

Development of a Project-Based Learning Model Integrated with Local Wisdom to Improve Students' Writing Literacy through Folk Tale Writing at Air Balui State Elementary School

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ABSTRACT

Writing literacy is an essential competency in elementary education because it enables students to express ideas coherently, think critically, and communicate effectively. However, elementary students often experience difficulties in developing creative writing skills, particularly in composing folk tales, due to teacher-centered instruction and limited integration of local cultural contexts. Although Project-Based Learning (PjBL) has been widely recognized for promoting active learning, few studies have developed a structured PjBL model that systematically integrates local wisdom to enhance writing literacy. This study aimed to develop and evaluate a Project-Based Learning model integrated with Musi Banyuasin local wisdom to improve elementary students' writing literacy through folk tale writing. This study employed a Research and Development (R&D) approach using the ADDIE model, comprising the Analysis, Design, Development, Implementation, and Evaluation stages. The developed model was validated by media, language, and instructional design experts. Practicality was evaluated through a small-group trial involving eight fourth-grade students, while effectiveness was examined through a field trial with 15 students using a one-group pre-test-post-test design. Data were collected using validation sheets, practicality questionnaires, interviews, and writing performance tests, and analyzed using descriptive statistics and N-Gain analysis. The developed PjBL model demonstrated high validity based on expert evaluations (90.75–95.33%), excellent practicality with an average score of 91.55%, and high effectiveness. Students' mean writing score increased from 54.00 in the pre-test to 90.93 in the post-test, yielding an N-Gain score of 0.82, which was categorized as high. The findings indicate that integrating Project-Based Learning with local wisdom provides meaningful and culturally relevant learning experiences that enhance students' writing literacy. The developed model offers a practical framework for contextual writing instruction while contributing to the integration of local cultural values into elementary literacy education.

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1. INTRODUCTION

Education plays a crucial role in preparing young generations to face increasingly complex global challenges (Murtiningsih, Untari, 2024). In the 21st century, literacy competence has become a key indicator of educational quality because it enables individuals to access, understand, and use information critically and creatively (Sholeh et al., 2024). At the global level, literacy is no longer limited to the ability to read texts; it also includes the ability to express written ideas effectively. In this context, it is important to distinguish between reading literacy—the ability to comprehend, interpret, and evaluate written (Wismanto, 2022).—and writing literacy—the ability to express ideas, organize arguments, and communicate meaning through coherent written language (Ramadhan, 2023). Both competencies are fundamental, yet they require different instructional approaches.

In Indonesia, however, literacy achievement remains a significant concern. Results from international assessments such as PISA and national evaluations indicate that many students still struggle with understanding texts and expressing their ideas in written form (Dilla et al., 2024; Nisphi et al., 2023). At the elementary school level, reading literacy often receives greater emphasis, while writing literacy—particularly creative writing such as folk tales—has not been optimally developed (Yulia & Inayatur, 2025). Classroom practices also tend to be teacher-centered and rely heavily on printed textbooks, resulting in limited student engagement in meaningful writing activities (Dini et al., 2023). Consequently, students' motivation and participation in writing tasks remain relatively low (Darmuki & Surachmi, 2024).

Several studies have attempted to address literacy challenges through the implementation of Project-Based Learning (PBL). Research shows that PBL can enhance students' critical thinking skills and improve learning outcomes (Made & I, 2024). In addition, integrating local wisdom into learning has been found to strengthen cultural identity and make learning more contextual and meaningful (Putri, 2024). Previous studies also demonstrate that PBL based on local wisdom can positively affect students' learning outcomes (Sarumaha et al., 2024). However, most of these studies focused on general learning outcomes or critical thinking skills, and did not specifically examine the systematic integration of local wisdom into a structured PBL model aimed at improving writing literacy, particularly in folk tale writing at the elementary school level. Furthermore, limited research has evaluated the practicality and effectiveness of such a model supported by digital learning media. This indicates a clear research gap.

Preliminary observations and interviews conducted at Air Balui Public Elementary School revealed several problems. Learning activities were still predominantly teacher-centered, instructional media were limited, and students were less actively involved in writing activities. Teachers mainly used printed books and blackboards, and students reported that learning was less engaging. As a result, students' writing literacy skills—especially in developing ideas and composing structured folk tales—had not developed optimally. This situation highlights the need for an innovative, contextual, and technology-supported learning model that can actively engage students in meaningful writing experiences (S. Oktarina et al., 2023).

