IMPROVING ENGLISH READING COMPREHENSION THROUGH PROBLEM BASED LEARNING (PBL)

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Abstract: In this study, initially scoring at 50.35, the objective was to enhance students' English reading comprehension through Problem Based Learning (PBL), using a Collaborative Classroom Action Research approach. The methodology involved stages of planning, action, observation, and reflection in distinct cycles, each comprising two meetings. Data were collecting using methods like English reading comprehension evaluation, questionnaires on Problem Based Learning (PBL) practice, and field notes. The participants were fourth semester students of the D3 English Study Program State Polytechnic. Notably, student scores in English reading comprehension improved across cycles, from a total score of English reading comprehension ability in reading skill in cycle I is 1.530 and in cycle II is 1.745, average in cycle I is 77,5 and in cycle II is 88,25 and the percentage in cyle I is 70 % and in cycle II is 90 %. And the average of the effectiveness of the Problem Based Learning (PBL) increase in the learning process, in cycle I is 58 and in cycle II is 88.
Keywords: Problem Based Learning (PBL) & English Reading Comprehension

1 INTRODUCTION

In the context of global issues, the role of Problem Based Learning (PBL) not only influences students' English reading comprehension abilities but can also have a positive impact on responding to and solving global problems. Through Problem Based Learning (PBL), students can learn more about global issues such as climate change, world peace, and social inequality. They can take on roles as world leaders, diplomats, or activists working together to find solutions to these global problems. The studies conducted indicate that Problem Based Learning (PBL) creates a dynamic and motivating learning environment, allowing students to interact and develop their reading skill. This can lead to a better understanding of global issues, improved cooperation among students, and enhanced English reading comprehension abilities, which can, in turn, be used to contribute to global issue solutions.

Arends[1,2] explains Problem Based Learning is a learning model based on constructivist understanding that accommodates student involvement in learning and authentic problem solving. Acquiring information and developing understanding of topics, students learn how to construct problem frames, organize and investigate problems, collect and analyze data, compile facts, construct arguments, recognize problem solving, work individually or collaboratively in problem solving.

The Problem Based Learning (PBL) learning model according to Arends ([3,4], has five learning steps, namely: 1) providing problem orientation to students, 2) organizing students to study, 3) supporting investigative groups, 4) developing, presenting the product and showing it off, 5) analyzing and evaluating the problem-solving process. The principle developed in this learning model is the role of educators as guides and negotiators. [5], [6] stated that the focus of Problem Based Learning (PBL) is on student learning and not on lecturer teaching, where students are expected to be able to have the competence to research, express opinions, apply previous knowledge, generate ideas, and create decisions. The process carried out by students is far more important than just learning outcomes. If the learning process is carried out optimally, the learning results obtained will be optimal [7-10].

Problem Based Learning (PBL) will help students find the best way to convey the concepts being taught so that students can remember and understand the concepts longer [11-13]. Having a good understanding of concepts will have a positive impact on learning because students can explore knowledge anywhere.

[14] conducted a study focusing on grade 11 students in Bangkok, demonstrating the benefits of project work in developing thinking skills, utilizing the internet for additional information, managing time effectively, and establishing strong ties among students. Similarly, [15] investigated the effect of Project Based Learning on undergraduate EFL students' reading comprehension ability, revealing a positive impact on their reading skill. Additionally, [16,17] found a significant positive relationship between Project Based activities and intermediate EFL students' reading comprehension. [18-20]explored the effect of Project Based reading instruction on English reading comprehension ability and intercultural communicative competence among undergraduate students, reporting significant improvements. [21,22] conducted a study on narrative text comprehension, demonstrating a notable enhancement in students' reading scores through Project Based Learning (PBL). However, there is limited research comparing the effectiveness of Project Based Learning (PBL) and collaborative strategic reading in enhancing reading comprehension among second-grade students.

