classroom Action Research is research conducted in the classroom by using action to improve the quality of the teaching and learning process in order to obtain better results than before (Burns, 2009; Mertler, 2009; Sagor, 2010). CAR takes a long time because it has to implement actions and variables designed to achieve the desired results. The purpose of this CAR is to improve teachers' teaching patterns; improve student behavior; improve learning practices, and change the framework of teachers' teaching so that there is an increase in teacher professional services (Efron & Ravid, 2019; Mertler, 2019). Therefore, this study used 3 cycles to determine the effect of the problem-based learning model in improving English learning outcomes at public middle school 2 Karawang Barat, Indonesia.

The data collection techniques used are observation techniques and test techniques. The assessment instrument uses a test sheet and an observation sheet. Before using the instrument, validity and reliability tests were carried out, and validation was carried out by two education experts. The data analysis used was descriptive and quantitative.

3. RESULTS AND DISCUSSION

The implementation of this research at public middle school 2 Karawang Barat lasted for approximately 1 month. Overall, the practice of teaching and learning activities goes according to plan, but in fact, every activity experience problem, which, of course, arise during the process of teaching and learning activities. So, the teacher tries to find the factors that cause these problems. The factors that the teacher found in the learning practice were as follows:

1. Factors Causing Cases of Cycle I Teaching Activities
 - a. Cell phones used by parents at work.
 - b. Internet or WIFI network is not stable.
 - c. Time management.
 - d. Monotonous learning media.
2. Factors Causing Cases of Cycle II Teaching Activities
 - a. Time management.
 - b. The teacher still doesn't fully use Indonesian
3. Factors Causing Cases of Cycle III Teaching Activities
 - a. The student's Internet or WIFI network connection is unstable.

- b. Teachers still do not fully use English, almost 75% use Indonesian in the learning process.
- c. The lack of students' vocabulary.

3.1. Action Results Cycle 1

The results of the first cycle of learning activities are getting better, although there are still some obstacles that arise but they do not interfere with learning activities too much, and students are a little more active and enthusiastic in participating in learning activities. All activities in the LKPD at the time of learning were not completed, but were reworked when the learning ended. Knowledge assessment and skills assessment can be carried out. Results The value of students' knowledge in cycle 1 meets the KKM criteria ranging from 80-100. Student skill scores ranged from 75-80.

Table 1. Knowledge Assessment

No	Student	Activtiy 2	Activitiy 3
1	Af	90	100
2	Az	85	100
3	Ap	80	100
4	Aa	90	100
5	Am	80	100
6	Ba	80	100
7	Dr	80	100
8	Di	85	100
9	Fa	80	100
10	Fn	80	100
11	Hp	90	100
12	In	90	100
13	Iy	90	100
14	Ln	80	100
15	Cb	85	100

Source: Data Analysis Results

Table 2. Skills Assessment

No	Group	Activtiy 1
1	Group 1	80
2	Group 2	75
3	Group 3	79

Source: Data Analysis Results

3.2. Action Results Cycle 2

The results of the second cycle of learning are getting better; although there are still some obstacles that arise, not too many obstacles are faced in learning activities, and students are also more active and enthusiastic in participating in learning activities. In Cycle 2, the results of knowledge and skills are not below the KKM ranging from 80-100. This is because the activities provided are not too difficult for students to do through problem-based learning models.

Tabel 3. Knowledge Assessment

No	Student	Activtiy 1	Activitiy 3
1	Bl	100	100
2	Ps	100	100
3	Ft	100	100
4	Sh	100	100
5	Lr	100	100
6	Sr	100	100
7	Al	100	100
8	St	100	100
9	Sw	100	100
10	Ry	100	100
11	Gs	100	100
12	Zf	100	100
13	El	100	100

Source: Data Analysis Results

Tabel 4. Skills Assessment

No	Group	Activtiy 2
1	Group 1	90
2	Group 2	90
3	Group 3	95
4	Group 4	85
5	Group 5	80
6	Group 6	85

Source: Data Analysis Results

3.3. Action Results Cycle 3

The results of the 3rd cycle of learning activities are getting better, although there are still some obstacles that arise, they are not too disruptive to the activities in learning activities, and students are already more active and enthusiastic in participating in learning activities. In the third cycle, students did all the activities, but the activities that were supposed to be done in groups were not carried out. So these activities are carried out individually. The results of the knowledge and skills tests were better than in the previous cycle. The value of his knowledge and skills meets the criteria for the KKM score. The following data analysis of knowledge and skills is presented in Tables 5 and 6 below.

Table 5. Knowledge Assessment

No	Student	Activtiy 1
1	Bl	100
2	Ps	100
3	Ft	100
4	Sr	100
5	Lr	100
6	Sr	100

No	Student	Activitiy 1
7	Al	100
8	Sn	100

Source: Data Analysis Results

Table 6. Skills Assessment

No	Student	Activitiy 2
1	Bl	80
2	Ps	85
3	Ft	80
4	Sr	85
5	Lr	80
6	Sr	85
7	Al	80
8	Sn	85

Source: Data Analysis Results

3.4. Discussion

A problem-based learning model is defined as a learning model in which students try to solve problems by going through several stages of the scientific method so that students are expected to be able to learn knowledge related to the problem and, at the same time, students are expected to have skills in solving problems.