Based on these considerations, this study aims to develop a Project-Based Learning model integrated with the local wisdom of Musi Banyuasin to improve students' writing literacy in folk tale writing at Air Balui Public Elementary School. Specifically, this research seeks to answer the following questions: (1) How practical is the developed Project-Based Learning model when implemented in elementary school classrooms? and (2) How effective is the model in improving students' writing literacy skills in folk tale writing?

2. METHODS

This study employed a Research and Development (R&D) approach using the ADDIE development model proposed by Branch and Varank (2009), which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. The product developed in this study was a Project-Based Learning (PjBL) model integrated with Musi Banyuasin local wisdom to improve

students' writing literacy through folk tale writing activities. The developed model consisted of five components, namely syntax, social system, reaction principles, support system, and instructional as well as nurturant effects.

The implementation stage involved applying the developed PjBL model in classroom learning activities. The local wisdom integrated into the model was derived from Musi Banyuasin folk tales, which were used as learning resources and project materials to support students in developing writing literacy skills. The syntax of the developed PjBL model consisted of six stages: (1) determining local wisdom themes, (2) identifying problems and exploring ideas, (3) planning the writing project, (4) developing the writing project, (5) presenting project results, and (6) reflection and evaluation.

The small-group trial involved eight students. This number was selected based on Tessmer's formative evaluation procedure, which recommends involving six to ten participants during the small-group evaluation stage to identify practicality issues before wider implementation. Meanwhile, the field trial involved 15 fourth-grade students because the total number of students in Grade IV at SD Negeri Air Balui was 15; therefore, the entire population was included in the study.

The writing assessment instrument was validated by a content expert, a media expert, and an instructional design expert. Reliability testing was conducted prior to implementation and demonstrated acceptable reliability. Data were collected through validation sheets, practicality questionnaires, and writing tests. The collected data were analyzed using descriptive statistics and N-Gain analysis to determine the validity, practicality, and effectiveness of the developed PjBL model.

The syntax of the Project-Based Learning (PjBL) model integrated with local wisdom consists of six stages:

Table 1. The syntax of the Project-Based Learning (PjBL)

No	Stage	Learning Activities
1.	Determining Local Wisdom Themes	Students identify local cultural themes as sources of writing idea
2.	Identifying Problems and Exploring Ideas	Students discuss cultural values and story elements.
3.	Planning the Writing Project	Planning the Writing Project
4.	Developing the Writing Project	Students write and revise their folk tales.
5.	Presenting Project Results	Students present their work.
6.	Reflection and Evaluation	Teacher and students reflect on the learning process.



Figure 1. ADDIE Stages (Branch, 2009)

The implementation stage involved applying the developed Project-Based Learning (PjBL) model in real classroom activities to examine its practicality. This stage included a small-group trial followed by a field test to observe how effectively the model functioned in authentic teaching and learning situations.

The data collection instruments were clearly distinguished according to their purpose. The instruments included: (1) a practicality questionnaire developed based on a grid covering five aspects — syntax, principles of reaction, social system, support system, and instructional and accompanying impacts; (2) a writing performance test in the form of pre-test and post-test to measure students' ability to write simple folk tales with complete structure (characters, setting, conflict, resolution, and moral message); and (3) interview guidelines used to gather qualitative feedback regarding the strengths and weaknesses of the developed model. The practicality questionnaire used a four-point Likert scale (Very Good = 4, Good = 3, Fairly Good = 2, Not Good = 1).

Table 2. Practicality Questionnaire Grid

Aspect	Indicators	Question Number
Syntax	Project-Based Learning	1-13
	Local Wisdom	14-15
	Literacy	16-17
	Writing projects	18-20
Principles of Reaction	Teachers as facilitators in the learning process	21
	Teachers as motivators in the learning process	22
	Teachers as managers in the learning process	23
	Teachers as evaluators in the learning process	
Social System	Interaction between students and educators	25
	Atmosphere in the learning process	27
Support System	Teaching modules	32
	Teaching Materials	38
	Equipment and Supplies	43-45
Instructional and accompanying Impacts	Students' understanding of learning materials	46
	Formation of positive attitudes, character, and habits in learners	47

Source: Santi Oktarina (2023)

The practicality questionnaire data obtained will be analyzed using the *Likert* scale.

