

DEVELOPMENT OF LKPD BASED ON ETHNOPEDAGOGY OF SINGOSARI TEMPLE ON CULTURAL LITERACY

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ABSTRACT

LKPD is one of the tools that can facilitate student learning. The reason for this research is the absence of digital teaching materials and the lack of compatibility of the content of learning materials with student characteristics. This study uses the ADDIE development research model, the target of this research is grade VI students of SDN 1 Pagentan Singosari Malang with the type of data used, namely qualitative and quantitative data. The results of the product validity test from the assessment of subject matter experts and linguists obtained an average score of 95.46% which indicates very valid criteria. The results of the product attractiveness test from the student and teacher response questionnaire during the limited and field trials obtained an average score of 86.71% and 93.29% which indicates a very interesting criterion. The results of the product practicality test were obtained from the questionnaire of teacher response (94.82%) and student response (84.61%) which showed very practical criteria. Ethnopedagogy-based LKPD products also show effective criteria for increasing student learning activities and teacher activities before and during the use of LKPD, namely previous teacher activities were 74.43% to 90.27% so that it can be concluded that ethnopedagogy-based LKPD is very effective in increasing student and teacher activities in learning. Based on these results, ethnopedagogy-based LKPD for use in elementary schools has met the requirements for use in learning because it has met the criteria of validity, attractiveness, effectiveness, and practicality.

I. INTRODUCTION

Cultural literacy can be defined as a network of information owned by competent readers, as the basis of information that is inherent in the mind and understood, obtaining the essence, understanding its implications, connecting what they read with an unwritten context that gives meaning to the reading (Desyandri, 2018). cultural literacy will encourage the realization of an Indonesian society that adheres to the concept of complete multiculturalism, which is a society based on respect and appreciation for differences [1].

The Literacy Implementation Program aims to develop a deep understanding of the different cultures of the world. Students will learn about the rich culture that exists around them and in different countries. The goal is for students to be able to appreciate cultural diversity and avoid prejudices or inaccurate stereotypes against other cultures [2].

However, in practice, elementary school students often face difficulties in cultural literacy, including getting to know many cultural treasures of the archipelago, both local and national, the occurrence of bullying, the emergence of tribalism, primordialism, and ethnocentrism, the occurrence of acculturation of negative cultures from outside, as well as cultural alienation, and so on. One of the cultural aspects that is rich in Indonesian elements is Singosari Temple. Singosari Temple is one of the historical heritage buildings that is rich in language treasures that can be used to hone students' vocabulary, thinking, speaking and writing. The use of the history of Singosari Temple as a learning medium can provide a more real and relevant learning experience for students, as well as strengthen the relationship between writing skills and local cultural literacy that can be used as a learning resource that is around the student environment and is more contextual with student life. With the contextual learning model, Singosari Temple is assisted by the "ADIKSIMBA" technique which contains 6 sentences asking What, Where, When, Who, Why, and How can hone students' writing skills and cultural literacy.

A significant research gap lies in deepening the mechanisms of integrating the local cultural values inherent in heritage sites into ethnopedagogical practices that empower students holistically. Existing research tends to focus on improving language skills through the use of heritage sites, but has not in-depth examined how the philosophical,

social, and spiritual riches contained in these sites can be internalized through teaching methods based on local wisdom (ethnopedagogy). This research can further explore learning strategies that not only enhance students' cognitive and linguistic abilities, but also develop their emotional, social, and spiritual intelligence through authentic interactions with cultural heritage. In addition, the research can also examine the challenges and opportunities in implementing this approach in a sustainable manner in the basic education curriculum [3]. Ethnopedagogy is the actualization of learning towards the cultivation of the value of local wisdom of an ethnic group [4]. Ethnopedagogy is closely related to multicultural education which has the view that raising local wisdom and the diversity of ethnic commodities is important to shape lifestyles, social experiences, individual and group identities [5]. Ethnopedagogy that originates from the culture of a tribe in its implementation uses a transformation. The transformation taken is in the form of content aspects, process perspectives, and contextual [6]. The novelty in this research lies in the explicit incorporation of the "ADIKSIMBA" technique which focuses on the development of questioning skills and factual understanding with ethnopedagogical principles that emphasize the internalization of cultural values and local wisdom sourced from Singosari Temple. Thus, this novelty lies in the creation of a learning model that synergistically combines the inquiry structure of "ADIKSIMBA" with the pedagogical richness of the culture of Singosari Temple, making it an innovative approach in teaching culturally based literacy that is more in-depth and empowers students holistically [7].

