THE EFFECT OF THE LET'S READ APPLICATION TO STUDENTS' CRITICAL THINKING ABILITIES FOR ELEMENTARY SCHOOL

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Abstract

This study aims to determine the effect of the Problem Based Learning (PBL) learning model assisted by Let's Read media on students' critical thinking skills in the Javanese language subject of grade IV SDN Teguhan 02. The background of this study is the still low implementation of learning that encourages critical thinking in elementary schools. The study used a Posttest-Only Control Group Design with a saturated sampling technique, involving 34 students divided into an experimental class and a control class. The data collection instrument was a multiple-choice test of 20 questions given after the learning. The prerequisite test showed that the data were normally distributed and homogeneous. The t-test results showed a significance value of 0.000 < 0.05, which means there is a significant effect of the use of the PBL model assisted by Let's Read media on students' critical thinking skills. The average posttest score of the experimental class reached 81.76, higher than the control class which was only 63.24. This shows that the use of the PBL model with the help of interactive digital media such as Let's Read can significantly improve students' critical thinking skills.

INTRODUCTION

Critical thinking is a process aimed at drawing conclusions about our own beliefs and convictions about what we will do. It's not just about obtaining answers and grades, but more importantly, asking questions about the answers, facts, or information available (Rendi, 2024). If teachers and students recognize this importance, then a strong foundation for critical thinking skills is within reach. A person's critical thinking ability will emerge when they are in a critical situation where they are required to solve a complex problem and require unusual solutions.

Critical thinking competencies tend to be undervalued by some teachers and students, making them difficult for students to master (Affandy, 2019). Many education systems still focus on mastering content and memorizing material rather than developing deeper critical thinking skills. As a result, students are often directed to memorize facts or correct answers rather than encouraged to ask questions, explore, and challenge the information they receive (Lestari, 2022). When teachers primarily assess students based on how much they can memorize, the space for critical and analytical thinking is limited. Students are also less accustomed to honing their ability to evaluate various sources of information,

compare points of view, or build strong arguments based on existing evidence. A dense curriculum often leaves teachers feeling pressed for time, so they focus more on completing material than developing students' thinking processes (Fauzi, 2017). This situation exacerbates the lack of emphasis on critical thinking skills, which are crucial for facing future life challenges. Students who lack critical thinking skills will struggle to navigate complex realworld situations, both in their personal and professional lives. Therefore, it is important for all parties in the world of education, both teachers and students, to realize the importance of developing this competency so that students can grow into individuals who are able to think independently, creatively, and reflectively in various situations.

Critical thinking is an essential skill that involves analyzing, evaluating, and interpreting information to achieve deep understanding and support logical decision-making. According to Firdaus (2019), critical thinking is defined as "reflective and rational thinking focused on what to believe or do." Furthermore, Rositawati (2019) identified that critical thinking involves a series of skills, including interpretation, analysis, evaluation, inference, and explanation. Interpretation serves to understand the meaning of information, while analysis helps in breaking down the essential elements that form an argument. Evaluation aims to assess the reliability and relevance of information, while inference allows one to draw conclusions based on available evidence. Explanation, on the other hand, is the ability to communicate the results of thinking clearly and logically. When teachers primarily assess students based on how much they can memorize, the space for critical and analytical thinking is limited. Students are also less accustomed to honing their skills in evaluating various sources of information, comparing points of view, or building strong arguments based on available evidence (Melik, 2017).

In the context of elementary school learning, critical thinking skills are a crucial foundation. At this age, students are introduced to various basic concepts that require in-depth understanding to be applied in everyday life (Magdalena, 2024). The importance of critical thinking in elementary school is also related to efforts to develop higher-order thinking skills . When students are taught to analyze and evaluate information, they become more independent in their learning process. They can also develop curiosity and reflection skills, which are an important element in lifelong learning. Therefore, teachers need to design learning that integrates challenging activities, such as group discussions, problem-solving, and case studies, to train students' critical thinking skills (Mazna, 2024).

