PROBLEM-BASED LEARNING MODEL TO IMPROVE ENGLISH LEARNING ACHIEVEMENT

Hamzah Alias
Institut Agama Islam As'adiyah Sengkang, Indonesia

Article Info	ABSTRACT
	Examining the language components, textual organization, and social function of statements that provide services and answers based on usage context is one of the most challenging assignments for students. It is necessary to find a remedy because student achievement data from recent years indicates that they are quite poor when it comes to studying this content. Thus, 32 students from class XI MA As'diyah Putri Sengkang served as subjects for a classroom action study that was conducted. English learning achievement is the subject of the study. Determining and assessing the PBL model's efficacy in raising English learning outcomes is the goal of this study. Utilizing learning accomplishment exams, data was gathered and subjected to both qualitative and descriptive analysis. If this action research attains a minimum average score of 75 and a minimum of 82% for classical learning completeness, it is considered effective. According to the study findings, cycle I had an average score of 72.21 and 75.64% for classical completeness. In cycle II, on the other hand, classical completeness reached 92.48%, and the average score was 74.32. In the second semester of the 2022-2023 academic year, the class XI MA As'adiyah Putri Sengkang students can attain better learning outcomes by implementing the PBL learning model in two cycles.

Corresponding Author:

Hamzah Alias
Institut Agama Islam As'adiyah Sengkang
Email: hamzahedutech@gmail.com

1. INTRODUCTION

The development of excellent, competitive, and intelligent human resources is one of the main issues facing the Indonesian people today (Malihah, 2015). Offering top-notch education can contribute to the quality of life for Indonesian citizens. According to Minister of Education and Culture Regulation Number 22 of 2016 concerning Standards for Primary and Secondary Education Processes, learning takes place in educational units in an engaging, stimulating, enjoyable, and challenging way that encourages students to actively participate and gives them ample opportunity to take initiative, be creative, and be independent based on their interests, talents, and physical and psychological development.

In addition to having a solid understanding of the subject matter and the classroom, a teacher needs to be proficient in several learning models that can be used to enhance learning activities (Uerz et al., 2018; Rapanta et al., 2020). These models need to be able to encourage students to participate in the process by making it enjoyable, engaging, and demanding. learning. Teachers are no longer limited to applying a single learning model; instead, they must use creativity to apply new models that align with learning objectives. The learning outcomes that students achieve during the learning process serve as a measuring stick for meeting learning objectives (Hartikainen et al., 2019).

Constructivism philosophy has the following characteristics (Matthews, 2020): (1) students can develop their knowledge through research activities or direct observation so that they can find facts that support theoretical studies and channel new ideas according to experience; (2) knowledge acquired must be related to students' experiences; (3) each student plays an important role in determining what they learn; and (4) teachers' roles are limited to those of guides, providing students with opportunities to analyze material and concepts that will be covered. Constructivism-based learning aims to (Suhendi et al., 2021): (1) inspire students with the idea that learning is their responsibility; (2) strengthen their capacity to ask questions and find their answers; and (3) support their development of insight and thorough comprehension of concepts.

Based on constructivist theory, problem-based learning (PBL) is a teaching approach in which students are given a problem right away and then guided through a student-centered process of finding information (Amerstorfer, 2020; Chen et al., 2021; Hasbi & Fitri, 2023). It is well recognized that there is a broad conceptual fog in PBL, encompassing a blend of curriculum philosophy and instructional techniques. PBL's philosophical focus is on pupils who are faced with a challenge (Muzaini et al., 2022). In contrast, subject-based learning allows the teacher to illustrate the knowledge before utilizing the problem as a starting point for learning. PBL seeks to give students the tools they need to efficiently, contextually, and integratedly acquire and form knowledge.

