



PROBLEM-BASED LEARNING AS A FACILITATOR OF STUDENTS' READING COMPREHENSION

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ABSTRAK

The purpose of this study was to determine to what extent the Problem-Based Learning method improved reading comprehension during the second year of MA Muhajirin As'adiyah Kampiri. This study employed a pre-experimental approach to attain its goal. The researcher employed a cluster random sampling technique with a sample of 24 students from classes XII-A. The pre-test and post-test were used to collect data. Problem-Based Learning was used to teach the experimental class. The data was analyzed using the education data analysis formula. The pre-test and post-test results revealed a considerable improvement. It was demonstrated by the fact that the mean score of the students' experimental post-test (77.9) was greater than the mean score of the students' pre-test (41.8), and the post-test T-test value was 0.02, which was less than (α) = 0.05. The treatment causes an improvement in kids' reading comprehension. Problem-Based Learning improves students' thinking skills and encourages them to use their abilities to read literature. So that students participating in Problem-Based Learning could easily understand the texts. As a result, it is concluded that implementing problem-based learning improves students' reading comprehension throughout their second year of MA Muhajirin As'adiyah Kampiri.

Keywords : Problem-Based Learning, Reading Comprehension, Experimental

INTRODUCTION

English is one of the foreign languages studied by Indonesian students (Abrar et al., 2018; Djafri & Wimbari, 2018; Setiyadi et al., 2019). In an era when competition among countries is fierce, English plays a vital role in aiding Indonesian human resources. English, as one of the most essential worldwide languages, is a prerequisite for navigating the global era. English is one of the courses that must be taught in official schools at specific levels in Indonesia, and pupils are expected to master it (Mistar, 2005; Putra, 2014; Zein, 2016). As a result, English must be taught in senior high schools in order to prepare students for the globalization period.

English instruction in Indonesia is separated into four major skills (Marcellino, 2015; Zein et al., 2020). Listening, speaking, reading, and writing is the skills. Reading is a vital ability for students to develop. According to the most recent curriculum, the curriculum 2013, students are expected to have strong reading skills (Nugraheni, 2015; Akib et al., 2020). As a result, adequate speaking instruction must be provided in the classroom. They must improve their reading skills in order to become acquainted with English.

However, after conducting observations with MA Muhajirin As'adiyah Kampiri students and the English teacher, as well as studying the teaching and learning process and the class, the researcher discovered that the students' reading skills remained relatively low.

They appeared to be discouraged in English class and were unable to execute competent reading in an appropriate manner. They were still struggling to read and comprehend the meaning of the words. Furthermore, they frequently struggled with fluency, particularly in vocabulary and pronunciation.

Given the benefits of reading fluency for an English language learner, the researcher reasoned that some effort should be made. Making students think outside the box and try to solve the problem on their own is one strategy to improve their reading skills. The researcher would then employ the Problem-Based Learning Model.

LITERATURE REVIEW

1. Theories dealing with reading

Reading is one of the four skills required to acquire a language. Reading is one of the key language skills that distinguishes itself from the others. Reading is the best technique to learn a new language because it allows us to expand our vocabulary (Yu et al., 2018; Onishchuk et al., 2020; Hashemi, 2021). Reading is defined in a variety of ways.

Furthermore, reading is a physical and cerebral action that reveals the meaning of written texts, and it includes the process of understanding letters (Karolides, 2020). It is referred to be a physical activity since some elements of the body, primarily our eyes, perform it. It is sometimes referred to as mental activity because perception and memory are components of cognition. He, therefore, concludes that the primary purpose of reading is to grasp written texts (Meneghetti et al., 2006; Castles et al., 2018; Goodman, 2020; Fahmi et al., 2020).

Moreover, reading is the decoding and comprehension of written texts (Spencer & Wagner, 2018; Groen et al., 2019). Decoding entails converting writing system symbols (including Braille) into the spoken words that they represent. The reasons for reading, the context, the character of the material, and the readers' methods and knowledge all influence comprehension. Reading is an information process that begins with the text and ends with the reader's knowledge (Olson et al., 2018; Mangen et al., 2019; Syakur & Aziz, 2020). It can also be defined as learning to recognize the printed symbols that signify language and to respond intellectually and emotionally to the text while reading. Furthermore, it contains information that facilitates interaction between the reader and the text itself.

Reading, according to the definition above, is an activity that involves gathering information, understanding from written text, increasing perception through written text, and transferring meaning from printed pages to the brain.

2. Problem-based learning

Problem Based Learning (PBL) is a learning paradigm aimed to provide learners with vital knowledge that will enable them to solve issues, develop their own learning models, and participate effectively in teams (Hairuddin, 2018; Ginaya et al., 2020; Chen et al., 2021; Fathurrohman et al., 2021). The learning process employs a systemic approach to problem-solving or confronting the obstacles that will be encountered in everyday life.

Problem-based learning is a type of learning module that confronts learners with contextual challenges that encourage them to learn (Dolmans et al., 2005; Nagarajan & Overton, 2019; Moust et al., 2021). Learners in problem-based learning classes work in groups to address real-world challenges. Problem-based learning is a learning module that requires students to "learn how to learn" by working in groups to solve real-world problems.

Here are five approaches to employing Problem-Based Learning Models.