Table 3. Likert Scale Rating Levels

Category	Score
Very Good	4
Good	3
Fairly Good	2
Not Good	1

Source: Sugiyono, (2019)

The questionnaire results for the assessed aspects will produce data. Next, the average will be calculated using the formula;

$$\text{Response Score} = \frac{\text{Score Achievement}}{\text{Score Maximum}} \times 100$$

The results obtained from the average will be categorized into the criteria specified in the following table:

Table 4. Practicality Questionnaire Score Assessment Criteria

Range	Category
81-100	Very Practical
61-80	Practical
41-60	Fairly Practical
21-40	Less Practical

Source: Sugiyono; 2019

The data analysis techniques were conducted separately based on the type of data obtained. Quantitative data from the practicality questionnaire were analyzed using percentage calculations with the formula: $(\text{obtained score} / \text{maximum score}) \times 100\%$, and then categorized into practicality criteria (Very Practical, Practical, Fairly Practical, Less Practical). Pre-test and post-test results were analyzed to measure students' improvement after using the developed model. Qualitative data from interviews were analyzed descriptively to support and interpret the quantitative findings.

Table 5. Pre-test and Post-test Assessment Grid

No	Competencies measured	Question Indicators	Cognitive Level	Question Format
1.	Students are able to write simple folk tales with a complete structure	Write a folk tale (minimum 3 paragraphs that includes: characters, setting, conflict, resolution, moral messages)	C6 (Creating)	Description

The test instrument used was a descriptive test of writing folk tales, while the questionnaire instrument was designed to assess the practicality of learning media in the teaching and learning process. This questionnaire assessed five main aspects, namely syntax, reaction principles, social systems, support systems, and instructional and accompanying impacts. Non-test instruments in the form of interviews were used to explore the strengths and weaknesses of the developed learning model. Before use, all instruments were validated by three experts to ensure their suitability. The interview data were analyzed qualitatively, such as media display, accessibility, and material presentation. Meanwhile, the questionnaire and test results were analyzed quantitatively using a four-point Likert scale, namely very good (4), good (3), not so good (2), and not good (1).

a. Validity Test

Validity was evaluated through assessments conducted by three experts, namely, a media expert, a language expert, and learning design. The media expert validation sheet is used to assess the suitability of learning media developed through a validation questionnaire with indicators of material and display suitability. The aim is to determine the level of validity of the media in supporting the Project Based Learning (PjBL) model combined with local wisdom in order to improve the literacy of elementary school students. The media validation instrument grid is presented in Table 6.

Table 6. Media Expert Validation Instrument

Aspect	Indicators	Rating Scale			
		4	3	2	1
Image Quality	1. The image is of good quality and not blurry				
	2. The images used are able to attract the attention of students				
	3. The use of color in the images is not too striking				
	4. The background selection is appropriate for The learning theme and provides an attractive appearance				
	5. The layout of the material is structured in a way that makes it easy for students to understand the learning content.				
	6. The image design is in line with the learning material theme and is not boring.				
	7. The colors in the images do not obscure important details that need to be noted.				
	8. The font is easy to read, and the size is appropriate for the reader (not too small or too large).				
	9. The colors used are harmonious and not too striking.				
Appearance	10. The cover page is designed attractively.				
	11. The text is clearly legible in terms of size, font type, line spacing, and placement on the page.				
	12. Text, images, and other media elements are arranged proportionally and do not overlap				
	13. The background supports text readability				
Video and Audio	14. The videos used support the material and flow that are easy for students to understand.				
	15. The sound in the media (script, narration, dialogue, or background music) is clear.				

Source: Modified from Nur Hikmah (2021)

For the language expert instrument, assessments are obtained from validators, which concern language aspects in the material and language aspect assessments in the media as follows:

Table 7. Language Expert Validation Instrument

Aspect	Indicators	Score			
		4	3	2	1
Spelling	1. The spelling used in the learning materials complies with the General Guidelines for Indonesian Spelling (PUEBI).				
	2. Spelling is used consistently throughout the learning materials, including in titles, paragraphs, and sentences				
	3. Use of capital letters, punctuation, and other writing rules				
	1. The sentences used in the material are easy to understand				

Communicative	2. The language is positive and encourages learning
	3. The learning materials are presented in simple and easy-to-understand language, appropriate for the ability level of 4th grade elementary school students.
Information	1. The information provided in the learning materials is clear
	2. The information provided in the learning materials is accurate
	3. Assess whether there is any information that is Confusing
	4. The information is appropriate for the learning objectives
Use of terms, symbols or icons	1. The terms used are appropriate to the learning context and are accurate, especially in the use of terms related to local culture and literacy
	2. Symbols and icons used support understanding of the material and do not confuse students

Design Expert Validation Instrument is used to assess the validity and feasibility of the instructional design developed before it is implemented in the classroom. This validation covers aspects of systematic presentation, material integration, and suitability with the principles of Project Based Learning (PjBL) combined with local wisdom. The following is a display of the instructional design expert validation instrument in Table 8.

