IMPROVING STUDENTS’ READING COMPREHENSION BY USING PROBLEM-BASED LEARNING METHOD AT XI MIPA 5 SMA NEGERI 1 BADEGAN PONOROGO IN ACADEMIC YEAR 2021/2022

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Abstract
This research aimed to explain how the Problem-Based Learning Method improved the reading comprehension of XI MIPA 5 students at the SMAN 1 Badegan and to identify what aspects of reading learning can be improved. The researcher used classroom action research. This research had 2 cycles consisting of planning, implementation, observation, and reflection. In this research, the researcher used 3 instruments: observations, questionnaires, and tests to measure student achievement and to know student responses after the implementation of Problem-Based Learning in reading comprehension. The result of the study showed that students’ reading comprehension was improved. This was proven by the result of the test which improved from 7% in cycle 1 to 100% in cycle 2. Then, the result of the questionnaires improved from 78% in cycle 1 to 98% in cycle 2. Furthermore, this study was also proven by the result of observation which improved from 65% in cycle 1 to 95% in cycle 2. Based on finding data from 3 instruments, the researcher concluded that the implementation of the Problem-Based Learning method was successful to improve students’ reading comprehension at X MIPA 5 SMA Negeri 1 Badegan in academic year 2021/2022.

Keywords: Reading Comprehension, Problem-Based Learning, Education, Academic.


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INTRODUCTION

Language is a tool that people use to communicate with one another so that everyone understands each other. Language may help us manage our thoughts, ideas, feelings, and a variety of other things. Many languages are spoken around the world; in fact, one country may speak up to two languages. And, in today's globe, many people speak a variety of languages. English is one of the most widely spoken languages (E Putra 2020). Some countries, particularly those that were once British colonies, consider English to be a second language that must be learned after their original tongue (Sciences, 2016).

There are four language skills that a language student must master in English
learning activities: speaking skills, listening skills, reading skills, and writing skills (Rachman 2018). Reading is an essential component of content instruction in the classroom. Everyone requires reading material in order to complete their studies, accelerate their lessons, and expand their knowledge. Reading is also important and necessary for students because the majority of their academic success is dependent on their ability to read. If they have poor reading skills, they are more likely to fail or make slow progress in their studies (Becker et al., 2015).

It is also crucial for a student to learn reading comprehension because reading comprehension seeks to develop students into persons who can take knowledge and apply it through their creations. Reading Comprehension is also frequently found in English tests, both in high school and in college. Reading Comprehension is also frequently included in English tests such as the TOEFL, IELTS, and TOEIC. Additionally, several companies, particularly those on a global scale, add English Reading Comprehension as one of the admittance tests. Furthermore, if a person knows reading comprehension, that person will be able to comprehend, analyze, and reply to documents and written communication in the workplace. It can also help to improve writing skills so that it appears more clear and more effective. The ability to concentrate on reading for an extended period will also improve. Moreover, high reading comprehension can make you appear more professional and reading activities more fun.

Reading has a strong interrelationship with other skills, such as the relationship between reading and writing. There is also a relationship between reading and listening. Reading and listening are two methods for gaining language knowledge. Listening and reading share the same psychological activity and decoding process. Listeners have little or no control over the rate at which listening material is input. Reading is a psycholinguistic guessing game in which prior knowledge is required to succeed. Reading a lot allows students to obtain additional input by exposing them to different types of linguistic information. Students can improve their reading vocabulary by being exposed to a variety of practical and contextual words. Reading allows students to think in English more often, which improves listening comprehension.

However, there are still many difficulties experienced by students when doing reading comprehension. The student's problems may interfere with their interest in reading and cause them to become bored with the lesson (Goal, 2015). The same thing happened at SMA Negeri 1 Badegan. Based on the pre-observation that
the researcher did at SMA N 1 Badegan during the PLP 3 activity in January – February, students of class XI MIPA 5 also still had many difficulties in doing reading comprehensions, such as lack of understanding of vocabulary, inability to find important information in the text, determining reference and the inability to making inference from a text. This affects their reading comprehension ability.

