



Project-Based Learning Assisted by Digital Interactive Flipbook to Improve Students Interest in Reading Folklore and Connotative Meaning Analysis Skills

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Abstract: Reading literacy development requires instructional strategies that support students in understanding texts and interpreting implicit meanings. However, elementary students often experience difficulties in analyzing connotative meanings and show limited interest in reading literary texts. This study aimed to improve students' interest in reading folklore and their connotative meaning analysis skills through Project-Based Learning assisted by Digital Interactive Flipbook. This study employed Classroom Action Research using the Kemmis and McTaggart model consisting of planning, action, observation, and reflection stages. The participants were 27 sixth-grade students at SDN Mojojoto 1. Data were collected through connotative meaning analysis tests, reading interest questionnaires, observation sheets, and documentation. Data were analyzed using descriptive quantitative and qualitative approaches. The results showed that students' connotative meaning analysis skills improved from 71.74 in the pre-cycle stage to 77.74 in Cycle I and 83.37 in Cycle II, with learning mastery increasing from 51.85% to 92.59%. Students' reading interest also improved from 40.74 to 51.63. The findings indicate that Project-Based Learning assisted by Digital Interactive Flipbook supports literacy learning and students' interpretative reading skills.

Keywords: Project-Based Learning, Digital Interactive Flipbook, Reading Interest, Folklore, Connotative Meaning Analysis.

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Introduction

Reading literacy has become one of the fundamental competencies required in contemporary education. Literacy development is no longer limited to the ability to recognize written symbols or obtain explicit information from texts, rather it also involves the ability to understand, evaluate, interpret, and reflect on information gained through reading activities. According to the Organization for Economic Cooperation and Development (OECD) (2021), reading literacy is not simply about being able to read words. It also involves understanding what is written, using the information, judging its meaning, and thinking about it

carefully. These skills help people reach their personal goals and take an active role in society. Reading literacy has become an important skill for students today. It is not enough for them to simply understand the information directly stated in a text. They also need to be able to interpret what they read and decide whether the information makes sense or is reliable (OECD, 2021). Reading activities involve complex processes of understanding meaning, interpreting information, and constructing knowledge (Tarigan, 2021). Therefore, elementary education should provide learning experiences that encourage students to develop higher-

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level comprehension skills, particularly the ability to interpret meanings that are not explicitly expressed in texts.

In Indonesian language learning, reading comprehension involves not only identifying factual information but also constructing interpretations based on textual contexts. One essential component of interpretative reading competence is the ability to analyze connotative meanings. Connotative meaning refers to meanings that extend beyond the literal definitions of words and are influenced by contextual, cultural, and emotional factors. Students who are able to analyze connotative meanings can better understand implied messages, symbolic expressions, and values embedded within texts. Literary texts require students to understand implicit meanings and interpret language expressions within specific contexts. Previous studies have emphasized that semantic learning supports students' ability to understand meaning construction in texts (Kamila et al., 2025). However, reading instruction at the elementary level often emphasize literal comprehension, which may cause students to encounter difficulties in interpreting implicit meanings and figurative expressions. For this reason, literacy learning should give students plenty of chances to explore texts, understand different meanings, and build their interpretation skills through enjoyable and meaningful reading activities.

Folklore is one type of literary material that can support the development of students interpretative literacy. Folklore provides cultural and linguistic contexts that support students' literacy development because it contains values, messages, and symbolic meanings that require interpretation (Juita et al., 2025). Literary reading activities encourage students to connect textual information with their personal experiences and cultural backgrounds, thereby promoting deeper comprehension. Tarigan (2021) explains that reading is an active process involving comprehension, interpretation, and critical responses toward written information. Therefore, folklore can serve as an appropriate medium for developing students connotative meaning analysis skills because these texts often contain symbolic expressions and implicit messages.

However, the implementation of literacy learning in elementary schools still faces several challenges. Based on preliminary observations conducted in Grade VI at SDN Mojoroto 1, students experienced difficulties in analyzing connotative meanings in folklore texts. Students tended to interpret words and sentences based only on their literal meanings and required teacher assistance to identify implied messages. In addition, students' interest in reading activities remained suboptimal because

learning resources were still dominated by conventional printed materials. These conditions indicate the need for innovative instructional strategies that can enhance students' engagement in reading while developing their ability to interpret literary texts.