The characteristics of problem-based learning are as follows (Amerstorfer et al., 2021; Aslan, 2021): (a) the problem becomes the starting point in learning; (b) the problems raised are unstructured problems that exist in the real world; (c) problems require multiple perspectives; (d) problems challenge students' knowledge, attitudes and competencies which then require identification of learning needs and new areas of learning; (e) learning self-direction is the main thing; (f) utilization of diverse sources of knowledge from various sources, their use, and evaluation of information sources is an essential process in PBL; (g) learning is collaborative, communicative, and cooperative; (h) developing questioning and problem-solving skills is as important as mastering content knowledge to find a solution to a problem; (i) process openness in PBL includes synthesis and integration of a learning process; and (j) PBL involves evaluating and reviewing students' experiences and learning processes.

Problem-based learning consists of five main steps, which start with the teacher introducing students to a problem situation and end with presenting and analyzing the results of the students' work (Amerstorfer, 2020; Chen et al., 2021; Hasbi & Fitri, 2023).

The five steps are explained in the syntax for the PBL model, which can be presented in Table 1 below.

Table 1. PBL Model Learning Steps

Learning steps	Teacher Activities
Stage-1 Student orientation to the problem	The teacher explains the learning objectives, explains the logistics required, proposes phenomena, demonstrations, or stories to raise problems, motivates students to be involved in solving the chosen problem.
Stage-2 Organizing students to learn	The teacher helps students to define and organize learning tasks related to the problem.
Stage-3 Guiding individual and group investigations	Teachers encourage students to collect appropriate information, carry out experiments, to obtain explanations and solve problems.
Stage 4 Develop and present work results	Teachers assist students in planning and preparing appropriate work, such as reports, videos and models and help them share assignments with their friends.
Stage-5 Analyze and evaluate the problem-solving process	Teachers help students to reflect or evaluate their investigations and the processes they use.

Several advantages of the PBL learning model provide benefits to students (Hadi & Izzah, 2018; Saad & Zainudin, 2022): (a) remember information and knowledge better; (b) develop problem-solving abilities, critical thinking, and communication skills; (c) develop an integrated knowledge base; (d) enjoy learning; (e) increase motivation; (f) increase cooperation in group work; (g) develop learning strategies; and (h) improve communication skills.

On the other hand, PBL also has several weaknesses (Wells et al., 2009; Strobel & Van Barneveld, 2009), including (a) when students do not have interest or do not believe that the problem being studied is difficult to solve, then they will feel lazy to try; (b) the success of this PBL learning model requires sufficient time starting from preparation and implementation; (c) without understanding why they are trying to solve the problem being studied, they will not learn what they want to learn; (d) PBL cannot be applied to every learning material; there are parts of the teacher who play an active role in presenting the material. PBL is more suitable for learning that demands certain abilities related to problem-solving; (e) in a class that has a high level of student diversity, there will be difficulties in distributing tasks; (f) it requires the ability of teachers to be able to encourage students to work in groups effectively, meaning that teachers must have the ability to motivate students well; and (g) there are times when the required resources are not fully available.

Learning achievement is an indicator of student success in the learning process (Al-Abyadh & Abdel Azeem, 2022). Changes that occur in the learning process are due to experience or practice carried out deliberately and consciously, not by chance. Learning achievement is a behavior change that occurs after following the teaching and learning process with educational goals. To determine the level of student learning achievement or student ability in a subject, teachers use a learning achievement test (Ulum, 2022).

There are three domains of learning achievement, namely cognitive, affective, and psychomotor (Marfu'ah et al., 2017; Bali & Musrifah, 2020). Each domain of learning achievement can be explained as follows: (a) cognitive domain, relating to intellectual learning outcomes, which consists of six aspects, namely knowledge, understanding, application, analysis, evaluation, and creation; (b) affective domain, relating to attitudes and values. The affective domain includes five levels of ability: receiving, responding, or reacting; assessing, organizing, and characterizing with a value or value complex; and (c) the psychomotor domain, including motor skills, manipulation of objects, and neuromuscular coordination. Several factors that can influence student learning achievement include the following: Internal factors, namely factors that exist within the individual himself, have a big influence on whether a person is successful or not in determining the learning progress of students, including (a) intelligence; (b) talent; (c) attitude; and (d) interest. External factors, namely factors from outside, include the following: (a) rewards and punishments; (b) a safe learning environment; (c) active training; and (d) learning tools.