Therefore, to improve students' reading comprehension, the researcher examined to improved students’ reading comprehension by using problem-based learning method at XI MIPA 5 SMA Negeri 1 Badegan Ponorogo in academic year 2021/2022. The subject of this study are students of XI MIPA 5 SMA Negeri 1 Badegan. This research aimed to explain how the Problem-Based Learning Method is improving the reading comprehension of XI MIPA 5 students at the SMAN 1 Badegan and identifying what aspects of reading learning can be improved.

LITERATURE REVIEW
1. Theoretical Framework
   a. Definition of Reading

Reading is a global, interactive, and developmental process that improves learned skills. The procedure takes into account an individual's linguistic knowledge. It means that reading is regarded as a complex activity involving a variety of activities, such as understanding each symbol and analyzing the words to derive a meaning (Boakye, 2014).

Reading, according to Brown (2004), is a process of negotiating to mean. This process requires readers to apply their comprehension of the meaning of the texts they read. It means that readers' comprehension of the text is the result of a conversation between their thoughts and the meaning of the texts they read.

Reading is more than just looking at the words and spelling of a written text and attentively following the letters line by line of the text; it is also about understanding a written text. The needed information should be extracted from the text as efficiently as possible (Grellet 1981).

According to the various definitions provided by experts above, reading is an activity to learn information and expand one's knowledge since when reading, one not only reads multiple lines of phrases but also interacts with the text and should be able to extract the relevant information. We can deduce from the definitions that reading is tremendously useful to students. To extract information and analyze texts, we must encourage our students to interact with the texts.
b. Reading Purpose

Reading can be defined as the process of absorbing and interpreting reading content to enlighten and expand our knowledge. Each lesson has a reading purpose and each extension impacts the reading purpose, shifting the reader's attentiveness. Readers can fulfill the goal of reading if they identify the optimal manner to absorb the reading material. For example:

1) Reading for pleasure includes reading a narrative, novel, comics, and so forth.
2) Reading for a broad impression, such as deciding whether or not to read the content.
3) Reading to arrange reading and study, such as identifying the main content of a text, answering a specific question, or deciding which area of a text to begin studying.
4) Reading for learning content or procedure, such as grasping new concepts, acquiring specific information from a source, and following instructions.

c. Definition of Reading Comprehension

Reading comprehension is the application of a previously established skill (hearing or speaking comprehension) to a new type of input (text). Reading comprehension, unlike listening comprehension, has not evolved in our brains. Our mental frontiers are expanded when we apply comprehension to literature.

Reading comprehension must occur during the reading process. As a result, numerous hypotheses underpin the concepts of reading comprehension (Boardman, Klinger, and Vaughn 2007). They characterize reading comprehension as a multifaceted, extremely complicated process involving several interactions between readers and the text.

Boardman et al. (2007) define the steps that must take place during reading comprehension. Here, readers must define their reading objectives and draw on prior knowledge and experience related to the material. Readers should also use tactics that are appropriate for the content and the aim of the reading. Furthermore, readers must ensure that they can follow the flow of the words. Readers are also taught to construct their arguments and thoughts to respond to the texts during the reading comprehension process (Snow 2002).

According to the ideas discussed above, reading comprehension is the core of reading because it is intended to obtain the meaning of the texts. Reading comprehension does not happen in a vacuum; it necessitates active engagement between readers and texts. Readers must decide what they want to read. Then they bring their knowledge related to the content of the texts, such as vocabulary, grammar,
and text structure. Readers should use certain ways to deal with the texts as well. Finally, they are expected to construct their argument to respond to and forecast the texts they have read.

d. Micro skills and Macro skills of Reading

According to Brown, (2004), the micro-skills and macro-skills listed below show the range of possible objectives for assessing reading comprehension.