Table 8. Learning Design Expert Validation Instrument

Aspect	Indicators	Score			
		4	3	2	1
Syntax	1.The learning process is centered on the Students				
	2.Project-based learning				
	3. Learning developing active student Participation				
	4.Learning encourages student initiative and independence				
	5.Learning trains collaboration and accountability to access and manage information in order to find solutions				
	6.Learning trains critical thinking				
	7.Evaluation is conducted periodically so that students can reflect				
	8. Learning project products produce clear or results				
	9.Learning prioritizes the practice of writing material combined with local wisdom efficiently				
	10. Learning implements the Pancasila Student Profile				
	11. Learning is the language integration of all skills				
	12. Learning provides students with the opportunity to engage in writing according to the process, namely the pre-writing, writing, and post-writing stages				

	13. Learning prioritizes an interactive classroom atmosphere characterized by a group learning system, mutual exchange of ideas, and mutual feedback/criticism among students
	14. Learning presents material by displaying teaching objects, texts, and videos that are integrated with local wisdom
Reaction Principle	1.The learning process optimizes the role of the teacher as a facilitator in the learning process
	2. The learning process optimizes the role of the teacher as a motivator in the learning process
	3. Learning optimizes the role of teachers as evaluators in learning
	1. In learning, there is interaction between teachers and students
	2. Learning is able to create an interactive atmosphere characterized by group learning systems, discussions, and mutual feedback/criticism of each other's writing.
	3. Learning is able to build a democratic and open atmosphere
Social System	4. Learning is able to create a conducive Atmosphere
	5. Learning is able to build a collaborative atmosphere
	6. Learning is able to build creativity and activity among students
System Support	1.Completeness of teaching modules
	2.The suitability of teaching modules in accordance with the developed model
	3.Quality of teaching modules
	4.Teaching materials are aligned with learning objectives
	5.Teaching materials contain accurate Information
	6.Teaching materials use language that is easy to understand
	7.The material presented makes students interested in learning
	8.The material is easy for learners to use
Instructional and Accompanying Impact	1.Instructional impact includes mastery of material and skills
	2.Non-instructional impact involves the development of attitudes, character, and other habits

Source: Santi Oktarina, et al. (2023)

Data obtained from expert validation will be analyzed using the *Likert* scale.

Table 9. Likert Scale Rating Levels

Answer	Score
Very Needed (VN)	4
Need (N)	3
Less Needed (LN)	2
Not Needed (NN)	1

Source: Sugiono (2019)

Data from the validation sheet filled out by experts can be averaged using the following formula.

$$\text{Score} = \frac{\text{Total Score}}{\text{Maximum score}} \times 100\%$$

The results are then categorized into the following predetermined criteria:

Table 10. Assessment Criteria for Validity Scores

Range	Category
81-100	Highly Valid
61-80	Valid
41-60	Fairly Valid
21-40	Less Valid

Source: Sugiono, 2019

The table below shows the results of the validation sheet percentages from media experts' assessments of the developed products.

Table 11. Media Expert Validation Results

No.	Aspect	Score	Maximum Score	Percentage	Category
1	Graphics	33	36	92	Very Valid
2	Display	15	16	94	Very Valid
3	Video	8	8	100	Very Valid
Total Score		56	60	95.33%	Highly Valid

Based on the above results, the media expert validation stage that assessed several aspects yielded a result of 92% for the graphic aspect. The assessment of the display aspect yielded a result of 94%. For the video aspect, the result was 100%. The Project-Based Learning (PjBL) development model combined with local wisdom is declared to be highly valid for use.

The table below shows the percentage results of the instructional design expert validation sheet for the learning model development product. The following is the explanation presented by the researcher in Table 12.

