# THE IMPACT OF USING QUIZLET-BASED PBL MODEL ON GLOBAL DIVERSITY IN ELEMENTARY SCHOOLS

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Article Info	Abstrak		
Article History:	This research examines how the Quizlet application and the PBL model can improve elementary students' understanding of cultural diversity. The research targets the low level of global diversity awareness among 5th-grade students at SDN Sudimara		
Accepted	1 Tangerang despite implementing the Merdeka Curriculum. An		
October 2024	experimental method was employed, using a Non-Equivalent Control Group Design with two student groups: a control group using traditional teaching methods and an experimental group utilizing Quizlet alongside the PBL paradigm. Researchers		
Revised	collected data through observations, interviews, and tests,		
September 2024	including pretests and post-tests. The findings showed that the experimental group's average post-test score was higher than the control group's. The experimental group achieved an average post-test score of 84.48, while the control group reached an		
Approved	average of 73.08, a difference of 11.4 points. Additionally, the		
August 2024	experimental group improved its average score from 66.04 to 84.48, whereas the control group increased from 58.44 to 73.08. The results indicate that the PBL model supported by Quizlet can help students understand global diversity better. According to this research, using the Quizlet application with the PBL paradigm can raise educational standards and enhance elementary students' awareness of cultural diversity. Implementing this model in the educational process enables students to gain a deeper understanding of cultural diversity and fosters a stronger desire to learn.		
	Keywords: Problem-Based Learning, Quizlet, Global Diversity		

#### A. Introduction

Indonesia is renowned for its diversity, encompassing various religions, ethnicities, languages, beliefs, and ethnic groups. Additionally, people in this society come from different identities and social classes, such as social status, occupation, and gender. Indonesian students understand that diversity is an inevitable reality in a pluralistic society. They recognize that they differ from others in various aspects and understand that their socio-cultural and personal identities are balanced. Students learn to respect and appreciate others' perspectives by understanding and acknowledging this diversity. Diversity is defined as Indonesian students' collective knowledge and abilities regarding their local and international environments and various groups, cultures, and identities (Irawati et al., 2022).

Diversity is the ability to accept differences and respect them. It allows "Pancasila students" to embrace differences without judgment, without prejudice, and without feeling superior to others or other groups. Respecting others' traditions and cultures, such as accepting differences, should be instilled early in students so they can uphold valuable local cultural values throughout their lives. In today's era of globalization, students also need a broad understanding of foreign cultures as they seek information (Ghozali, 2020).

According to Lubaba & Alfiansyah (in Rohmah et al., 2023), this element emphasizes the importance of students remaining sensitive to globalization phenomena while loving their culture, locality, and valuable identity. The global diversity element aims to produce Indonesian students who can preserve and care for their cultural heritage and local identity while remaining open and responsive to other cultures. This is expected to create a mutually respectful environment that encourages the development and growth of new cultures while respecting the nation's ancestral cultural values without causing conflict or tension.

SDN Sudimara 1 Tangerang is a school that has implemented the Kurikulum Merdeka since the 2022/2023 academic year. However, interviews regarding students' understanding of cultural identity at this school revealed a lack of seriousness, such as laughing when their friends were interviewed about culture, reflecting their limited understanding of respecting other cultural identities. It

indicates a need to enhance cultural diversity education at the school. A better understanding enables students to live harmoniously and respectfully despite different cultural backgrounds. Moreover, interviews with 5th-grade students showed that even though the Kurikulum Merdeka has been implemented, students still need to develop a global sense of diversity. Many were unable to adequately describe the unique characteristics of their regions, indicating a lack of understanding of Indonesia's cultural diversity.

Susilawati (in Yuniharto et al., 2023) explains that global diversity character values encompass three aspects. First, students should recognize, identify, and explain various ethnic, religious, racial, and cultural backgrounds. Second, they must communicate their culture with others, prioritizing respect and appreciation for differences. Third, they should reflect on differences as a manifestation of diversity.

Teachers can enhance their students' character education by utilizing resources, cultural artifacts, and other possibilities (Rachmadyanti, 2017). This research examines how the 5th-grade students at SDN Sudimara 1 Tangerang can improve their understanding of cultural diversity using the Quizlet application combined with the PBL model. PBL is a learning technique that uses cases or problems as the starting point for acquiring and integrating new knowledge (Siswanti & Indrajit, 2023). Previous research has shown that PBL improves student learning outcomes, as Mulyasari et al. (2019) Explained that this model increases student engagement and creates an enjoyable learning atmosphere. This method allows students to learn actively and independently while honing their research, analytical, and writing skills. PBL also allows students to independently discover solutions, fostering a greater sense of ownership over the material they study.