1) Micro Skills

a) Understand the various graphemes and orthographic patterns in English.
b) Maintain language chunks of varying lengths in short-term memory.
c) Write at a frequency that is appropriate for the task.
d) Recognize a core of words and decipher word order patterns and their financial implications.
e) Recognize grammatical word classes (nouns, verbs, and so on), systems (for example, tense, agreement, and pluralization), patterns, rules, and elliptical forms.
f) Recognize that several grammatical forms can communicate the same concept.
g) Recognize and apply coherent methods in written language to signal clause relationships.

2) Macro Skills

a) Recognize written discourse's rhetorical forms and their implications for interpretation.
b) Identify the communication roles of written texts based on their form and purpose.
c) Use background information to understand the context that isn't presented.
d) Infer links and connections between occurrences, deduce causes and consequences, and recognize such relationships as the core idea, supporting the idea, fresh information, supplied information, generalization, and exemplification from described events, ideas, and so on.
e) Recognize the difference between literal and inferred meanings.
f) Recognize and comprehend culturally diverse references within the framework of the relevant cultural schemata.
g) Scanning and skimming, detecting discourse markers, estimating word meanings from context, and activating schemata for text interpretation are all skills to learn and practice.

Brown's stated that micro-skills and macro-skills are beneficial to students when reading specific books. Our students'
reading will be effective if they can apply the micro-skills and macro skills. As a result, reading strategies and reading activities should include those reading macro skills and micro-skills that have been determined. Its goal is to assist students in efficiently comprehending texts and making it easier for them to deal with a variety of materials.

e. Type of Reading

Reading techniques are classified into four categories: skimming, scanning, intensive, and extensive. The final two major categories are discussed below.

1) Intensive Reading

Brown (2007) defines intensive reading as "paying close attention to grammatical forms, discourse markers, and other surface structure aspects to discern literal meaning, implications, rhetorical linkages, and other similar subtleties." He compares intensive reading to using a zoom lens. Students participating in intensive reading, also known as narrow reading, may read works by the same authors or many literature pieces on the same subject.

2) Extensive Reading

According to Indriastuti and Mustikawati (2021) Extensive reading (ER) is a method of learning to read that is often thought to be the polar opposite of intensive reading. Extensive reading is self-directed reading in which students read the material they select. The principle of extensive reading is to allow readers to select reading material based on their needs and aptitude, whereas intensive reading is handled by the teacher for all class needs.

Students can read faster when they are not required to pay attention to details as long as they understand the main idea of the text. Students can appreciate the literature as well because long reading is more about enjoyment than thorough comprehension.

Students must pay attention to grammatical forms, discourse markers, and other surface structural aspects when reading in this setting. Students should fully comprehend the book, and they will be tested on the content or topic that they have learned following the reading tasks.

f. The Reading Comprehension Component

To comprehend text, King et al. (1989) recommend focusing on five components of reading comprehension:

1) Discovering the Main Idea

The primary idea is the main topic of a paragraph. The primary concept is also the fundamental concept. It describes the substance of the paragraph. According to the author, the main idea helps the reader understand not only ideas but also their relative worth.

2) Obtaining Accurate Information

Factual information is relevant information regarding the world described
in the text. Every paragraph contains factual facts.

3) Guessing Vocabulary in Context
   A difficult or unfamiliar vocabulary is difficult to comprehend. The context suggestions allow us to deduce the tricky word. Not only does context assist us to grasp recognized words, but it can also help us understand unfamiliar concepts.

4) Reference
   A reference is a term that stands in for another word. It is issued to avoid the repetition of the word. It might appear at the start, middle, or finish of a sentence. It, she, he, this, they, them, and other pronouns are popular examples of reference terms.

5) Making Inference
   The inference is a skill that necessitates the reader's ability to read between the lines. King and Stanley focused their attention on two essential areas, making logical conclusions and making accurate predictions.