Table 12. Results of Instructional Design Expert Validation

No	Aspect	Score	Maximum Score	Percentage	Category
1	Syntax	52	56	93	Very Valid
2	Principles of Reaction	12	12	100	Very Valid
3	Social system	24	24	100	Highly Valid
4	Support System	28	32	88	Highly Valid
5	Instructional and accompanying impact	7	8	88	Highly Valid
Total Score		123	132	93.80%	Highly Valid

Based on the results above, the instructional design expert validation stage, which assessed several aspects, including the syntax aspect, obtained a percentage of 93%. The assessment of the reaction principle aspect obtained a percentage of 100%. In the social system aspect, the result was

100%, the support system aspect was 88%, and the instructional and accompanying impact aspect was 88.

The Project-Based Learning (PjBL) model product combined with local wisdom was declared highly valid for use. The table below shows the percentage results of the language expert validation sheet for the Project-Based Learning (PjBL) model product integrated with local wisdom that was developed. The following is the explanation presented by the researcher in Table 13.

Table 13. Results of Language Expert Validation

No	Aspect	Score Obtained	Maximum Score	Percentage	Category
1.	Spelling	11	12	92	Valid
2.	Communicative	12	12	100	Very Valid
3	Information	14	16	88	Very Valid
4	Use of symbols, terms, and icons	10	12	83	Very Valid
Total Score		47	52	90.75	Highly Valid

Based on the above results, the language expert validation stage, which assessed several aspects, obtained results in the spelling aspect, with a percentage of 92%. The assessment of the communicative aspect obtained a result with a percentage of 100%. The assessment of the information aspect yielded a result of 88%, and the assessment of the use of terms, symbols, and icons yielded a result of 83%. Therefore, based on these results, the developed Project-Based Learning model integrated with local wisdom is declared to be highly valid.

b. Practicality Test

The practicality test was conducted on a small group consisting of 8 students. Data was collected using a questionnaire with a 4-point Likert scale. The practicality questionnaire was given to students after the trial was conducted with the assistance of educators. The data obtained from the questionnaire was then processed to assess the practicality level of the learning media.

Table 14. Practicality Questionnaire Instrument

Aspect	Number	Statement	Response			
			4	3	2	1
Structure	1.	The learning model structure involves students in activities or projects.				
	2.	The structure of this learning model clearly explains the steps of the project: .				
	3.	This learning model structure clearly explains the stages of the project from start to finish.				
	4.	The learning model structure uses easy-to-understand instructions for completing the project.				
	5.	The learning model structure creates interaction between educators, learners, and groups.				
	6.	The learning model structure enhances learning motivation because the projects are engaging and relevant to daily life.				
	7.	This learning model structure helps learners understand project assignments.				
	8.	The learning model structure is designed with consideration for the time needed to complete each part of the project.				
	9.	This learning model structure is more enjoyable with project activities.				

	10.	This learning model structure can boost self-confidence.
	11.	This learning model structure teaches how to work together and respect each other.
	12.	This learning model structure creates meaningful experiences.
	13.	This learning model structure provides new experiences and skills.
	14.	The learning model structure is integrated with local cultural Wisdom
	15.	The structure of this learning model helps students feel proud of their local culture.
	16.	The structure of this learning model helps students learn new Vocabulary
	17.	This learning model structure helps students understand the structure of writing stories.
	18.	This learning model structure includes the pre-writing, writing, and post-writing stages.
	19.	This learning model structure makes it easier for students to write folk tales that exist in their surroundings.
	20.	This model structure helps students express their thoughts and writing in their own words.
Reaction Principle	21.	Educators as facilitators in the learning process
	22.	Educators as motivators in the learning process
	23.	Educators as managers in the learning process
	24.	Educators as evaluators in the learning process
Social System	25.	This learning model creates interaction between educators and students
	26.	This learning model creates interaction among learners
	27.	This learning model is able to build an interactive atmosphere characterized by group learning in discussions.
	28.	This learning model is able to create a democratic and open atmosphere.
	29.	This learning model is capable of creating a conducive atmosphere.
	30.	This learning model is capable of creating a collaborative atmosphere.
	31.	This learning model is capable of fostering active and creative learning.
Support System	32.	The learning plan is structured in a logical and easy-to- follow manner
	33.	Learning objectives are clearly explained
	34.	Learning activities are designed in accordance with project stages that integrate local wisdom.
	35.	Activity instructions in the module are easy for students to understand.
	36.	Assessment or evaluation in the module is explained openly and fairly.
	37.	The teaching module encourages active engagement and collaboration among students.
	38.	Teaching materials are presented in the form of text, audio, and video (PDF text, PPT, YouTube links, educational videos, and flipbooks)
	39.	The teaching materials presented contain accurate information and are appropriate to the local culture
	40.	The language used in the teaching materials is easy to Understand