The results of the initial observations were carried out on the English learning achievement of class 75. Of the 32 students, only 20 people reached the KKM, so classical completion only reached 62.5%. Another common condition found is that the majority of students still think that English is a subject that is difficult to understand, which has an impact on students' reluctance to learn English. Based on the problems mentioned above, it is necessary to find a solution so that English learning can be presented more interestingly so that students are interested in learning it. Increasing students' interest and motivation to want to learn English is expected to improve students' English learning achievements. Therefore, the research question that can be formulated is: can the application of the PBL learning model improve the English learning achievement of class XI MA As'adiyah Putri Sengkang? Thus, the aim to be achieved in this research is to analyze the effectiveness of implementing the PBL learning model to improve English learning achievement.

2. METHOD

Classroom action research was the type of study that was conducted. At MA As'adiyah Putri Sengkang, the research was conducted. The research subjects were MA As'adiyah Putri Sengkang's class XI students. Learning achievement in English is the subject of the study. Using a learning achievement exam, data on English learning accomplishments was gathered. The acquired learning achievement data was subsequently subjected to a descriptive and qualitative analysis. The study is considered successful if it satisfies the following two requirements: (1) the students' classical mastery must be at least 85%, and (2) the average English learning accomplishment score must be at least KKM = 75.

Experts have created several models for classroom action research, such as the ones created by Mertler (2009) and Altrichter et al. (2002). The implementation of these models is cyclical, which unites them all. The classroom action research model created

by Mertler (2009) is the methodology employed in this study. In Indonesia, this is the most widely utilized model for action research in the classroom. Each step in the cycle can be explained as follows:

1. Planning is the set of steps taken by the teacher when starting action. The activities carried out include preparing an activity plan, including organizing students, when and how long it will be carried out, where it will be carried out, if equipment or facilities are needed, what form it will take, and when it is finished, what will be the follow-up.

2. Implementation, namely implementing the plans that have been made and carrying out learning through the PBL learning syntax.

3. Observation, namely the process of observing the course of action. Observed matters are recorded in diary format, including the correspondence between planning and implementing actions. Observations are made by the teacher himself.

4. Reflection, also known as contemplation events. In this reflection, what is very important to note is that all subjects of action must be involved. They were asked to recall the events that occurred when the action was carried out, express their feelings, whether they were happy or not, and express opinions and suggestions for improvement in the next cycle.

3. RESULTS AND DISCUSSION

Prior to conducting action research, a preliminary analysis of the initial circumstances in Class XI MA As'adiyah Putri Sengkang was conducted. A correlation between student participation in the learning process and English learning achievement was discovered. Only 65.75 was the average score for English learning achievement, while 69.61% was the average for learning completeness. Because professors often control the learning process, students seem to be less engaged in it. It is believed that students' performance in learning English is impacted by their lack of participation in the educational process. As a result, classroom action research was used to package a PBL learning paradigm. The following is a description of the research findings.

1. Action planning Several activities carried out by researchers related to action planning in cycles I and II are as follows:
(a) preparing lesson plans using the PBL learning model;
(b) prepare other learning support facilities such as LCDs, active speakers, laptops, and worksheets; (c) prepare research instruments in the form of learning achievement test questions to be implemented in cycles I and II;
(d) prepare and develop teaching materials (teaching materials) by the determined scope of material; and (e) prepare a daily record format and list of student test scores at the end of the cycle.

2. Implementation of Actions. The implementation of learning is an implementation of the PBL learning model. In general, learning activities include an introduction, core activities, and a conclusion. In each cycle, action research was carried out in four

meetings. Whereas learning was carried out three times, learning achievement tests were carried out at the fourth meeting. The research was carried out by the researcher himself.