The Problem-Based Learning (PBL) process has several key characteristics: the learning process begins by presenting a problem as the primary focus. The selected problem is a natural, unstructured issue that requires various perspectives and challenges students' knowledge, attitudes, and competencies. Identifying learning needs and exploring new areas during the learning process is essential. A

vital aspect of this approach is the development of independent learning skills. Additionally, using various knowledge sources and evaluating and utilizing information from multiple sources is essential to Problem-Based Learning (Fauziah, 2016).

Media such as the Quizlet application can make learning more interactive and engaging. Quizlet allows for creating interactive assessment questions, such as multiple-choice or short-answer questions, which can inspire students to participate more actively in their education. Designed for students from elementary school to university level, Quizlet is helpful for language learning and can be applied across various fields to structure materials and conduct assessments effectively (Sari, 2019). This research combines PBL with the Quizlet application to improve academic achievement and shape students' characters to be more tolerant and open to cultural diversity. Thus, using PBL and Quizlet in teaching is expected to deepen students' understanding of cultural diversity and improve their social interactions at school.

#### **B.** Methods

This research occurred at SDN Sudimara 1 Tangerang, located in Jl. Raden Fatah No. 69, RT. 002/RW. 003, Sudimara Barat, Ciledug District, Tangerang City, Banten 15151, using quantitative techniques with a quasi-experimental design. Researchers have scheduled the research to begin in May 2024. Sahir (2021) explains that a quasi-experimental design explores cause-and-effect relationships without applying randomization in the division of control and experimental groups. Instead, this method uses other strategies to control variables that may influence research outcomes. The researchers will select two groups of students through purposive sampling techniques. The Problem-Based Learning (PBL) model, supported by the Quizlet application, will teach the experimental group, while the control group will learn through conventional teaching methods.

Non-equivalent Control Group Design							
Class	Pretest	Treatment	Post-test				
Experiment	0	Х	0				
Control	0	-	0				

Table 1

(Isnawan, 2020)

Description:

- O = Students in  $5^{th}$  grade
- X = Treatment using the Problem-Based Learning Model based on the Quizlet application
- = The control class uses a learning model that teachers usually apply.

Sugiyono (2017) stated that a sample is a population component representing all its attributes. This research involves all 5th-grade students at SDN Sudimara 1 Tangerang, which consists of four classes with 104 students in total. Classes 5A and 5B, with 25 students each, were selected as the experimental and control groups using the purposive sampling method. Since creating new classes was not feasible, the researchers used the existing classes as the research sample.

The researchers collected data through various methods. They conducted pretests and post-tests to measure students' global diversity character. The pretest aimed to assess the student's initial abilities, while the post-test evaluated the effect of the treatment on character value changes. The pretest and post-test results will be analyzed using the SPSS application for statistical analysis.

The performance benchmarks, or success indicators, include significant differences in pretest and post-test scores and changes in student interaction and activity observed during the learning process. The researchers will measure success by tracking improvements in students' global diversity character scores and observing positive changes in student behavior during learning.

#### **C. Results and Discussion**

In this research, the researchers used two classes at SDN Sudimara 1 Tangerang to observe how implementing the Problem-Based Learning (PBL) model supported by Quizlet affects students' understanding of cultural diversity in a global context within the Social and Natural Sciences (IPAS) subject. Class 5A was the experimental group that applied the PBL model and Quizlet application, and Class 5B was the experimental group using PBL and Quizlet. The research has occurred over three sessions.

Relevant educational theories support this research's problem-based learning (PBL) model. Kunandar (in Setiawan & Dewi, 2024) states that PBL is an educational approach that places students in real-life situations. This method uses problems as the central focus of teaching.

In the problem-based learning (PBL) model, the teacher's role is to encourage, assist, and instruct students. The PBL model has several advantages, such as the following: (1) Students must actively participate in the problem-solving process and develop their higher-order thinking skills. (2) Learning becomes more meaningful because it is connected to students' existing schemas, making it more engaging. (3) Students directly benefit from learning because the problems they solve are relevant to real life, which can increase their motivation to learn and improve. (4) The PBL approach teaches students to be more independent, appreciate others' perspectives, and encourage their classmates to adopt healthy social attitudes. (5) The PBL model fosters student interaction and creates a good group learning environment. PBL can also encourage student creativity, individually and in groups, enhancing learning outcomes (Mardani et al., 2021).

In the context of the curriculum, the 5th grade Social Studies and Natural Sciences (IPAS) textbook of the Independent Curriculum covers material from both Science and Social Studies, with eight chapters designed to provide comprehensive understanding. This research focuses on Social Studies, specifically Chapter 7, titled "My Proud Region." This chapter studies local cultural heritage and encourages students to identify and address specific issues, such as miscommunication among students from different cultures or negative stereotypes in school. Therefore, the goal of this lesson is to help students contribute to creating a more inclusive school environment that values differences while enhancing their understanding of diversity and promoting integration and tolerance in the school environment.