	41.	The teaching media used makes students active and interested in learning.
	42.	The teaching materials can be used independently by students at home or at school.
	43.	Learning tools can support the successful implementation of this learning model.
	44.	The use of learning aids can make students interested and involved in learning.
	45.	The use of learning aids can stimulate students' creativity.
Instructional and accompanying impacts	46.	Students understand the learning material well through project activities integrated with local wisdom.
	47.	Educators are accustomed to collaborating, respecting peers' opinions, being honest, and fair throughout the project-based learning process.

Source: Santi Oktarina, 2023

The next step is to analyze the survey response data using the Likert scale as a reference for evaluation.

Table 15. Likert Scale Assessment Level

Category	Score
Very Good	4
Good	3
Fairly Good	2
Not Good	1

Source: Sugiono, 2019

The results of the questionnaire on the aspects assessed will produce data that will then be calculated using the following formula:

$$t \text{ value} = \frac{\text{Score obtained}}{\text{Maximum score}} \times 100\%$$

The results obtained from the average will be categorized according to the criteria set out in the following table:

Table 16. Practicality Questionnaire Score Assessment Criteria

Range	Category
81-100	Very Practical
61-80	Practical
41-60	Fairly Practical
21-40	Less Practical

Source: Sugiono, 2019

The effectiveness of the developed Project-Based Learning (PjBL) model was evaluated through a field trial involving 15 students. Effectiveness was determined by comparing students' pre-test and post-test scores and calculating the N-Gain score to measure improvements in writing literacy achievement. The N-Gain score indicates the extent of learning improvement between the pre-test and post-test results. The interpretation criteria for the N-Gain scores are presented in Table 17.

Table 17. N-gain Scores

Range	Category
>0.70	High
0.30-0.70	Moderate
<0.30	Low

Source: Sugiono, 2019

c. Effectiveness Test

The effectiveness of the media was tested through pretest and posttest in a field trial involving 15 students. Effectiveness was determined by comparing pretest and posttest scores and calculating learning gain using the N-Gain calculation.

Table 18. Pretest and Posttest Results

No	Students' Name	Pre-test	Posttest
1.	AR	69	100
2.	MDA	50	88
3.	RA	50	81
4.	HS	75	100
5.	DK	44	94
6.	SY	44	94
7.	YO	75	100
8.	ZA	50	81
9.	FE	38	75
10.	IM	38	81
11.	MA	63	88
12.	MD	38	88
13.	MS	63	100
14.	NKP	75	100
15.	RAY	38	94
Total		810	1364
Average		54.0	90.93
Score ≤ 70		80	0
Score ≥ 70		20	100

Source: Primary data processing in 2025

3. FINDINGS AND DISCUSSION

This study aimed to develop a valid, practical, and effective Project-Based Learning (PjBL) model integrated with Musi Banyuasin local wisdom to improve students' writing literacy through folk tale writing. The results indicated that the developed model was highly valid based on expert assessments, very practical based on the small-group trial results (91.55%), and effective based on the improvement of students' writing literacy achievement. The field trial demonstrated an increase in the average score from 54.00 on the pre-test to 90.93 on the post-test, with an N-Gain score of 0.82 categorized as High.

However, the effectiveness findings should be interpreted cautiously because the study employed a one-group pre-test and post-test design without a control group. In addition, the study involved a limited number of participants from a single elementary school. Future studies are recommended to involve larger samples, multiple schools, and experimental research designs to provide stronger evidence regarding the effectiveness of the developed PjBL model and its impact on students' writing literacy.

After the learning model and Project Based Learning combined with local wisdom were validated by media experts, instructional design experts, and language experts as feasible for use, the next stage was to conduct small group trials and field trials. The small group trial was conducted to measure the

practicality of the Project-Based Learning model combined with local wisdom in teaching folk tale writing to students at Air Balui State Elementary School. Meanwhile, the field trial was conducted to measure the effectiveness of the learning media that had been developed.