3. Observation. Observation activities are carried out during the learning process regarding student involvement, recording problems and obstacles that arise as well as the progress that has been achieved. Observations were carried out by the researcher himself. Some of the progress found in the implementation of cycle I and cycle II actions includes: (a) student involvement in the learning process is starting to be built through the implementation of the PBL learning model, which needs to be reinforced so that it continues to appear in subsequent learning; (b) an attitude of self-confidence and pride emerges in students who have succeeded in discovering the text structure concepts assigned by their teacher; (c) funny language because they are not used to speaking in public can motivate other students to dare to comment. With this activity, students are not sleepy. Apart from progress in student activities, there were also several obstacles encountered, including: (a) in several other groups discussions were not carried out optimally; (b) some groups carry out group assignments individually by group members, especially students who have above-average abilities so that group discussions do not go well; (c) in discussions or answering questions asked by the teacher, only a few students were willing to express opinions or answer; this was because students lacked the courage to express opinions or lacked self-confidence; and (d) the presentation of group work results is dominated by group members with greater abilities.

4. Reflection. Based on the observation data in the first cycle, several weaknesses were still found that needed attention. These weaknesses need to be corrected and recommendations for improvement are given in the second cycle. The weaknesses and recommendations in cycle I include the following: (a) the planning stage needs to be improved in preparing LKS; (b) at the action implementation stage in the analysis and evaluation step of the problem solving process, students need to be motivated with questions that can direct students in producing evaluation results; (c) when presenting and concluding their findings, they should be based on a literature review, so that discussions can run efficiently and conclusions can be drawn more quickly and precisely.

5. A complete summary of research results starting from pre-cycle, cycle I, and cycle II is presented in Table 2 as follows.

Statistics	Pre-Cycle	Cycle I	Cycle II
Average value	65,75	72,21	88,95
Complete number of students	22	26	28
The number of students is incomplete	10	6	4
Statistics	Pre-Cycle	Cycle I	Cycle II
Classical completeness (%)	69,61%	75,64%	92,48%

Based on Table 2 above, it can be seen that there has been an increase in the average score of English learning achievement. Likewise, classical completeness has increased. When compared with the research success criteria, the results achieved in the implementation of cycle I did not meet the success criteria. The average student learning achievement score reached 72.21, still below the KKM of 75. Likewise, classical completeness has only reached 75.64%, still below the target of 85%. Therefore, this research was continued in cycle II. After implementing the PBL model, which had been refined according to the reflection results of cycle I, the results achieved in cycle II improved compared to cycle I. The average score of students' English learning achievement reached 88.95, and classical mastery also increased to 92.48%. When compared with the research success criteria, the results achieved in cycle II have exceeded the target, so it can be concluded that the application of the PBL learning model has succeeded in increasing the English learning achievement of class XI MA. As'adiyah Putri Sengkang.

4.   CONCLUSION

The explanation given in the research findings above leads one to the conclusion that the PBL learning model's implementation was successful in raising class XI MA As'adiyah Putri Sengkang students' English learning achievement. The results achieved in cycle II improved compared to cycle I. The average score of students' English learning achievement reached 88.95, and classical mastery also increased to 92.48%. Teachers of English should use the PBL learning model to boost student learning achievement, taking into account the effectiveness of this research. The PBL learning approach is also suggested for use in other topics by schools. Naturally, continue to be mindful of each subject's unique qualities.

REFERENCES

Al-Abyadh, M. H. A., & Abdel Azeem, H. A. H. (2022). Academic achievement: influences of university students' self-management and perceived self-efficacy. *Journal of Intelligence*, *10*(3), 55. https://doi.org/10.3390/jintelligence10030055

Altrichter, H., Kemmis, S., McTaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. *The learning organization*, *9*(3), 125-131.

Amerstorfer, C. M. (2020). Problem-based learning for preservice teachers of English as a foreign language. In *Colloquium: New Philologies* (pp. 75-90).

Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in psychology*, *12*, 4978.

Aslan, A. (2021). Problem-based learning in live online classes: Learning achievement, problem-solving skill, communication skill, and interaction. *Computers & Education*, *171*, 104237. https://doi.org/10.1016/j.compedu.2021.104237

Bali, M. M. E. I., & Musrifah, M. (2020). The Problems of Application of Online Learning in the Affective and Psychomotor Domains During the Covid-19 Pandemic. *Jurnal Pendidikan Agama Islam*, *17*(2), 137-154. https://doi.org/10.14421/jpai.2020.172-03

Chen, C. H., Hung, H. T., & Yeh, H. C. (2021). Virtual reality in problem-based learning contexts: Effects on the problem-solving performance, vocabulary acquisition and motivation of English language learners. *Journal of Computer Assisted Learning*, *37*(3), 851-860.

Hadi, M. S., & Izzah, L. (2018). Problem based learning (PBL) in teaching English for students of primary school teacher education department. *English Language in Focus (ELIF)*, *1*(1), 45-54. https://doi.org/10.24853/elif.1.1.45-54

Hartikainen, S., Rintala, H., Pylväs, L., & Nokelainen, P. (2019). The concept of active learning and the measurement of learning outcomes: A review of research in engineering higher education. *Education Sciences*, *9*(4), 276. https://doi.org/10.3390/educsci9040276

Hasbi, M., & Fitri. (2023). Pre-Service Teachers with Courses in Problem-Based Learning in Mathematics. *ETDC: Indonesian Journal of Research and Educational Review*, *2*(2), 51-60.

Malihah, E. (2015). An ideal Indonesian in an increasingly competitive world: Personal character and values required to realise a projected 2045 'Golden Indonesia'. *Citizenship, Social and Economics Education*, *14*(2), 148-156. https://doi.org/10.1177/2047173415597143

Marfu'ah, S., Djatmiko, I. W., & Khairudin, M. (2017). Learning goals achievement of a teacher in professional development. *Jurnal Pendidikan Teknologi dan Kejuruan*, *23*(3), 295-303.

Matthews, M. R. (2020). Philosophical Problems with Constructivism: Some considerations for student-centered learning and teaching. In *The Routledge International Handbook of Student-Centered Learning and Teaching in Higher Education* (pp. 47-64). Routledge.

Mertler, C. A. (2009). *Action research: Teachers as researchers in the classroom*. Sage.

Muzaini, M., Hasbi, M., Ernawati, E., & Kristiawati, K. (2022). The Empowerment of Problem-Based Learning Models to Improve Students' Quantitative Reasoning. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, *12*(1).

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital science and education*, *2*, 923-945.

Saad, A., & Zainudin, S. (2022). A review of Project-Based Learning (PBL) and Computational Thinking (CT) in teaching and learning. *Learning and Motivation*, *78*, 101802. https://doi.org/10.1016/j.lmot.2022.101802

Strobel, J., & Van Barneveld, A. (2009). When is PBL more effective? A meta-synthesis of meta-analyses comparing PBL to conventional classrooms. *Interdisciplinary journal of problem-based learning*, *3*(1), 44-58.

Suhendi, A., Purwarno, P., & Chairani, S. (2021). Constructivism-based teaching and learning in Indonesian education. *KnE Social Sciences*, 76-89.

Uerz, D., Volman, M., & Kral, M. (2018). Teacher educators' competences in fostering student teachers' proficiency in teaching and learning with technology: An overview of relevant research literature. *Teaching and Teacher Education*, *70*, 12-23.

Ulum, H. (2022). The effects of online education on academic success: A meta-analysis study. *Education and Information Technologies*, *27*(1), 429-450. https://doi.org/10.1007/s10639-021-10740-8

Wells, S., Warelow, P., & Jackson, K. (2009). Problem based learning (PBL): A conundrum. *Contemporary Nurse*, *33*(2), 191-201.