In conclusion, the consistent evidence from these studies suggests that the use of Problem Based Learning (PBL) is a highly effective approach to teaching English reading comprehension abilities. Problem Based Learning (PBL) activities create a dynamic and engaging learningenvironment that fosters interaction, fluency, and confidencein

English reading comprehension abilities. By simulating real-life situations, Problem Based Learning (PBL) provides students with valuable opportunities to apply their language knowledge, leading to enhanced English reading comprehension abilities.

2 LITERATURE REVIEW

[5, 23-26]concluded that "PBL as an instructional strategy based on constructivism, is the concept that learners construct their own understanding by relating concrete experience to existing knowledge where process of collaboration and reflection are involved" and also "Problem Based learning (PBL) is considered a student-centered instruction approach in which inspired students to apply critical thinking through simulated problems in order to study complicated multifaceted, and practical problems that may have or not have standard answers".

[27-29] explains the characteristics of PBL as: 1) to promote flexible thinking, 2) problems must be complex, 3) unstructured and open; 4) to support intrinsic motivation, they must also be realistic and connected to the student experience.

[30-34] stated that the benefits of PBL are :1) ability to be critical thinkers, 2) skills to analyze and solve complex, real-worldproblems, 3) expertise in finding, evaluating, and using information resources, 4) ability to work cooperatively in groups 5) skills to communicate orally and in written form, 6) interest in being lifelong learners and role models for students. The disadvantages of PBL are as follows: (1) when students have difficulty solving problems and students are less enthusiastic about learning, students will feel lazy to try, (2) it takes a long time to prepare, and (3) there is no explanation from the lecturer about the purpose of solving the problem. students don't want to learn and try it. [35,36] stated that syntax of PBL is as shown in Figure 1:
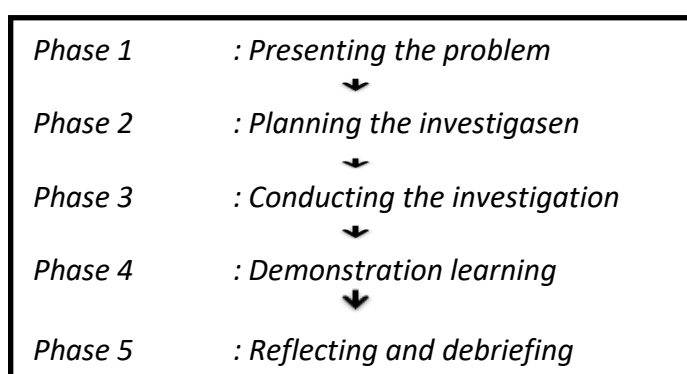
Phase 1   *: Presenting the problem*
Phase 2   *: Planning the investigasen*
Phase 3   *: Conducting the investigation*
Phase 4   *: Demonstration learning*
Phase 5   *: Reflecting and debriefing*

Figure 1. syntax of PBL

[37,38] sated that reading comprehension ability as the process of simultaneously extracting and constracting meaning through interaction and involvement with written. [39] stated that reading comprehension ability is defined as the level of understanding of reading. Proficient reading depends on the ability to recognize words quickly and effortlessly. If the words recognition is difficult, students use to much of their processing capacity to read individual words, which interfers with their ability to comprehend what is read. Snow [40,41] stated that comprehension needs (1) reader, (2) text, and (3) reading activity.

3 RESEARCH RESULTS AND DISCUSSION

3.1 Cycle I

In planning, the results of the Problem Based Learning (PBL) strategy practice are discussed together with collaborators. In the actions and observations of Problem Based Learning (PBL) learning strategy practice carry out in the form of groups in which there are four-five students. The steps of Problem Based Learning (PBL) learning strategy practice are pre-activity, whilst-activity, and post-activity. In meeting 1, the activities are explaining the material about English reading comprehension material and training Problem Based Learning (PBL) learning strategy. In pre-activity, the lecturer gives an opening and greeting, teaches students, motivates students, shares material and worksheets, and divides students into several groups. In whilst activity, the lecturer gives and explains English reading comprehension material. Students are also trained English reading comprehension abilility. In post activity, the lecturer tells students to prepare activities at the next meeting and close the learning process. In meetings 2 and 3, the students prepare themselves in their respective groups in the pre-activity activity. In whilst activity, students present their English reading comprehension ability in reading skill. In the first session, assessing the appearance of students in English reading comprehension ability in reading skill.