Wati (2018) stated that the essence of PBL is presenting various authentic and meaningful problem situations to students, which can serve as a springboard for investigation and inquiry. PBL is an approach that uses real-world problems as a context for students to learn critical thinking and problem-solving skills, as well as to acquire essential knowledge of the subject. PBL has the idea that learning can be achieved if educational activities are centered on tasks or problems that are authentic, relevant, and presented in a context. In a problem-based learning model, students are required to be active and collaborative, so they can more easily overcome existing challenges. In addition, students are also given the opportunity to seek their own resources in order to solve problems (Suyanti, 2023).

According to Rahayu and Adistana (2018), the objectives of PBL are mastery of learning content from heuristic disciplines and the development of problem-solving skills. PBL is also related to learning about life more broadly (lifewide learning), skills in interpreting information, collaboration and team learning, and reflective and evaluative thinking skills. Dewi Fortuna (2021) stated that the objectives of PBL are to help students develop thinking and problem-solving skills, learn authentic adult roles, and become independent learners. In line with this opinion, problem-solving is a problem-based teaching strategy where teachers help students learn to solve problems through learning experiences.

Let's Read is a digital platform that aims to encourage reading habits among children, especially in Southeast Asia. This platform is managed by the global literacy development

organization The Asia Foundation. Let's Read provides a collection of illustrated storybooks that can be accessed for free through a mobile app and website. These books are available in various local languages, making them an inclusive tool for overcoming language barriers in learning (Ermerawati, 2019). Amanda (2022) said that Let's Read was designed not only as a collection of digital books, but also as an ecosystem that supports learning. This ecosystem includes a community of local content creators, such as writers and illustrators, who work together to create quality reading materials. In this context, Let's Read not only aims to increase access to reading materials but also promotes cultural sustainability through stories rooted in local wisdom.

Although numerous studies have confirmed the effectiveness of the Problem Based Learning (PBL) model in improving students' critical thinking skills, most of these studies focus on science or mathematics subjects at the secondary school level. Research examining the integration of PBL with interactive digital literacy platforms such as Let's Read in elementary school contexts remains limited. Previous studies discussing Let's Read primarily emphasize its role in enhancing reading interest and literacy development rather than its potential contribution to higher-order thinking skills such as critical thinking.

Furthermore, there is still a scarcity of empirical studies that specifically investigate the combined implementation of PBL assisted by Let's Read media in Javanese language learning at the elementary school level. Given that local language learning often tends to emphasize memorization rather than analytical and reflective thinking processes, this area requires further exploration. Therefore, this study aims to fill this gap by examining whether the integration of the PBL model with Let's Read media significantly influences students' critical thinking skills in the Javanese subject for fourth-grade elementary students.

In the world of education, Let's Read can be categorized as an interactive digital learning medium. This medium utilizes visual and narrative approaches to capture children's attention. The picture books provided on this platform feature rich and engaging illustrations and simple yet educational narratives (Jasmine, 2014). Then, Let's Read Wati (2018) stated that the essence of PBL is presenting various authentic and meaningful problem situations to students. It's also a flexible learning medium that can be tailored to the user's needs. The download feature allows users to read books offline, providing a solution for areas with limited internet access.

Based on the research gap described above, it is important to examine the effectiveness of integrating the Problem Based Learning (PBL) model with Let's Read digital media in improving students' critical thinking skills, particularly in elementary school Javanese language learning. Therefore, the research question of this study is: "Does the Problem Based Learning model assisted by the Let's Read application significantly affect the critical thinking skills of fourth-grade elementary school students in Javanese language learning?"

In line with this research question, the purpose of this study is to determine the effect of the Problem Based Learning model assisted by the Let's Read application on the critical thinking skills of fourth-grade elementary school students. This study also aims to provide empirical evidence regarding the effectiveness of integrating problem-based learning with digital literacy media to support the development of higher-order thinking skills in elementary school students, particularly in local language learning contexts.

METHOD

This study employed a quantitative approach using an experimental research design. Quantitative experimental research was chosen because this study aims to examine the causal effect of a specific treatment on students' critical thinking skills. Experimental design allows researchers to test hypotheses objectively through statistical analysis and to

determine whether significant differences occur between groups receiving different treatments. This research was conducted at SDN Teguhan 02, Madiun Regency.