6. Definition of Problem-Based Learning
   Problem-based learning is an instructional method that encourages students to learn by presenting them with an actual problem to solve. Students develop content knowledge, problem-solving abilities, and self-directed learning skills while working toward a solution during the problem-solving process. Prof. Howard Barrows, a medical science student at McMaster University in Canada, pioneered Problem Based Learning (PBL) in the 1970s (Woei Hung, Jonassen, and Liu 2008).

   According to Barrows and Tamblyn (1980), Problem-based learning (PBL) is stimulating, demanding, and entertaining learning strategy that emerged from the act of attempting to comprehend or solve a problem.

   According to Arends (Trianto, 2007), PBL is a learning strategy in which students are provided with actual (real) situations to construct their knowledge, develop high-level skills and inquiry, make pupils independent, and boost their self-confidence.

   From several descriptions regarding the definition of Problem Based Learning, it can be concluded that Problem-based learning (PBL) is a learning methodology that requires students to "learn how to learn" by working in groups to solve real-world problems. This challenge is designed to pique students' interest in the subject of study. PBL is a teaching method that emerged from the act of attempting to comprehend or solve a problem.

7. Characteristics of Problem-Based Learning Method
   Problem-based learning is an instructional methodology or a strategy for overcoming
learning problems. The primary goal of PBL is to improve learning by requiring students to solve problems (Hung et al. 2008). It is a methodology with the following characteristics:

a. The problem-based learning model is problem-focused, such that learners begin learning by addressing simulations of an authentic, ill-structured problem. The content and skills to be learned are organized around problems, rather than as a hierarchical list of topics. It is problem-focused so knowledge building is stimulated by the problem and applied back to the problem.

b. It is student-centered since teachers cannot tell students what they should learn.

c. Students are required to take part in a self-directed learning program that includes self-assessment, peer assessment, and access to materials. Required assignments are rarely made it is self-paced and self-guided.

d. A self-reflective approach to learning is a way of looking at the world around you. It is self-reflection, such that learners monitor their understanding and learn to adjust strategies for learning.

e. Tutors are facilitators who encourage and model thinking processes, facilitate group processes and interpersonal dynamics, extensively examine students' understanding, and never insert content or directly answer queries. Tutors are facilitators, not disseminators of knowledge (not disseminators).

i. The Steps of Problem-Based Learning Method

According to Nurdiansyah & Fahyuni (2016), there are five stages to implementing the Problem-Based Learning method:

a. Orienting Students to Problem

The teacher introduces the learning objectives, discusses the logistics, encourages students to participate in problem-solving activities, and poses difficulties.

b. Organizing Students to Learn

The teacher splits students into groups and assists them in defining and organizing problem-solving learning assignments.

c. Assisting Independent Studies and Groups

The teacher encourages students to gather the necessary information, conduct experiments and investigations, and solve problems.

d. Creating and Presenting Exhibitors' Work

Teachers help students plan and prepare reports, documents, or models, as
well as assist them in sharing tasks with their peers.
e. Analyzing and Evaluating the Problem-Solving Process

The teacher helps students reflect on and evaluate the process and results of their study.

2. Review of Previous Research

The first research was conducted by Windi Astuti with an article entitled "Enhancing Students' Writing Ability by Implementing Problem-Based Learning Method at The English Department Students in Muhammadiyah University of Ponorogo in Academic Year 2019/2020". In her research, the researcher uses a Problem-Based learning model and uses CAR as a research model. The English Department Students in Muhammadiyah University of Ponorogo in Academic Year 2019/2020 are the subjects used in this study. The researcher used questionnaires, tests, and observations to collect data. The research conducted in two cycles shows that the Problem Based Learning method has succeeded in improving writing skills. In addition, there was an increase in student activity in learning activities.