In post-activity, students have a test and collaborators give appreciation and correction to Problem Based Learning (PBL) strategy practice. In reflection of the cycle I is the students are not active enough to discuss the material in the learning process. The interaction between students in Problem Based Learning (PBL) strategy activities were unsuccessful. In cycle I, the conclusions relate to Problem Based Learning (PBL) strategy for improving English

reading comprehension abilility in reading skill has not been successful. In meeting 2 and 3, some students have not been able to use English reading comprehension abilility well in explaining material. In Problem Based Learning (PBL) strategy practice, they are not ready and afraid of making mistakes. Second, it is quite good lecturer, student interaction. Third, Problem Based Learning (PBL) activities were unsuccessful. And fourth, the attention of it is quite successful (See Table 1).

Table 1 Score of English Reading Comprehension Ability in Reading Skill in Cycle I

NO	Respondent Name	Cycle I
1	R1	85
2	R2	85
3	R3	75
4	R4	95
5	R5	65
6	R6	75
7	R7	95
8	R8	75
9	R9	65
10	R10	75
11	R11	65
12	R12	75
13	R13	85
14	R14	85
15	R15	55
16	R16	65
17	R17	90
18	R18	60
19	R19	75
20	R20	85
21	Total	1.530
22	Average	77,5
23	Percentage	70 %

A total score of English reading comprehension ability in reading skill in cycle I is 1.530 and average is 77,5 and percentage is 70 %.

3.2 Cycle II

In planning, the problems are activities in a conversation, lecturer and student interactions, student attentions in learning process of improving English reading comprehension ability in reading skill by using Problem Based Learning (PBL) strategy practice. The activity of meeting 1 is discussing English reading comprehension material and Problem Based Learning (PBL) strategy to improve English reading comprehension ability in reading skill. Students often correct to comprehend the text from the result of the observation. In the whilst-activity is the explanation of English reading comprehension material in reading skill by using Problem Based Learning (PBL) strategy. Discussion is also needed in the pre-activity. In post-activity, the activity ends with the preparation the next meeting. In meetings 2 and 3, the preparation of Problem Based Learning (PBL) strategy is pre-activity and whilst activity is implementing and observing on English reading comprehension ability in reading skill. In post-activity, students have a test, collaborators give appreciation and correction on Problem Based Learning (PBL) strategy practice, and the activity ends with the preparation the next meeting. In reflection, improving English reading comprehension ability in reading skill is considered to be good in cycle 2. Students show an increase in good interaction. Interaction is not only shown by lecturers to students but also by students to lecturers (See Table 2).

Table 2 Score Of English Reading Comprehension Ability in Reading Skill In Cycle II

NO	NAMA RESPONDEN	SIKLUS II
1	R1	90

2	R2	95
3	R3	90
4	R4	100
5	R5	75
6	R6	90
7	R7	100
8	R8	90
9	R9	75
10	R10	85
11	R11	85
12	R12	90
13	R13	95
14	R14	95
15	R15	60
16	R16	75
17	R17	100
18	R18	65
19	R19	95
20	R20	95
	JUMLAH	1.745
	RATA-RATA	88,25
	PERSENTASE TUNTAS	90%

A total score of English reading comprehension ability in reading skill in cycle I is 1.745 and average is 88,25 and percentage is 90 %.