The population of this study consisted of all fourth-grade students at SDN Teguhan 02, Madiun Regency, in the 2024/2025 academic year. The total population was 34 students, divided into two intact classes: class IV A (17 students) and class IV B (17 students). Since the number of students was relatively small and manageable, all members of the population were included in the study.

This research employed a non-probability sampling technique, specifically saturated sampling (total sampling). Saturated sampling was chosen because the entire population was used as the research sample, ensuring that no students were excluded. Therefore, the total sample size was 34 students. Class IV A (17 students) was assigned as the experimental group receiving the Problem Based Learning model assisted by the Let's Read application, while class IV B (17 students) served as the control group receiving conventional learning. The sampling technique used in this study is nonprobability sampling. Nonprobability sampling. The sampling used in this study is saturated sampling. Saturated sampling. By using this sampling technique, the sample in this study was all students of class IV A and class IV B of SDN Teguhan 02. The design type was Posttest-Only Control Group Design.

Table 1. Research design

Group	Treatment	Posttest
R1	X1	O1
R2	Y2	O2

The data collection technique in this study used a test method to assess students' critical thinking skills. The test consisted of 20 multiple-choice questions. The test was a posttest. The posttest itself is data collection conducted after the teaching and learning activities have been carried out to determine students' ability to absorb the learning that has been learned. The prerequisite tests used are normality, homogeneity, and t-type hypothesis tests. The following are further details regarding the prerequisite tests: a. Normality test to determine whether a sample comes from a population with a normal distribution or not, a normality test is required. The test used in this study is the Lilliefors method. b. Homogeneity Test This homogeneity test utilizes the F test. The data obtained from the posttest were analyzed using IBM SPSS Statistics version 25. Descriptive statistical analysis was conducted to determine the mean, median, mode, standard deviation, minimum score, and maximum score of students' critical thinking abilities in both the control and experimental classes.

Before hypothesis testing, prerequisite tests were performed using SPSS, including the normality test and homogeneity test. The normality test was conducted using the Shapiro–Wilk test with a significance level of 0.05 to determine whether the data were normally distributed. The homogeneity of variance was tested using Levene's Test with a significance level of 0.05 to examine whether the variances of the two groups were equal. After fulfilling the assumptions of normality and homogeneity, an Independent Samples t-test was conducted using SPSS to determine whether there was a statistically significant difference in critical thinking skills between the experimental and control groups. The decision criteria were set at a significance level of 0.05. If the p-value (Sig. 2-tailed) was less than 0.05, the null hypothesis (H_0) was rejected, indicating a significant effect of the Problem Based Learning model assisted by the Let's Read application on students' critical thinking skills.

RESULT

Experimental Results

This research was conducted in class IV of SDN Teguhan 02 located in Krajan Hamlet, Teguhan Village, Jiwan District, Madiun Regency. With a sample of 17 students as an experimental class in class IV / B and a sample of 17 students as a control class in class IVA. The researcher conducted one test in one week precisely on May 28, 2025, on May 28, 2025 the researcher immediately conducted research in two different classes namely class IV / B as a control class first, Where in the control class learning was not given special treatment but conventional learning as usual, then given post-test evaluation questions to find out as well as the results of students' understanding of the material that had just been delivered. Continued with the researcher conducting research activities in the experimental class which was in class IVA with a total of 17 students, the experimental class was a class that was given treatment of learning activities using a problem-based learning model assisted by let's read media. Before the researcher carried out data collection activities, the researcher first conducted a reliability test of the validity of the question instrument that the researcher would use as a post-test question in data collection. Post-test data of students in the control class were obtained after carrying out learning activities. In the control group, the method used in the learning process was a traditional approach or lecture, while for the experimental group, the learning process was carried out using the Problem Based Learning (PBL) model using let`s read media. The post-test in the control class and the experimental class was carried out on Wednesday, May 28, 2025. The instrument used was a test question containing 20 multiple-choice questions. The material of Natural Resources around me in the Javanese subject for grade IV of elementary school. The results of post-test data processing can be seen as follows:

Table 2. Post-test control table

Value Interval	Frequency	Percentage %
45-55	2	11,8%
56-65	11	64,7%
66-75	4	23,5%
N	17	
Mean	63,24	
Median	60,00	
Mode	60	

Based on Table 2, the value interval 45-55 obtained a percentage of 11.8%, the value interval 56-65 obtained a percentage of 64.7%, the value 66-75 obtained a percentage of 23.5%.