The second research is an article from Suci Rengganis with the title "Meningkatkan Hasil Belajar Bahasa Inggris Siswa Kelas IX A Dengan Model Pembelajaran Problem Based Learning di SMP Islam Darussalam Kab. Majalengka Jawa Barat". In this study, researchers used problem-based learning as a learning model and CAR as a research model. The subjects of the study were all students of class IX A at SMP Islam Darussalam. The data in the study were obtained from observations and tests. The final result of the study showed that the average student learning outcomes in the cognitive domain were 84%. The research that has been done, proves that problem-based learning can improve student learning outcomes.

The third research was conducted by ABD Rohman with an article entitled "Penggunaan Model Pembelajaran Problem Based Learning Untuk Meningkatkan Hasil Belajar Bahasa Inggris Pada Pokok Bahasan Explanation Text". In this study, researchers used Problem Based Learning as a learning model and CAR as the research method used. The subjects in this study were students of class XII IPS 1 at SMA Negeri 1 Salo in the 2016/2017 academic year. Student activities during the learning process were observed by researchers as data for evaluation and reflection. The results of this study prove that the problem-based learning model can improve student learning outcomes in English subjects.

The last research entitled "Implementasi Model Pembelajaran..."
**BERBASIS MASALAH/PROBLEM BASED LEARNING TERHADAP PRESTASI BELAJAR BAHASA INGGRIS PADA SISWA SMA NEGERI 9 BULUKUMBA SULAWESI SELATAN** was written by Rosnaimah Said. This research uses CAR research methods and problem-based learning as learning models that are applied. The subjects in this study were students of class XI MIPA 2 UPT SMA Negeri 9 Bulukumba. The research data in this study were obtained from tests, observation sheets, and student responses given in the learning process. The study's findings indicate that implementing the problem-based learning method can improve students' English learning outcomes. Furthermore, the use of problem-based learning can boost students' motivation, activeness, sense of responsibility, and self-confidence during the teaching and learning process.

From several previous studies, it is proven that the use of the deep problem-based learning method that will be used in this study is still feasible to use.

**RESEARCH METHODOLOGY**

The researcher used classroom action research. This research has 2 cycle which consists of reconnaissance, planning, action, observation, and reflection. The researcher worked directly to perform the research to find solutions to the students' reading comprehension challenges that they encountered in class. Based to Borgia Schuler (2003), Classroom Action Research is a method for strengthening instructors' professional qualities and promoting student learning performance.

This research was conducted in class XI MIPA 5 SMA Negeri 1 Badegan, Ponorogo. Research activities were carried out every Tuesday during English learning times. Learning activities took place in the first section with estimated learning activities being 60 minutes. The research began the research on April 12, 2022, and was completed on May 10, 2022. The researcher also conducted this research by collaborating with Mrs. Rustiani Widyawati, M.Pd as the English subject teacher who was in charge of the class. The subjects of this study were students from XI MIPA 5 SMA Negeri Badegan for the academic year 2021/2022.

In this research, the researcher used 3 instruments: observations, questionnaires, and tests to measure student achievement and to know student responses after implementation of Problem-Based Learning in reading comprehension learning. While collecting observational data, the researcher observed how students participated in learning activities. Four factors were used as assessment criteria when collecting observation data: activeness, responsibility, honesty, and discipline. During this observation activity,
the collaborator teacher assisted the researcher in carrying out the activity and records how many students participated in the learning activity. For questionnaire, the researcher utilized a checklist sheet to collect questionnaire data. In which 10 questions are provided with two possible answers, Yes or No. The total number of students who answered Yes or No to each question will be recorded.

The following formula was used in the research to analyze the observation and questionnaire data:

\[
\text{Percentage} : \left( \frac{\sum \text{amount of obtain score}}{\sum \text{amount of maximum aspect}} \right) \times 100\%
\]

The researcher defined that if the students of XI MIPA 5 SMA Negeri 1 Badegan Ponorogo in academic year 2021/2022 achieved the percentage criteria score of 75 percent, it means that the Problem-Based Learning method of improving students reading comprehension was successful.