The Effectiveness of the Problem Based Learning (PBL) Strategy

We can know the effectiveness of demonstrating the Problem Based Learning (PBL) in the learning process in reading skill in cycle I and cycle II through Table 3 below:

Table 3 The Effectiveness of Demonstrating the Problem Based Learning (PBL) in the Learning Process in Reading Skill In Cycle I and Cycle II

No	Aspek Yang Diamati	Pertemuan ke			
		Siklus I		Siklus II	
		1	2	1	2
I	Phase 1 (Student orientation to problems)				
	1. Students seemed enthusiastic about participating in the learning process	3	3	4	5
	2. Students form heterogeneous groups consisting of 4-5 people	3	4	4	4
II	Phase 2 (Organizing students)				
	3. Students find problems in the reading text	2	3	4	5
	4. Students answer questions correctly during learning	2	3	4	4
	5. Students state their opinions clearly about the problems contained in the reading text	2	3	3	5
	6. Students respect other people's opinions	2	3	3	5
	7. Students pay attention to the material presented by the lecturer	3	3	4	5
III	Phase 3 (Guide individual and group investigations)				
	8. Students optimize interactions between students and lecturers with group work	3	4	4	5

	9. Students are directly involved in class activities during the learning process	3	4	4	5
	10. Students work together to solve the problem quickly	3	3	4	5
IV	Phase 4 (Develop and present work results)				
	11. Students read reading texts in groups	3	3	4	5
	12. Students read the group's findings to other groups	3	4	4	5
V	Phase 5 (Analyze and evaluate the problem-solving process)				
	13. Students conclude the courses they have received	3	3	4	5
	14. Students carry out written tests	2	3	4	5
	15. Students assess and improve their work	2	3	4	5
	Total	39	48	59	73
	Total Amount	87		141	
	Average	58		88	

4 DISCUSSION

This research aligns with the findings of [42-44], indicating that the use of Problem Based Learning (PBL) strategies in learning significantly enhances the quality and production of students' English reading comprehension ability in in reading skills. Feedback gathered from student questionnaires after the post-test highlights a widespread preference for the Problem Based Learning (PBL) strategies approach in the educational process, noting its effectiveness in fostering active participation in English classes. This method not only facilitates student engagement and attention in learning reading English but also encourages interaction among students and between students and lecturers. A majority of the students reported ease in conversation and an understanding of the discussed topics within the Problem Based Learning (PBL) strategies framework. These outcomes resonate with the principles proposed by [45][36][11]. The study's findings, which support the theoretical and empirical evidence on the efficacy of Problem Based Learning (PBL) strategies in enhancing English reading comprehension ability, suggest potential improvements for the English reading comprehension ability of semester 4A at Madiun State Polytechnic's English Study Program. For future enhancement, it is recommended that students engage in more practice at home, develop quicker thinking for practice English reading comprehension ability.

In Cycle I, the implementation of Problem-Based Learning (PBL) did not yield optimal results. Students were generally passive during discussions, and interaction among peers was minimal. Many students appeared unprepared to engage actively and hesitant to participate due to fear of making mistakes. These challenges hindered the overall effectiveness of the PBL strategy. Additionally, some students struggled to fully comprehend the reading texts and were unable to articulate their understanding effectively. Although the interaction between the lecturer and students showed some promise, the overall learning objectives were not fully achieved. The average score for English reading comprehension in this cycle was 77.5, with a completion percentage of 70%, reflecting suboptimal outcomes.

In Cycle II, several improvements were made based on reflections from Cycle I. The planning phase was enhanced with a more structured approach to organizing learning materials, and during the implementation phase, the lecturer provided increased support to boost students' confidence. Discussions were made more effective by offering clearer guidance and ample time for students to grasp the problems in the reading texts. Moreover, recognizing and appreciating students' efforts became a vital part of the strategy, motivating them to engage more actively in the learning process. These adjustments underline the importance of thoughtful planning and adaptive teaching strategies in improving the effectiveness of PBL.

