

Improving Student Literacy Using an Interactive Video-Assisted Problem-Based Learning Model with a Teaching at the Right Level Approach Regency

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ABSTRACT

This research aims to: (1). Determine the application of the Problem Based Learning model assisted by Interactive Video with the Teaching at the Right Level approach in the content of Pancasila Education Lessons in grade V of SD Negeri 3 Karangtengah, (2). Determine the improvement of students' literacy skills, and (3). Determine which aspects of literacy skills have improved the most after the application of the Problem Based Learning model assisted by Interactive Videos with the Teaching at the Right Level approach in grade V SD Negeri 3 Karangtengah. This research was carried out in 2 cycles, each cycle consisted of 2 meetings. Each meeting consists of 4 stages, namely planning, implementation, observation/observation, and reflection. The data analysis techniques used in this study are quantitative data analysis techniques using tests and qualitative data analysis techniques through observation. The results of the study Classroom actions with the application of the Problem Based Learning Model assisted by Interactive Videos using the Teaching at the Right Level Approach are proven to increase student literacy, where based on the test results show that the percentage of classical completion in the first cycle of 32% increased in the second cycle to 100%. Meanwhile, based on observations, the percentage of increase in student literacy in the first cycle was 37% to 70% in the second cycle. The literacy aspect that has the most significant improvement is the aspect of the ability to compose short stories with correct grammar, effective sentences and convey ideas, in the first cycle reached 28%, in the second cycle it increased to 67%.

Keywords: Literasi, Problem Based Learning, Video Interaktif, Teaching at the Right Level

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INTRODUCTION

Education plays a vital role in enriching national intellectual life and preparing generations capable of facing global challenges. One of the key indicators of educational success is student literacy, which refers to students' ability to utilize their potential and skills to process and understand information during reading and writing activities (Oktariani & Ekadiansyah, 2020). According to Law No. 3 of 2017 concerning the Book System, literacy is the capacity to interpret information critically, enabling individuals to access knowledge and technology to improve their quality of life. Thus, literacy serves as a foundational medium for students to recognize, comprehend, and apply the knowledge acquired in formal schooling.

However, empirical data indicate that the literacy levels of Indonesian students remain concerning. Based on the 2022 Programme for International Student Assessment (PISA) results, Indonesia ranked 69th out of 81 countries, experiencing a drop in reading literacy scores to 347 from 397 in 2018. Furthermore, the 2022 Education Report Card (*Rapor Pendidikan*) published by the Ministry of Education, Culture, Research, and Technology revealed that only 61.53% of primary school students achieved the minimum literacy threshold. This condition highlights a

significant challenge for educators in improving educational quality and fostering critical thinking skills from elementary school levels.

The low level of student literacy is influenced by several factors, notably the predominance of conventional, teacher-centered instructional models that fail to engage students actively. Classroom observations in the fifth grade at SD Negeri 3 Karangtengah revealed that learning activities were one-way, limiting opportunities for critical thinking. Additionally, addressing diverse student readiness in a single classroom remains a challenge; low-achieving students often lag behind, while higher-achieving students lack sufficient cognitive challenge. In Pancasila Education classes, learning assessments rarely incorporated literacy-oriented tasks requiring students to analyze, apply, and reflect on reading passages through written responses. Consequently, during a preliminary assessment involving word problems, only 3 out of 34 students successfully met the Minimum Learning Mastery Criterion (*Kriteria Ketercapaian Tujuan Pembelajaran / KKTP*).

To address these empirical gaps, an innovative pedagogical strategy combining Problem-Based Learning (PBL), interactive video media, and the Teaching at the Right Level (TaRL) approach was implemented. The integration of PBL fosters critical problem-solving skills, interactive videos enhance engagement and visualization, and the TaRL approach ensures learning experiences are tailored to students' actual competency levels. Therefore, this study aims to examine the implementation of the interactive video-assisted PBL model integrated with TaRL in Pancasila Education, evaluate its effectiveness in improving fifth-grade students' literacy skills, and identify which specific literacy dimensions exhibit the most significant growth following the intervention.

METHOD

This study employed Classroom Action Research (CAR) conducted at SD Negeri 3 Karangtengah, Banyumas Regency. The research subjects were 34 fifth-grade elementary students enrolled in the Pancasila Education course. The implementation followed a two-cycle action research design, with each cycle consisting of two meetings. Each cycle comprised four sequential phases: planning, acting, observing, and reflecting.

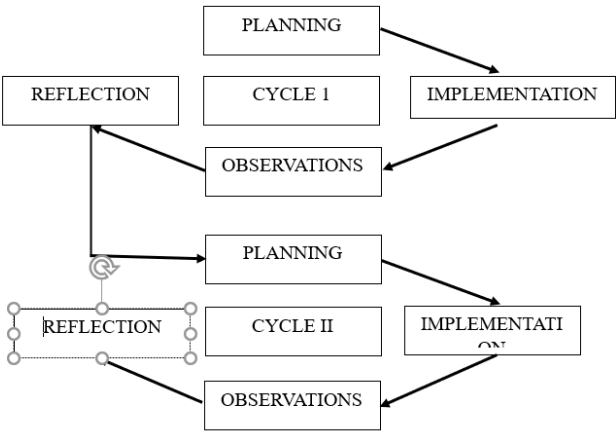


Figure 1. Frame of mind

Data were gathered using both quantitative and qualitative techniques. Quantitative data were obtained through written test instruments consisting of three essay/story problems designed to assess students' literacy skills, measured before and after the intervention (pre-test and post-test). Qualitative data were collected using structured observation sheets to monitor student engagement and literacy progression during the interactive video-assisted Problem-Based Learning (PBL) sessions integrated with the Teaching at the Right Level (TaRL) approach.