This trial was conducted at SD Negeri 1 Air Balui, involving eight students. To determine the practicality of the learning model, the researcher distributed a questionnaire after the trial was completed. The questionnaire consisted of descriptive questions used to assess the media in terms of appearance, accessibility, and presentation of material. The results of the questionnaire analysis are presented in the following section.

Table. 19 Results of the Student Practicality Questionnaire

Name	Syntax	Principle Reaction	Social System	System Supporters	Impact Instructional	Score	Average Scale	%	Category
WA	73	15	25	50	7	170	3.6	90.4	Very Practical
AA	78	15	27	52	8	180	3.8	95.7	Very Practical
SNC	50	16	26	58	8	158	3.3	84	Very Practical
MV	50	15	27	58	7	157	3.3	83.5	Very Practical
AP	75	14	27	52	8	176	3.7	93.6	Very Practical
AJ	76	14	26	54	7	177	3.7	94	Very Practical
RA	78	15	27	54	7	181	3.8	96.2	Very Practical
MZL	68	10	28	48	8	162	3.4	86	Very Practical
Total							28.6	723.4	
Average							3.5	90.4	

Source: Primary data processing, 2025

Meanwhile, the recapitulation results are presented in Table 20. The following provides an overview of the practicality of the developed product from the perspective of students as respondents.

Table. 20 Recapitulation of Practicality Test Results

Aspect	Score Obtained	Maximum Score	Percentage
Syntax	548	640	85
Reaction Principle	114	128	89
Social System	213	224	95
Support System	426	448	95
Instructional and Support Impact	60	64	93.75
Average	272.2	300.8	91.55

Based on the results of small group trials, this study shows that the development of a Project Based Learning model integrated with local wisdom in teaching folk tale writing is very practical and effective. This is supported by the results of a questionnaire given to students.

Field testing was conducted to determine the effectiveness of learning media in real classroom conditions. The media was applied to all students as research subjects through pretest and posttest administration. The results of data analysis from both tests were used to assess the extent to which the

developed media was able to improve student understanding.

The data was obtained from the pretest and posttest results, which were analyzed using the N-Gain calculation to determine the increase in learning outcomes. The research subjects were 15 fourth-grade students at SDN 1 Air Balui. The test instrument consisted of an essay with instructions to write a folk tale based on the video watched, with a minimum passing grade of 70 for Indonesian. *The pretest* was given before the lesson, while *the posttest* was given after the lesson. The following are the *pretest* and *posttest* results:

Table. 21 Pretest and Posttest Results

No	Name of Student	Pre-test	Posttest
1.	AR	69	100
2.	MDA	50	88
3.	RA	50	81
4.	HS	75	100
5.	DK	44	94
6.	SY	44	94
7.	YO	75	100
8.	ZA	50	81
9.	FE	38	75
10.	IM	38	81
11.	MA	63	88
12.	MD	38	88
13.	MS	63	100
14.	NKP	75	100
15.	RAY	38	94
Total		810	1364
Average		54.0	90.93
Score ≤ 70		80	0
Score ≥ 70		20	100

Source: Primary data processing in 2025

The following is Table 22 of the N-Gain score calculations produced by all students;

Table 22. N-Gain Score Calculation Results

No	Name Student	Score Pre-test	Score Post-Test	Posttest - Pretest	Maximum Score – Pretest	N-gain	Category
1.	AR	69	100	31	31	1	High
2	MDA	50	88	38	50	0.76	High
3	RA	50	81	31	50	0.62	Moderate
4	HS	75	100	25	25	1	High
5	DK	44	94	50	56	0.89	High
6	SY	44	94	50	56	0.89	High

7	YO	75	100	25	25	1	High
8	ZA	50	81	31	50	0.62	Moderate
9	FE	38	75	37	62	0.59	Moderate
10	IM	38	81	43	62	0.69	Moderate
11	MA	63	88	25	37	0.67	Moderate
12	MD	38	88	50	62	0.80	High
13	MS	63	100	37	37	1	High
14.	NKP	75	100	25	25	1	High
15	RAY	38	94	56	62	0.90	High
Average		54.0	90.93	36.93	46	0.82	High