Student engagement and interaction significantly improved during Cycle II. Unlike in Cycle I, where students were hesitant and passive, in Cycle II they demonstrated more confidence in expressing their thoughts and actively participated in group discussions. This was evident in the way they contributed ideas, answered questions, and collaborated with their peers. The lecturer's consistent support and encouragement helped students overcome their fear of making mistakes, particularly when using English to comprehend and explain texts.

The lecturer's role as a facilitator who consistently provided constructive feedback and encouragement also played a critical part in boosting students' motivation. When students felt their efforts were valued, they became more motivated to contribute to the learning process. This appreciation also fostered better group dynamics, as students began to respect each other's opinions and worked collaboratively to solve the problems presented in the learning tasks.

The improvement in students' performance was reflected in the test results for Cycle II, where the average score for English reading comprehension increased to 88.25, with a completion percentage of 90%. This substantial improvement highlights the positive impact of the PBL strategy on students' learning outcomes. Furthermore, students demonstrated

a deeper understanding of the material, a better grasp of reading texts, and an ability to apply the learning strategies effectively.

The effectiveness of PBL was also evident in several key aspects observed during the learning process. Students showed greater enthusiasm for participating in the lessons, formed heterogeneous groups more effectively, and engaged more actively in identifying problems and proposing solutions. The interaction between students and the lecturer became more dynamic, with the lecturer not only delivering the material but also actively supporting students at each stage of the learning process.

The success of PBL was further underscored by students' ability to complete group tasks, present their findings, and evaluate the processes they had undertaken. Through this approach, students not only improved their reading comprehension skills but also developed essential competencies such as teamwork, critical thinking, and collaborative problem-solving. These skills are crucial for their overall academic and personal development in the 21st century.

Overall, these findings reaffirm that PBL can be an effective strategy for enhancing students' reading comprehension skills, provided it is implemented with careful planning and supported by strong lecturer-student interactions. The significant improvements observed from Cycle I to Cycle II highlight the value of reflective practice in teaching, which enables educators to continually refine and adapt their methods to better meet students' needs.

5 CONCLUSION

The ability of students to comprehend the reading text showed a marked improvement across second cycles, rising from the cycle I and II. A total score of English reading comprehension ability in reading skill in cycle I is 1.530 in Cycle II is 1.745, average in cycle I is 77,5 in cycle II is 88,25 and the percentage in cyle I is 70 % and in cycle II is 90 %. This growth in proficiency coincided with a noticeable enthusiasm and satisfaction among students regarding the application of Problem Based Learning (PBL) as a learning strategy to enhance their English reading comprehension in reading skill. The research achieved its objectives by the second cycle, aligning with the predefined success criteria, thereby concluding the study at this stage. Problem Based Learning (PBL) strategy proved effective in the English Study Program for class 2A, semester 4A, within the Business Administration Department at Madiun State Polytechnic. The progression of student scores from the initial pretest through to the posttests of cycles I and II demonstrated consistent improvement. By the end of the second post-test, students' average scores met the established standards of proficiency, affirming the decision to conclude the study in the second cycle. Students expressed a daily preference for the Problem Based Learning (PBL) strategy approach, finding it both supportive and motivational for their English reading comprehension ability development. This research represents a novel contribution to teaching methods in the English Study Program at Madiun State Polytechnic, specifically within the realm of spoken English vocabulary enhancement. For educators, this study underscores the efficacy of Problem Based Learning (PBL) as a strategy in teaching English, especially for improving the English reading comprehension ability of students in class 4A of the English Study Program. The strategy offers a viable alternative for structuring English language instruction. Essential elements for implementing Problem Based Learning (PBL) strategy in the classroom include lesson plans, teaching materials, laptops, LCDs, and whiteboards. Furthermore, disseminating the findings of this research through informal discussions, seminars, and publications can enrich the knowledge and teaching repertoire of other educators, providing valuable insights and strategies for enhancing teaching performance in the field of education.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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