According to Wahidmurni (Sari & Rosidah, 2023), Social Studies (IPS) is a subject that integrates various fields of social sciences for educational purposes in schools. Social Studies covers various aspects of human life. At the elementary level, Social Studies education aims to enhance students' intellectual abilities while

improving their skills and responsibilities as members of society. Hasan (in Rahayu et al., 2019) adds that Social Studies education also aims to strengthen students' sense of nationalism. Thus, the researchers expect that the PBL approach applied in this research will facilitate achieving these goals through more interactive and relevant learning.

Comparison rests between Experimental Class and Control Class						
	Prete	st	Post-test			
Statistics	Experiment	Control	Experiment	Control		
	Class	Class	Class	Class		
Sample (N)	25	25	25	25		
Highest Score	86	76	100	86		
Lowest Score	48	33	57	52		
Mean	66,04	58,44	84,48	73,08		
Range	38	43	43	34		

 Table 2

 Comparison Tests Between Experimental Class and Control Class

Table 2 shows the level of difference between the experimental and control groups. Table 1.2 contrasts the pre-test and post-test results for the experimental and control groups. The mean post-test score for the experimental group was 84.48, while the control group scored 73.08. It indicates that the mean post-test score for the experimental class was 11.4 points higher than that of the control group. Between the pre-test and post-test, the mean score of the experimental class dramatically increased from 66.04 to 84.48.



Figure 1 Comparison Graph of Mean Scores

The data also show an increase in the mean scores of the experimental class before and after the treatment. Before applying the Problem-Based Learning (PBL)

model using the Quizlet application, the mean score of the experimental class was 66.04. After implementation, the mean score rose to 84.48. The lowest score increased from 48 to 57, and the highest rose from 86 to 100.

Conversely, although not to the same extent as the experimental group, the control class, which used the lecture teaching technique, also experienced an increase in scores. The mean score of the control class was 58.44 before the intervention, rising to 73.08 after the treatment. The distribution of scores in the control class also showed improvement, with the highest score rising from 76 to 86 and the lowest score from 33 to 52. It concluded that the PBL model based on the Quizlet application enhanced student success and broadened the range of scores they could achieve more effectively than the lecture-based learning approach.

	independent 1-rest							
Independent Samples Test								
Post-	Sig	t	Sig. (2- tailed)	df	Mean Difference	96% Confidence Interval of The Difference		
test						Lower	Upper	
	.865	4.142	<,001	48	11.400	5.866	16.934	
		4.142	<,001	47.967	11.400	5.865	16.935	

Table 3 Independent T-Test

The Independent T-Test revealed a significant difference in post-test results between the experimental and control groups. The significance value of 0.001 was below the 0.05 significance threshold. It demonstrates how PBL with the Quizlet application can help students understand cultural diversity in the classroom.

These findings align with previous research by Bilqis et al. (2016), which found that students using the PBL learning approach outperformed those learning through direct methods in terms of cognitive achievement. This result supports the study, further validating the effectiveness of the PBL model in enhancing learning objectives.

Additionally, research by Wahyuningrat et al. (2023) showed that the PBL approach, aided by the E-KOKAMI Flashcard Quizlet, significantly influenced students' interest in learning. Al Bahij et al. (2022) research confirmed similar findings, demonstrating how teachers can effectively and correctly utilize PBL-

based teaching resources in the classroom. Marini et al. (2023) also reinforced the efficacy of PBL in improving student learning outcomes, especially when considering cultural diversity, as studied at SDN Sudimara 1 Tangerang.

The findings of this research support the claim that the PBL method enhances students' understanding and performance across various subjects, such as mathematics and environmental education, as well as in the context of cultural diversity, which was the focus at SDN Sudimara 1 Tangerang.

#### **D.** Conclusion

The research findings indicate that using the Quizlet application alongside Problem-Based Learning (PBL) significantly enhances elementary students' understanding of diversity. The experimental group outperformed the control group in the average post-test scores, and the difference in post-test scores between the two groups was statistically significant. Additionally, the data revealed a statistically significant increase in the average post-test scores for the PBL group between the pre-implementation and post-implementation periods. These findings suggest that PBL combined with the Quizlet application can improve elementary students' understanding of cultural diversity.

When combined with the Quizlet application, problem-based learning (PBL) methodology has enhanced elementary school students' understanding of diversity. Using traditional teaching techniques, the control class achieved an average score of 73.08 on the final exam, while the experimental class achieved an average of 84.48. According to the data, this difference represents an 11.4-point increase compared to the control group. These results demonstrate that PBL with Quizlet can help students better understand cultural diversity in elementary school.

Implementing PBL using the Quizlet application significantly improved academic achievement and increased interactivity during the learning process, effectively motivated students, and deepened their understanding of the material. These results suggest that this approach is beneficial for enhancing understanding of cultural diversity in elementary school and a practical option for improving the overall quality of education. Therefore, integrating Quizlet-based PBL can be

recommended as an innovative learning strategy with broad potential for future application in education.

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