Project-Based Learning (PjBL) is one way to make literacy learning more active and engaging. Instead of only listening to explanations, students take part in activities where they explore a topic, work with others, solve problems, and create something based on what they have learned. This approach puts students at the center of the learning process and gives them more opportunities to learn through real tasks. Through project activities, students actively construct knowledge by exploring information, exchanging ideas, analyzing problems, and communicating their understanding. Kokotsaki et al. (2016) explained that PjBL allows students to learn in a more meaningful way by exploring questions, sharing ideas, and working together with others. Furthermore, a meta-analysis conducted by Chen and Yang (2019) demonstrated that PjBL has positive effects on students' academic achievement because it encourages active participation and promotes deeper learning processes.

Using digital learning tools can make Project-Based Learning more effective and engaging for students. Digital Interactive Flipbook provides an interactive learning environment by combining textual information, visual representations, and digital navigation features. According to Mayer (2021), multimedia learning can enhance understanding when information is presented through appropriately designed verbal and visual representations. Digital learning environments can support students' engagement by providing interactive and meaningful learning experiences through the integration of digital resources in classroom activities (Juita et al., 2025). Therefore, Digital Interactive Flipbook has the potential to serve as a supporting medium in literacy learning, particularly in helping students explore and interpret reading materials.

Although previous studies have demonstrated the effectiveness of Project-Based Learning and digital learning media, several research gaps remain. Previous studies on PjBL have primarily focused on academic achievement, collaboration, creativity, and higher-order thinking skills (Chen & Yang, 2019). Meanwhile, previous studies on digital learning environments have primarily examined their role in increasing student engagement and supporting learning experiences, while investigations into their application for developing specific literacy interpretation skills remain limited (Juita et al., 2025). Furthermore, digital media in learning has often been examined separately from instructional models. Previous studies have shown that

digital flipbooks can support literacy learning by providing interactive reading experiences that combine textual and visual representations. Juita et al. (2025) found that the use of digital flipbooks in elementary literature learning can create engaging learning environments and support students' understanding of cultural values. However, research integrating digital flipbooks with Project-Based Learning to improve students' ability to analyze connotative meanings remains limited. Therefore, research integrating Project-Based Learning assisted by Digital Interactive Flipbook to improve students' interest in reading folklore and their ability to analyze connotative meanings remains limited. In Indonesian language learning, Project-Based Learning has also been applied to encourage students' active participation and improve language skills through meaningful learning activities. Asyifa et al. (2026) reported that the implementation of Project-Based Learning in Indonesian language learning helped improve elementary students' learning outcomes through collaborative and project-based activities. These findings strengthen the potential of Project-Based Learning as an approach to support literacy development.

This study addresses the identified research gap by integrating Project-Based Learning with Digital Interactive Flipbook in folklore-based literacy learning. The novelty of this research lies in combining an active learning model with interactive digital media to develop students' interpretative literacy skills while improving their reading interest. Unlike previous studies that examined Project-Based Learning or digital media separately, this study integrates Project-Based Learning with Digital Interactive Flipbook to improve both reading interest and connotative meaning analysis skills in elementary Indonesian language learning. The increase in students' reading interest is consistent with previous studies showing that interactive digital media can create engaging literacy environments for elementary students (Juita et al., 2025).

Classroom Action Research (CAR) using the Kemmis and McTaggart model has been widely implemented in educational research to improve teaching practices and student learning outcomes through systematic cycles of planning, action, observation, and reflection (Kemmis & McTaggart, 1988). This approach enables teachers and researchers to identify classroom problems, implement instructional improvements, and evaluate learning processes through continuous reflection. Previous studies have confirmed the effectiveness of Classroom Action Research in addressing educational problems through various instructional innovations.

Tanjung and Ridho (2024) applied Classroom Action Research using the sociodrama method to

improve students' learning motivation and found that reflective cycles contributed to improvements in classroom learning processes. Similarly, Lestari et al. (2024) implemented Classroom Action Research using Wordwall media to improve elementary students' IPAS learning outcomes through systematic cycles of action and reflection. Furthermore, Rabgay (2024) emphasized that the Kemmis and McTaggart action research model supports teachers in examining classroom practices and developing reflective teaching strategies. These findings indicate that Classroom Action Research is an appropriate approach for investigating classroom problems and developing effective instructional strategies in elementary education. Based on this background, this study aims to improve students' interest in reading folklore and connotative meaning analysis skills through Project-Based Learning assisted by Digital Interactive Flipbook among sixth-grade students at SDN Mojoroto 1.