Source: Primary Data, processed in 2025

The findings demonstrated that the developed Project-Based Learning (PjBL) model integrated with Musi Banyuasin local wisdom was valid, practical, and effective for improving students' writing literacy. The practicality test yielded an average score of 91.55%, which falls into the "very practical" category. Furthermore, the field trial results showed a substantial improvement in students' writing performance. The average pre-test score increased from 54.00 to 90.93 in the post-test, producing an N-Gain score of 0.82, which is categorized as High. These results indicate that the developed PjBL model effectively facilitated students in generating ideas, organizing story elements, and producing written folk tales based on local wisdom. The following graph shows the pretest and posttest results;

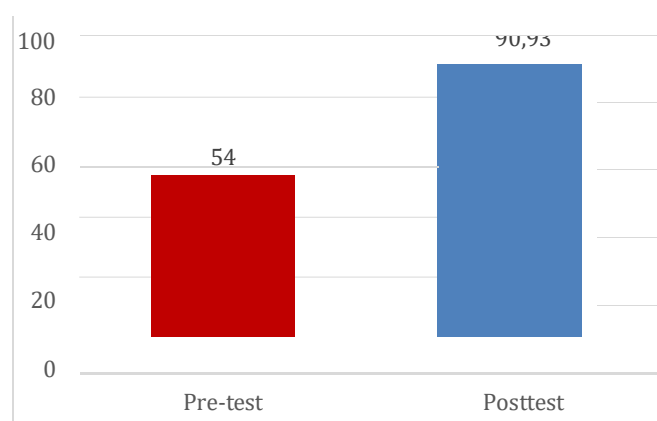


Figure. 2 Pretest and Posttest Results

In the digital era, learning is required to develop innovations that can integrate meaningful learning models with the context of students' lives (Shefira et al., 2024). The Project-Based Learning (PjBL) model combined with local wisdom is one of the learning alternatives that are systematically designed to provide an active, contextual, and product-oriented learning experience (Nurhamidah & Nurachadijat, 2023). Through student involvement in projects based on local wisdom, writing instruction not only improves literacy skills but also fosters an understanding of cultural values and makes it easier for students to express their ideas in writing (Sujinah et al., 2024).

Project-Based Learning is a learning model that places students as active subjects in the learning process through systematically designed project activities (Rineksiane, 2022). Through Project-Based Learning, students are trained to explore ideas, gather information, organize ideas, and express them in writing, so that their writing literacy skills develop gradually and meaningfully (Natty et al., 2019). The application of Project-Based Learning combined with local wisdom also encourages students to

recognize, understand, and preserve regional cultural values through contextual writing activities that are relevant to their environment (Jurnal *et al.*, 2024) .

Thus, the development of a Project-Based Learning model integrated with local wisdom is a strategic step in improving elementary school students' writing literacy skills. This model not only serves to develop writing skills but also helps students understand the cultural context and their surroundings as sources of writing ideas. Research on the development of PjBL integrated with local wisdom contributes significantly to learning innovation by presenting a more meaningful, contextual learning process that is oriented towards the active involvement of students in producing written work.

The findings are consistent with previous studies. Wismanto (2022) reported that Project-Based Learning (PjBL) effectively improved students' writing skills through meaningful project activities. Similarly, Fadhila and Rakhmawati (2024) found that integrating local wisdom into PjBL enhanced students' engagement and writing performance. Hasanah and Kurniaman (2025) also concluded that PjBL positively influenced students' ability to write folk tales. The present study extends previous research by developing a comprehensive PjBL model specifically designed to integrate Musi Banyuasin local wisdom into elementary school writing literacy instruction.

The novelty of this study lies in the integration of Musi Banyuasin local wisdom into a structured PjBL model aimed at improving writing literacy. Unlike previous studies that focused solely on writing instruction or local wisdom separately, this study combines both aspects into a single learning model.

4. CONCLUSION

This study aimed to develop a valid, practical, and effective Project-Based Learning (PjBL) model integrated with Musi Banyuasin local wisdom to improve students' writing literacy through folk tale writing. The results indicated that the developed model was highly valid based on expert assessments, very practical based on the small-group trial results (91.55%), and effective based on the improvement of students' writing literacy achievement. The field trial demonstrated an increase in the average score from 54.00 on the pre-test to 90.93 on the post-test, with an N-Gain score of 0.82 categorized as High. However, the effectiveness findings should be interpreted cautiously because the study employed a one-group pre-test and post-test design without a control group. In addition, the study involved a limited number of participants from a single elementary school. Future studies are recommended to involve larger samples, multiple schools, and experimental research designs to provide stronger evidence regarding the effectiveness of the developed PjBL model and its impact on students' writing literacy.

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