The researchers obtained testing data from the results of the tests at meetings 2 and 4. There were 15 multiple-choice questions and 2 description questions on the test. Then, the data was processed once again to determine the final value using the formula:

\[
\text{Score} : (\text{Point of Multiple Choice} + \text{Point of Description}) \times 4
\]

The researcher defined that if the students of XI MIPA 5 SMA Negeri 1 Badegan Ponorogo in academic year 2021/2022 achieved a score of \( \leq 75 \) so the learning outcomes were deemed to be complete.

RESULT AND DISCUSSION

These studies were carried out from Tuesday, April 12, 2022, to Tuesday, May 10, 2022. These studies were carried out in class XI MIPA 5 during the academic year 2021/2022. The data for this study were gathered through two cycles. There were two meetings in each cycle.

1. **Cycle 1**

   This stage was completed in two meetings. The students were given information on the material to be studied and separated into groups of 4-5 persons to discuss. They then read and comprehended the contents of the book assigned by the teacher. Students discussed recognizing and then given the primary point of each paragraph in the explanatory text. Furthermore, they detected linguistic features and language structures in the explanatory text. Students were also instructed to write if they found uncommon vocabulary. Their activities throughout the
discussion were monitored to assist those who are having difficulty. During the monitoring, they were also given various questions by the teacher to better understand the material provided.

The researcher observed the activities of the students' responses and class situations as they learned in class. Students found it challenging to resolve differences of opinion among group members throughout the first cycle's discussion stage. Students believed that including the problem-based learning method in the learning process made it easier for them to comprehend the material. Few of the students were still not participating in educational activities.

According to the data on student test scores from cycle one, 4 students (14% of students) received a score of 44. 2 students, or 7%, received a score of 48. 2 students, or 7%, received a score of 52. There was also a student, or 3% of all students, who received a score of 56. 4 students, or 13% of the class, received a score of 60, while 7 students, or 24% of the class, received a score of 64. 4 students, or 13%, received a score of 68. There were also 4 students, or 13% of all students, who received a score of 72, and 2 students, or 7% of all students, with a score of 76.

2. **Cycle 2**

The cycle was completed in two meetings. Students were divided into groups of 3-4 people based on the earlier lottery number created by the teacher. The students then congregate in their assigned groups. Each group was given an explanation text and asked to comprehend the meaning of the text that came before.

The researcher observed the activities of the students' responses and class situations as they learned in class. Students were also more involved in asking questions if they had challenges while participating in learning activities. Students also enjoyed and were more enthusiastic about studying reading comprehension than they had been at the previous meeting.

Based on test score data from cycle 2, 100% of students passed the minimum score (75), with 11 or 20% of students who received a score of 76, 10 or 34% receiving a score of 80, 6 or 20% receiving a score of 84, 2 or 7% receiving a score of 88, and 1 or 3% receiving a score of 92.

![Figure 1. Data Result](image-url)
According to the reflection above, the researcher concluded that the use of problem-based learning methods to improve students' reading comprehension was successful in this study. Based on these results, the researcher decided to end the research.

CONCLUSION

Based on the findings and discussion of the study, it was possible to conclude that the problem-based learning method was able in improving students' reading comprehension at XI MIPA 5 SMA Negeri 1 Badegan in the academic year 2021/2022. It can be seen the development of observation, questionnaire, and test.

This study increased psychomotor, affective, and cognitive aspects of reading learning. The psychomotor aspect was proven in the observation checklist results, which reveal that students were more involved in learning process. The affective side could then be observed in the findings of the questionnaire, which revealed that students enjoy the content more and find it simpler to learn. This was supported by the questionnaire results. In terms of cognitive ability, students were able to recognize the language, locate key material in the text, identify references, and draw inferences. This was also demonstrated by the improvement in student test scores.

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