Data analysis involved descriptive statistics for quantitative scores and qualitative narrative analysis. Quantitative mastery was calculated based on individual score averages and classical

learning completion percentage against the Minimum Learning Mastery Criterion (*Kriteria Ketercapaian Tujuan Pembelajaran / KKTP*) threshold of 75. The performance indicator for research success was set at a minimum classical mastery rate of 80% among students. Qualitative observational data were analyzed to evaluate learning process improvements, targeting a average student participation and literacy score exceeding 61%.

FINDINGS AND DISCUSSION

Findings

The classroom action research conducted in two cycles revealed significant improvements in students' literacy skills following the implementation of the Problem-Based Learning (PBL) model assisted by interactive videos and integrated with the Teaching at the Right Level (TaRL) approach.

The quantitative evaluation of student learning mastery demonstrated a notable progression from Cycle I to Cycle II. As presented in Table 1, only 32% of students achieved the Minimum Learning Mastery Criterion (*KKTP*) in Cycle I, primarily due to unfamiliarity with problem-oriented tasks and varying baseline reading capabilities. However, targeted remediation and group restructuring in Cycle II led to a 100% classical mastery achievement, with the lowest score rising from 55 to 78.

Table 1. Comparison of Student Evaluation Results Between Cycle I and Cycle II

Category / Metric	Cycle I	Cycle II	Improvement
Highest Score	88	95	+7
Lowest Score	55	78	+23
Class Average	73.2	85.6	+12.4
Classical Mastery (%)	32%	100%	+68%

In addition to test evaluation, observational assessments measured five distinct literacy aspects during instruction. As summarized in Table 2, the overall average student literacy percentage increased from 37% in Cycle I to 70% in Cycle II.

Table 2. Analysis of Student Literacy Observational Aspects

No	Observed Literacy Aspect	Cycle I (%)	Cycle II (%)	Gain (%)
1	Explaining and answering questions in their own words	33%	62%	+29%
2	Comprehending reading content and drawing conclusions	34%	63%	+29%
3	Analyzing texts to solve given problems	34%	63%	+29%
4	Extracting information from interactive videos for problem-solving	51%	72%	+21%
5	Composing short stories with correct grammar, effective sentences, and clear ideas	28%	67%	+39%
Average Literacy Score		37%	70%	+33%

Aspect IV (extracting information from interactive videos) yielded the highest final percentage at 72%. Meanwhile, Aspect V (composing short stories with proper grammar, effective sentences, and clear ideas) experienced the most substantial gain, escalating from 28% in Cycle I to 67% in Cycle II (+39% gain). This indicates that the combined interventions successfully fostered higher-order expressive writing skills alongside basic comprehension.

Discussion

The empirical results confirm that integrating interactive video-assisted PBL with the TaRL approach effectively addresses persistent literacy challenges in primary education. In Cycle I, students struggled to formulate written responses and extract underlying meanings from narrative prompts. This outcome aligns with prior research indicating that conventional, teacher-centered instruction often hinders critical literacy development and leaves lower-performing students disengaged.

The introduction of interactive video media provided multi-sensory scaffolding that facilitated visual and auditory information processing. By contextualizing abstract Pancasila Education concepts through engaging video scenarios, students demonstrated improved problem identification and analysis (Aspect IV). The visual cues served as a cognitive bridge, enabling students to organize their thoughts before translating them into written formats.

Furthermore, applying the TaRL approach played a decisive role in eliminating learning gaps. Grouping students according to their initial reading and writing competency enabled tailored learning assistance. High-achieving students engaged in deeper analytical tasks, while low-achieving students received targeted instructional support. This instructional differentiation accounts for the dramatic surge in Aspect V (+39%), as students gained confidence in constructing short stories using structured grammar and clear logical flows once tasks aligned with their developmental readiness.

These findings support the broader literature emphasizing that pedagogical frameworks combining active problem solving, multimodal media, and differentiated instruction significantly enhance foundational literacy. By satisfying both quantitative (100% classical mastery) and qualitative (>61% literacy participation) indicators, this intervention offers a sustainable model for elementary reading and writing instruction.

CONCLUSION

Implementing the Problem-Based Learning (PBL) model assisted by interactive video media and integrated with the Teaching at the Right Level (TaRL) approach effectively enhances fifth-grade students' literacy skills in Pancasila Education. The integration of problem-oriented learning tasks and multi-sensory media successfully bridges the gap between passive reading comprehension and active analytical reasoning. Furthermore, differentiating instruction according to students' actual learning readiness through the TaRL approach ensures equitable progress, resulting in complete classical learning mastery and substantial qualitative participation. The most pronounced impact was observed in students' ability to construct short, grammatically structured stories with clear ideas, demonstrating that tailored, technology-assisted instruction fosters expressive writing competence alongside basic reading comprehension.

These findings confirm the pedagogical value of combining interactive digital media with differentiated active learning models in primary education. Future research may explore the long-term retention of these literacy gains and investigate the scalability of this integrated framework across other foundational subjects and broader elementary grade levels.

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