Method

This study employed Classroom Action Research (CAR) to improve students' interest in reading folklore and their ability to analyze connotative meanings through Project-Based Learning assisted by Digital Interactive Flipbook. Classroom Action Research was selected because it enables teachers and researchers to systematically identify learning problems, implement instructional improvements, observe the effects of actions, and conduct reflections for further improvement. This study adopted the action research model proposed by Kemmis and McTaggart, which consists of four interconnected stages: planning, action, observation, and reflection. The research was conducted in two cycles, with each cycle involving the implementation of Project-Based Learning assisted by Digital Interactive Flipbook in Indonesian language learning activities.

The research was conducted at SDN Mojoroto 1 during Indonesian language learning activities. The participants were 27 sixth-grade students consisting of students with different levels of initial literacy ability. The research focused on folklore reading activities because folklore texts contain various linguistic expressions, symbolic meanings, and moral messages that require students to develop interpretative reading skills. The learning activities were implemented through Project-Based Learning assisted by Digital Interactive Flipbook. Students were involved in reading folklore texts, identifying connotative expressions, analyzing meanings based on context, discussing interpretations, and presenting their project results.

The research procedure followed the Classroom Action Research cycle developed by Kemmis and McTaggart. Before implementing the action, the

researcher conducted a preliminary observation and pre-cycle assessment to identify students' initial conditions regarding reading interest and connotative meaning analysis skills. The research consisted of two cycles.

Cycle I

The planning stage involved preparing lesson plans, Digital Interactive Flipbook materials, student worksheets, assessment instruments, observation sheets, and reading interest questionnaires. During the action stage, students participated in Project-Based Learning activities by exploring folklore texts through Digital Interactive Flipbook. Students worked collaboratively to identify connotative expressions, analyze meanings, and produce project outcomes. During the observation stage, the researcher observed teacher activities, student participation, and learning processes. At the reflection stage, the researcher analyzed the results and identified several aspects requiring improvement, particularly students' ability to interpret connotative meanings and their participation during group activities.

Cycle II

The second cycle was conducted based on the reflection results from Cycle I. Improvements were made by providing clearer guidance in analyzing connotative expressions, strengthening group collaboration, and optimizing the use of Digital Interactive Flipbook. Students continued project activities, presented their analysis results, and completed the evaluation instruments. The implementation of Cycle II aimed to achieve the research success indicators, namely increased students' reading interest and improved connotative meaning analysis skills.

Data were collected using four instruments: connotative meaning analysis tests, reading interest questionnaires, observation sheets, and documentation. The first instrument was a connotative meaning analysis test developed based on folklore texts. The test measured students' abilities in identifying connotative words or expressions, distinguishing denotative and connotative meanings, explaining meanings based on textual contexts, and connecting meanings with moral messages contained in stories. The second instrument was a reading interest questionnaire. The questionnaire was designed using a Likert scale to measure students' interest in reading folklore. The indicators included students' attention toward reading activities, enjoyment of reading folklore texts, willingness to read independently, participation during reading activities, and responses toward digital learning media. The third instrument was an observation sheet used to record teacher and student activities during learning implementation. Teacher observation focused on the

implementation of Project-Based Learning stages and the use of Digital Interactive Flipbook, while student observation focused on reading activities, collaboration, discussion participation, and presentation activities. The fourth instrument was documentation, including photographs of learning activities, student worksheets, and project results produced during the learning process.

The data were looked at in two ways, that is quantitatively and qualitatively. The quantitative part focused on the students' test results and their responses to the reading interest questionnaire. To see how well the students performed, their average scores and the percentage of students who reached the required level were calculated. The average score was calculated using the following formula:

$$X = \frac{\sum X}{N}$$

Where:

X = average score

$\sum X$ = total students scores

N = number of students

Learning mastery was calculated using the formula:

$$P = \frac{\text{Number of students achieving mastery}}{\text{Total number of students}} \times 100\%$$

Students were considered to have reached the expected level when their learning score met the KKTP standard of 75. The information from observation sheets and documentation was then reviewed in a simple descriptive way by selecting the important points, organizing the information, and drawing conclusions. Both types of data were used together to show how students' learning developed and how Project-Based Learning supported by a Digital Interactive Flipbook worked in literacy activities.