Aris Shomin (2014:131), suggests that the steps in PBL learning are as follows:

1. The teacher explains the learning objectives. Describe the logistics required. Motivate students to engage in selected problem-solving activities.
2. The teacher helps students define and organize learning tasks related to the problem (setting hats, assignments, schedules, etc.).
3. The teacher encourages students to collect appropriate information; experiments to get explanations and problems; data collection; hypotheses; and problem-solving.
4. The teacher assists students in the planning and preparation of appropriate works, such as reports, as well as in the completion of various tasks with their peers.
5. The teacher helps students to reflect or evaluate their investigations and the processes they use.

Cycle I

Planning Stage

At this stage, the teacher prepares learning tools consisting of lesson plans, teaching materials, LKPD, learning media, and teaching tools that support

Implementation Stage

Action Implementation of teaching and learning activities in the first cycle was carried out in class VII, which was attended by 17 students. In this case, the teacher acts as a teacher. The learning process refers to the lesson plans that have been prepared previously. Observations are carried out simultaneously with the implementation of teaching and learning.

Observation

From observations during the implementation of online learning activities and learning activities in a cycle, I found several obstacles that arose in the process, namely: (1) Not all students could attend online learning through the Zoom application, because many students had their cellphones brought by their parents. work. (2) The internet network is unstable when explaining learning materials. (3) Inadequate time for implementing learning in core activities. So, there are some unfinished group assignments, and only a few students present their assignments. (4) The range of available learning media is limited. So make the inactivity of students in the learning process their own.

Reflection

The implementation of teaching and learning activities in the first cycle is still lacking, so there needs to improvements to be made in the next cycle of learning activities. Things that will be done in the next cycle include: (1) Providing understanding to parents of students: During times of learning, parents of students are expected to refrain from using cell phones. Students and teachers are expected to find the best connection in the next learning practice. Students and teachers are expected to find the best connection in the next learning practice. (4) Teachers must be able to manage learning time effectively and efficiently in each learning step so that each activity is completed. In addition, the teacher will try his best in teaching so that the obstacles found in the learning activities of cycle 1 do not occur again in the learning activities of cycle 2.

Cycle II

Planning Stage

The teacher prepares learning tools at this stage, which include lesson plans, teaching materials, LKPD, learning media, and supporting learning tools and materials.

Implementation Stage

Action Implementation of teaching and learning activities in the second cycle was carried out in class VIII, which was attended by 15 students. In this case, the teacher acts as a teacher. The learning process refers to the lesson plans that have been prepared previously. Observation (observation is carried out simultaneously with the implementation of teaching and learning).

Observation

From observations during the implementation of online learning activities, learning activities in cycle II found several obstacles that emerged in the process, namely: (1) lack of learning time in core activities; (2) that the work on LKPD in groups was not completed; (2) The use of English is still not dominant. In the learning process, This limitation is one of the factors that influences the implementation of actions in the process of learning activities in cycle II.

Reflection

The results obtained from the actions that have been taken previously showed that almost all of these activities resulted in good achievements. But in reality, in each cycle, sometimes new obstacles and problems arise that were not present in the previous cycle.

In this case, learning activities need improvement for the next cycle. As for the obstacles that arise with the same problems in each cycle, actions are taken that produce good scores. These actions are in the form of solutions. The solutions are: time management and trying to use English to familiarize English-speaking students in the teaching and learning process.

Cycle III

Planning Stage

At this stage, the teacher prepares learning tools consisting of lesson plans, teaching materials, LKPD, learning media, and teaching tools that support.

Implementation Stage

Action Implementation of teaching and learning activities in the 3rd cycle was carried out in class IX, which was attended by 10 students. In this case, the teacher acts as a teacher. The learning process refers to the lesson plans that have been prepared previously. Observations are carried out simultaneously with the implementation of teaching and learning.

Observation

From observations during the implementation of online learning activities, learning activities in cycle III found several obstacles that arose in the process, namely (1) many students were unable to attend. The student's Internet network connection is not stable. Some students had network problems at the beginning of the lesson, so it took a few minutes to start learning. (2) English is still not widely used. In the learning process, students continue to have difficulty pronouncing vocabulary in English. (4) In the skill assessment, students are asked to practice the report text in a news story, but the result is that students are still lacking in pronunciation.

Reflection

In the last cycle of learning activities, namely cycle III, there are still obstacles that arise. In this case, the learning activities in the third cycle are carried out by actions or solutions. The actions/solutions obtained from the observations in this cycle are: (1) Students and teachers are expected to find the best connection in the next learning practice. (2) The language classroom needs to be improved once more. The teacher will try to use English in the classroom during the learning process. (3) While learning, make a vocabulary list. (4) The teacher provides material reinforcement or provides examples of activities that will be carried out by students in skill practice. The actions/solutions carried out in cycle III are expected to be a reflection for students in conducting KBM in the future.

4. CONCLUSION

Based on the analysis and discussion, it shows that the problem-based learning model is able to improve English learning outcomes at public middle-school 2 Karawang Barat, Indonesia. This is shown as follows at each stage of the learning cycle. Each cycle shows changes that are better than the previous cycle, namely:

1. Cycle 1 for class VII still has many shortcomings, because this is the first time students are back online and the conditions are at the end of the new school year holiday. However, the results achieved in the implementation of learning do not reach the KKM.
2. The cycle 2 of students who study in class VIII, so they are more enthusiastic. However, there are still students who are not confident in expressing their opinions. In the practice of learning cycle 2, student responses and learning outcomes increased compared to cycle 1.
3. In Cycle 3 with students from class IX there are still some cases similar to the previous cycle, but student responses and learning outcomes have increased. In the practice of learning cycle 3, the results achieved are very different from before. Students are more enthusiastic and more active, even though there are not too many students present. However, the results achieved on the KKM score are very good.

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