- a. Problems as a case study
- b. Problems as an exploratory assessment
- c. Problems as an example
- d. Problems as an essential component of the process
- e. Problems as a genuine activity stimulus

Authentic assessment is used to assess learning in PBL (Barber et al., 2015; Dos Santos, 2015; Dos Santos, 2016). A portfolio is a systematic collection of the work of the learners that are assessed to see the progress of learning within a specific time frame within the framework of accomplishing the learning objectives. Self-assessment and peer-assessment are used in the PBL approach for evaluation (Papinczak et al., 2007; Alias et al., 2015; Erdogan et al., 2018).

a. Self-assessment.

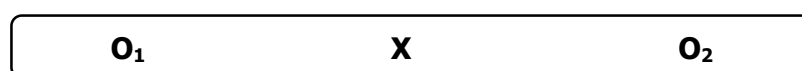
The learner himself assesses his efforts and the outcomes of his work by referencing to the goals to be attained (standard) by the learners themselves in learning.

b. Peer-assessment.

Assessment in which learners discuss the efforts and consequences of completing tasks that have been completed alone or by peers in the group.

RESEARCH METHOD

The researcher used a pre-experimental research approach in this study. It signifies that only one group (one class) was used as the experimental group. The group was given pre- and post-tests, as well as treatments, by the researcher. The design is as follows:



Where:

O₁ : Pretest

X : Experiment
O2 : Posttest

The reading exam was able to collect data on the students' development in reading skills as a result of the problem-based learning methodology. There were two types of tests: a pre-test, which was used to determine the students' level of reading comprehension prior to the implementation of the action, and a post-test, which was used at the end.

RESULTS AND DISCUSSION

This study was to determine to what extent the Problem-Based Learning method improved reading comprehension during the second year of MA Muhajirin As'adiyah Kampiri. In the following, the results and discussion are presented.

The test results show that student reading comprehension improves from pre-test to post-test. The Pre-test and Post-test Frequency and Percentage Results in Table 1.

Table 1. Pre-test and Post-test Frequency and Percentage

No.	Classifications	Range	Pre-Test		Post-Test	
			Frequency	%	Frequency	%
1	Excellent comprehension	86-100	0	0	4	16
2	Good comprehension	71-85	0	0	13	55
3	Fair comprehension	56-70	5	20	7	29
4	Poor comprehension	41-55	6	25	0	0
5	Very Poor comprehension	≤ 40	13	55	0	0
Total			24	100	24	100

The results of the students' pre-test and post-test are shown in the table above. There were no students classified as very good or good. Then there were 5 students who were classified as fair (20 percent). There were 6 (25 percent) students in the poverty group. Furthermore, 13 (55 percent) of the students were classified as very poor. So, according to the table, no students had very good or good reading comprehension, while others had fair, bad, or extremely low reading comprehension. It demonstrates that the pupils in this class were appropriate as a sample to be taught more in order to improve their reading comprehension.

The post-test results reveal that the students' scores increased significantly. There were no students in the table who were classified as poor or very poor. On the contrary, there was an increase in the number of students classified as very good, with 0 (0 percent) students in the pre-test and 4 (30 percent) kids in the post-test. Unlike the pre-test, which had 0 (0 percent) students classified as good, the post-test saw a rapid increase to 13 (55 percent) students. Furthermore, the student received a decent grade on the

pre-test, with 5 (20%) students categorized as good, and the post-test had a single increase into 7 (29%) students. The rate frequency and percentage of students' pre-test and post-test results suggest that students' reading comprehension has improved. It demonstrates that the treatment had a positive impact on the students, resulting in higher scores and a greater dispersion of very good and good ratings.

The mean score and standard deviation of the students' pre-test and post-test are shown in the Tables 2 below. The standard deviation represents the variation of each student's score from the mean.

Table 2. Mean score and standard deviation of the students'

Test	N (Students)	Mean Score	Standard Deviation
Pre-test	24	41,8	12,92
Post-test	24	77,9	6,94

The difference in mean score and standard deviation between students' scores on the pre-test and post-test is shown in Table 2. The pre-test mean of students' scores climbed from 41.8 to 77.9 in the post-test. Meanwhile, the pupils' standard deviation was reduced from 12,92 in the pre-test to 6,94 in the post-test.

The preceding chapter's hypotheses for this study were assessed using inferential analysis and the Paired-Sample T Test. Its purpose is to determine whether there was a statistically significant difference between the students' pre-test and post-test scores for both literal and interpretative comprehension. The test of significance of the students' pre-test and post-test results is presented in Table 3.

Table 3. Test of significance of the students' pre-test and post-test

Variables	Probability Value	Level of Significance (α)
Pre-test and Post-test	0.02	0.05

Table 3 displays the outcome of the t-test computation of the students' pre-test and post-test scores, encompassing literal and interpretative questions. As we can see, the probability value (0.02) was less than the level of significance (0.05). As a result, there is a considerable difference between the pre-test and post-test scores of the children.

This suggests that there is a substantial variation in the pupils' reading comprehension achievement between the pretest and posttest results. As a result, it is possible to conclude that implementing Problem-Based Learning significantly improves students' reading comprehension. The research results support and are relevant to various previous research results (Schmidt et al., 2011; Klegeris & Hurren, 2011; Othman & Shah, 2013; Lin, 2017).

CONCLUSION

Based on the findings and discussions, the researcher concluded that using Problem-Based Learning considerably improved reading comprehension. During the treatment notion of thinking outside the box to assist students absorb texts easier, the researcher noticed that they were more involved in a tale when they used problem-based learning to understand the information. This was demonstrated by the reading test results, which revealed that the post-test score (77.9) was greater than the pre-test score (41.8). It specifically contributed to the literal and interpretive comprehension of narrative text. It was also demonstrated by the t-test computation result, which revealed that the probability value (0.02) was less than the level of significance (0.05).

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