Result and Discussion

3.1 Implementation of Project-Based Learning Assisted by Digital Interactive Flipbook

The implementation of Project-Based Learning assisted by Digital Interactive Flipbook was conducted through two classroom action research cycles. Each cycle consisted of planning, action, observation, and reflection stages. The learning activities were designed to encourage students to actively engage with folklore texts, identify connotative expressions, analyze meanings based on contexts, and communicate their understanding through project activities. During the first cycle, students were introduced to folklore texts presented through Digital Interactive Flipbook. Students worked collaboratively in groups to identify words or expressions containing connotative meanings. The use of digital media provided a different learning

experience because students were able to access reading materials through interactive presentations containing text and visual elements.

However, during Cycle I, several students still required teacher guidance, particularly in distinguishing between literal and contextual meanings. During group discussions, some students were still not very active in sharing ideas or taking part in the activities. After reviewing what happened in Cycle I, several changes were made to improve the learning process in Cycle II. The teacher provided clearer instructions regarding the identification and interpretation of connotative expressions, strengthened group collaboration, and optimized the use of Digital Interactive Flipbook features. During Cycle II, students demonstrated better participation in reading activities, discussions, and project presentations.

The improvement in learning implementation indicates that Project-Based Learning assisted by Digital Interactive Flipbook created a more active literacy learning environment. Students were not only involved in reading activities but also participated in constructing meaning through exploration, discussion, and presentation. This finding supports the view that Project-Based Learning encourages students to become active participants in constructing knowledge through meaningful experiences (Kokotsaki et al., 2016).

3.2 Improvement of Students' Connotative Meaning Analysis Skills

The students' connotative meaning analysis skills were measured through a written assessment based on folklore texts. The assessment focused on four indicators: (1) identifying connotative words or expressions, (2) distinguishing denotative and connotative meanings, (3) explaining meanings based on textual contexts, and (4) connecting interpretations with moral messages contained in folklore. The improvement of students' achievement across cycles is presented in Table 1.

Table 1. Improvement of Students' Connotative Meaning Analysis Skills

Stage	Mean Score	Students Achieving KKTP	Percentage
Pre-Cycle	71.74	14	51.85%
Cycle I	77.74	20	74.07%
Cycle II	83.37	25	92.59%

The results indicate a continuous improvement in students' ability to analyze connotative meanings after the implementation of Project-Based Learning assisted by Digital Interactive Flipbook. The average score increased from 71.74 in the pre-cycle stage to 77.74 in Cycle I and reached 83.37 in Cycle II. The percentage of students achieving the learning criterion also showed significant improvement. Initially, only 51.85% of students achieved the minimum mastery criterion.

After Cycle I, the percentage increased to 74.07%, and after Cycle II, it reached 92.59%. This indicates that most students were able to achieve the expected competency after participating in project-based literacy activities.

3.3 Improvement of Students' Interest in Reading Folklore

Students' interest in reading folklore was measured using a questionnaire consisting of five indicators: interest in folklore texts, attention during reading activities, willingness to read independently, involvement in reading activities, and responses toward Digital Interactive Flipbook. The improvement of students' reading interest is presented in Table 2.

Table 2. Improvement of Students' Interest in Reading Folklore

Stage	Mean Score	Category
Pre-Cycle	40.74	Moderate
Cycle I	45.93	High
Cycle II	51.63	Very High

The results demonstrate that students' reading interest increased consistently throughout the research cycles. The average score increased from 40.74 in the pre-cycle stage to 45.93 in Cycle I and reached 51.63 in Cycle II. The improvement indicates that the implementation of Digital Interactive Flipbook provided a more attractive reading environment for students. Compared with conventional reading activities, students were more interested in accessing folklore texts through digital media because the material was presented with visual elements and interactive features. The increase in reading interest was also supported by project-based activities. Students were not only asked to read texts individually but also participated in discussions, interpretation activities, and presentations. These activities encouraged students to become actively involved in the reading process.