Table 3. Post-Test Results of the Experimental Class

Value Interval	Frequency	Percentage %
66-75	3	17,64%
76-85	12	70,60%
86-95	2	11,76%
N	17	
Mean	81,76	
Median	80	
Modus	80	

Based on Table 3, the value interval 66-75 obtained a percentage of 17.64%, the value interval 76-85 obtained a percentage of 70.60%, and the value interval 86-95 obtained a percentage of 11.76%.

After processing the post-test data from students in the control and experimental classes, the average score for each class, as well as the lowest and highest scores for each class, were obtained. The following table presents the details of the post-test results for students in the control and experimental classes.

Table 4. Description of critical thinking ability values

Class	Control	Experiment
Amount	1075	1390
Mean	63,24	81,76
Median	60	80
Mode	60	80
Standar Deviastion	5,574	5,286
Minimum Value	55	70
Maximum Value	75	90

Statistical analysis conducted using IBM SPSS 25 showed that the class that was not given special treatment or the control class produced a mean value of 63.24, median 60, mode 60, standard deviation 5.574, minimum value 55, maximum value 75. If referring to the minimum completion criteria in class IV of 75, it can be stated that the results of the control class post-test implementation did not meet the minimum completion criteria for class IV. Meanwhile, the class given problem-based learning treatment with the help of let's read media or the experimental class produced a mean value of 81.76, median 80, mode 80, standard deviation 5.286, minimum value 70 and maximum value 90. The value of students' critical thinking skills tended to increase with an average value of 80. If referring to the minimum completeness criteria category with a value of 75, students in the experimental class have met or achieved these criteria.

Prerequisite Test Results

The prerequisite test used is the normality test using the Shapiro-Wilk test with a significant ÿ = 0.05. The criteria in this normality test are if sig. (p-value) > 0.05, and the homogeneity test uses the Levene statistical test with a significance of ÿ = 0.05 criteria in this homogeneity test are if sig. (p-value) > 0.05. The hypothesis in this study is a t-test (independent sample t-test) with a significant ÿ = 0.05 criteria in this hypothesis test are if the p-value < 0.05.

Table 5. Normality test results

Tests of Normality

	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Class grades	Control	,249	17	,006	,907	17	,089
	Experiment	,200	17	,068	,916	17	,128

Based on the output table of the Shapiro-Wilk normality test, it can be seen that the significance value of the experimental class is 0.128 and the significance value of the control class is 0.089. Both values are > 0.05, so it can be concluded that both data are normally distributed. The results of both data meet the assumption of normality, so further testing can be carried out.

Table 6. Results of homogeneity test

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Class Grade	Based on Mean	,140	1	32	,711
	Based on Median	,042	1	32	,838
	Based on Median and with adjusted df	,042	1	30,283	,838
	Based on trimmed mean	,123	1	32	,728

Based on the results of the homogeneity test output table, the significance value is 0.728. This value is greater than 0.05, thus concluding that the data obtained is homogeneous. This data meets one of the important requirements for analysis, allowing for further testing.

Table 7. Results of the t-test hypothesis test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Class grade	Equal variances assumed	,140	,711	-9,946	32	,000	-18,529	1,863	-22,324	-14,734
	Equal variances not assumed			-9,946	31, 911	,000	-18,529	1,863	-22,325	-14,734

Based on the results of the hypothesis test output table, it can be seen that the significant value is 0.00, which is smaller than the significant limit of 0.05, so it can be concluded that there is a significant influence. Therefore, the decision of the null hypothesis test (H0) is rejected and the alternative hypothesis (H1) is accepted. Thus, there is an influence of the problem-based learning model assisted by the let's read media on students' critical thinking skills in the Javanese language subject.

DISCUSSION

The study was conducted on fourth-grade students of SDN 02 Teguhan with a sample size of 34 students and divided into 2 classes, namely class IVA as the experimental class and IVB as the control class. This study is a quantitative study with an experimental research form. The focus of this study is to determine the effect of the problem-based learning model assisted by let's read media on the critical thinking skills of fourth-grade students of SDN 02 Teguhan.