3.4 Graph Showing the Improvement of the Two Research Variables

Table 3. Improvement of Students' Learning Outcomes Data

Stage	Connotative Meaning Analysis	Reading Interest
Pre-Cycle	71.74	40.74
Cycle I	77.74	45.93
Cycle II	83.37	51.63

Figure 1 illustrates that both students' connotative meaning analysis skills and reading interest increased progressively from the pre-cycle stage to Cycle II. The consistent improvement demonstrates that the integration of Project-Based Learning and Digital Interactive Flipbook contributed positively to students' literacy development.

3.5 Discussion: Relationship between PjBL, Digital Interactive Flipbook, and Literacy Development

The findings of this study demonstrate that Project-Based Learning assisted by Digital Interactive Flipbook improved both students' connotative meaning analysis skills and interest in reading folklore. The improvement may have happened because the learning activities gave students more chances to learn by exploring ideas, working with their classmates, and thinking about what they had learned. In line with constructivist learning theory, students understand new ideas better when they gain knowledge from meaningful experiences instead of simply receiving information from the teacher. In this study, students constructed interpretations of folklore texts by identifying connotative expressions, discussing meanings with peers, and presenting their findings. This process supported deeper comprehension of textual meanings.

The effectiveness of PjBL found in this study is consistent with Kokotsaki et al. (2016), who explained that project-based learning promotes student engagement through inquiry and collaboration. Furthermore, Chen and Yang (2019) reported that PjBL contributes positively to learning achievement because students are actively involved in meaningful learning processes. The role of Digital Interactive Flipbook also contributed to the improvement of literacy skills. The combination of text and visual representations helped students understand folklore contexts and interpret symbolic meanings. This finding supports Mayer's (2021) multimedia learning theory, which explains that students can achieve better understanding when information is presented through integrated verbal and visual representations.

Therefore, the combination of Project-Based Learning and Digital Interactive Flipbook provided complementary functions. PjBL facilitated active knowledge construction, while Digital Interactive Flipbook created an engaging literacy environment. The integration of both approaches supported students in developing interpretative reading skills and increasing their interest in reading folklore.

Conclusion

This study concludes that the implementation of Project-Based Learning assisted by Digital Interactive Flipbook successfully improved students' interest in reading folklore and their connotative meaning analysis skills. The improvement was demonstrated through the increasing achievement of students' learning outcomes and reading interest across the research cycles. The implementation of Project-Based Learning provided students with opportunities to actively engage in literacy activities through

exploration, collaboration, discussion, and presentation. Meanwhile, Digital Interactive Flipbook supported the learning process by providing an interactive reading environment that helped students understand folklore texts more effectively.

The findings indicate that the integration of Project-Based Learning and Digital Interactive Flipbook can be an alternative instructional strategy for developing elementary students' interpretative literacy skills. This approach not only improves students' ability to analyze implicit meanings in texts but also encourages greater involvement and interest in reading activities. Therefore, Project-Based Learning assisted by Digital Interactive Flipbook is recommended as an innovative approach for Indonesian language learning, particularly in teaching literary texts that require students to interpret meanings, understand cultural values, and develop deeper reading comprehension.

The findings of this study provide several implications for educational practice. For elementary school teachers, the integration of Project-Based Learning and Digital Interactive Flipbook can be considered as an alternative strategy to create meaningful literacy learning. Teachers can utilize interactive digital media to support students' reading engagement while designing project activities that encourage critical thinking and collaboration. For students, this learning approach provides opportunities to become active participants in the learning process. Students are encouraged not only to read texts but also to analyze language use, construct interpretations, and communicate their understanding through collaborative activities. For schools, the findings highlight the importance of supporting digital-based literacy learning by providing access to appropriate learning resources and encouraging teachers to develop innovative instructional practices.

There are some limitations to keep in mind. First, the study involved only a small group of students from one elementary school, so the results mainly reflect the situation in that particular school and should not be applied to other schools without further consideration. Second, the study focused on folklore reading activities and connotative meaning analysis; therefore, further research may explore the implementation of Project-Based Learning assisted by Digital Interactive Flipbook in other literacy competencies or different learning materials. Future studies are also recommended to examine the effectiveness of this approach using different research designs, larger samples, and longer implementation periods. In addition, further research may investigate students' digital literacy development and other factors that influence literacy achievement.

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