In the learning process with the Problem Based Learning model assisted by let`s read media , it is seen that students actively participate in learning, in addition, students are interested and arouse curiosity from the media used, so that most students are able to understand the material on my region and its natural resources. Things found during learning using the problem based learning model, are that students are active when participating in learning using the problem based learning model, so that most students are able to understand the material presented. By using let`s read media, students begin to analyze and dig up information about images, showing students' curiosity from discussions with their deskmates. When working on the post-test questions, each of them worked diligently and proved to be able to complete them well.

After processing the research data, in general this research shows that the influence of the problem based learning model assisted by the let's read media can have a positive influence on the critical thinking skills of fourth grade students. The results of this study are supported by the findings of previous research, Rosa and Pujiati (2017) stated that problem-based learning has an impact on students' critical thinking skills, as evidenced by their active participation during learning activities. In line with research conducted by Hotimah (2020), Problem Based Learning is a learning model that confronts students with real-world problems to initiate learning and is an innovative learning model that can provide active learning conditions for students.

According to research conducted by Dewi Fortuna (2021), problem-based learning is very influential in helping students develop thinking skills and problem-solving skills, learn authentic adult roles, and become independent learners. This was also expressed by researchers Nurhayati & Langlang Handayani (2020) who stated that using the problem-based learning model there are differences in students' critical thinking abilities compared to other learning methods. The same thing was also conveyed by Firdaus (2019) By utilizing learning methods that involve observation, experiments, group discussions, and independent research, Javanese Language provides a solid foundation for the development of in depth and comprehensive critical thinking skills. Rangkuti, Khairuna, and Jayanti (2023) also revealed that the PBL model can improve students' critical thinking abilities in understanding biology material, because this approach prioritizes independent and collaborative problem solving. Furthermore, Kusuma Dewi and Rahayu Utami (2016) compared the effectiveness of the PBL model with the Discovery Learning model, and the results of their research showed that the PBL model was superior in improving the critical thinking skills of elementary school students.

Let's Read media is a digital platform that aims to encourage reading habits among children, especially in the Southeast Asia region. Reading habits are an important factor in improving students' critical thinking skills, because let's read media is an inclusive tool to overcome language barriers in learning (Ermerawati, 2019) in addition, JASMINE (2014) said that Let's Read media can be categorized as an interactive digital learning media. This media utilizes a visual and narrative approach to attract children's attention. Amanda (2022) also said that the use of Let's Read in learning at the elementary school level is very relevant to the needs of the times. Children in the digital era need media that is interesting, easily accessible, and according to their preferences that can improve their understanding in learning activities. Based on the opinions outlined above, the PBL model, supported by Let's Read, has an impact on critical thinking skills. The learning process in this model enables students to solve problems they face. Furthermore, students gain new experiences, practice active learning, and practice group collaboration.

CONCLUSION

Based on the introduction that has been delivered, the formulation of the problem in this study is: How does problem based learning with the help of let's read learning media influence students' critical thinking skills on the material "I and my needs" in grade IV elementary school for the subject of Javanese. The advantages of the PBL model are that

it trains students to work together in teams, solve problems using their knowledge and by searching for relevant information, prepares students to think critically and analytically and to search for and utilize appropriate learning resources, creates an environment that can encourage students to actively ask questions, doubt, and express their opinions. The benefits of using Let's Read media include: 1) It is flexible, meaning it can be read and taken anywhere because it is an application. 2) The Let's Read application and website can be accessed for free via digital devices, so students and teachers can use it anytime and anywhere.

This study has several limitations that should be considered when interpreting the findings. First, the sample size was relatively small, consisting of only 34 students from one elementary school. As a result, the findings may not be generalizable to broader populations or different educational contexts with varying student characteristics, school environments, or instructional conditions. And, this study used a Posttest-Only Control Group Design without administering a pretest. Although this design minimizes testing effects, it does not allow researchers to compare students' initial critical thinking abilities prior to the intervention. Therefore, it cannot fully capture the magnitude of individual improvement resulting from the treatment.

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