The goal of ethnopedagogy is the achievement of reconciliation of two or more cultural elements by modifying both. Ethnopedagogy is of the view that local wisdom plays a role as a source of innovation which is continued by multicultural education that empowers these innovations to make positive contributions to other groups and national culture [8]. In previous research, it was stated that the application of ethnopedagogical approaches in Indonesian learning has a positive effect on improving student learning outcomes [9]. Temple-based learning has significant potential in improving students' Higher-Order Thinking Skills (HOTS) through the integration of spatial, historical, and cultural literacy dimensions. The spatial dimension of the temple, with its complex architecture, narrative relief, and meaning-laden layout, stimulates students to perform visual analysis, symbolic interpretation, and understanding of the relationships between spaces [10]. The process of observing and interpreting the physical elements of the temple encourages the ability to think critically in decomposing visual information into a deeper understanding. Furthermore, the historical dimension of the temple invites students to conduct a chronological analysis, understand the causes and effects of past events, and evaluate the historical significance of the building in the context of civilization. Thus, temple-based learning holistically trains students in analyzing complex (spatial) information, conducting historical (historical) reasoning, and developing a deep understanding of cultural context (literacy culture), which overall contributes to the improvement of their higher-level thinking skills [11]. In elementary schools, ethnopedagogy has not been applied optimally even though thematic learning has been applied which must contain local wisdom in its teaching. Research conducted by Oktavianti and Ratnasari (2018) revealed that the lack of optimal ethnopedagogy is due to not being supported by facilities and infrastructure. The theme of ethnopedagogy is still relatively new and is still looking for the right pattern to be used in learning. This research aims to describe the concept of ethnopedagogy from several countries, its implementation (learning patterns), obstacles, and challenges of ethnopedagogy conceptually and operationally. A number of research articles are used to strengthen the discussion described in this article. This article is expected to contribute to the world of education, especially pedagogy for educators. Ethnopedagogy is a method that intends to examine how students learn, process, and then apply Indonesian strategies to solve problems, and then implement Indonesian strategies to solve problems related to habits [12].

In China, character education is often integrated through visits to historical sites and museums that instill traditional values and patriotism, although a focus on in-depth cultural literacy through an ethnopedagogical approach in heritage sites may not yet be mainstream. In Japan, history and culture learning often involves field trips to temples, castles, and other cultural sites, with an emphasis on understanding historical values and traditional aesthetics. However, the explicit incorporation of inquiry techniques such as "ADIKSIMBA" with ethnopedagogical principles to dig deep into cultural literacy in these sites also requires further research. Meanwhile, in Thailand, heritage-based education is often linked to the preservation of traditional arts, regional languages, and local cultural practices. Although awareness of the importance of cultural heritage is growing, the systematic utilization of ancient sites as "living classrooms" that integrate structured inquiry techniques with ethnopedagogical approaches to comprehensively improve cultural literacy seems to be a niche that can be developed further [13]. Thus, the study of the utilization of Singosari Temple with a combination of "ADIKSIMBA" techniques and ethnopedagogy has the potential to offer a unique contribution to the treasure trove of heritage-based education models in Asia, by providing a specific and structured framework to empower students'

cultural literacy through in-depth interaction with local heritage sites [14].

Cultural literacy learning based on heritage sites such as Singosari Temple has a strong correlation with Sustainable Development Goals (SDG) 4.7, which emphasizes education for sustainable development and global citizenship. The results of in-depth cultural literacy through interaction with local heritage will equip students with a rich understanding of their own cultural identity, the nation's history, and inherited noble values. This understanding becomes an important foundation for developing respect for the diversity of other cultures and fostering cross-cultural empathy, which is the essence of global citizenship. Furthermore, appreciation of local cultural heritage is often closely linked to awareness of the importance of environmental preservation and sustainable living practices that may have been embraced by past societies [15]. By understanding the local wisdom contained in heritage sites, students can be inspired to adopt environmentally responsible behaviors and contribute to sustainable development in their communities and on a global level. Therefore, heritage site-based cultural literacy learning not only enriches students' understanding of the past, but also equips them with the knowledge, skills, and values necessary to become active global citizens and contribute to a sustainable future [16]. Previous research has examined the application of the "ADIKSIMBA" technique-assisted contextual model approach can improve students' writing skills conducted. The results of the study show that the application of the "ADIKSIMBA" technique-assisted contextual model is carried out through: 1. Motivating students by reading the history of Singosari Temple or interviewing Singosari Temple resource persons. 2. Giving students the opportunity to explore information by asking questions using the question sentence "ADIKSIMBA". 3. Monitor students in LKPD discussion activities. 4. Reflect and evaluate activities. LKPD is a print media in the form of books, containing visual materials and one type of learning aid. In general, LKPD is a learning tool as a tool or means of supporting the implementation of the learning plan. Student sheets are in the form of sheets of paper that contain information and questions [17]. LKPD is one of the means to help and facilitate teaching and learning activities so that effective interaction will be formed between students, so that it can increase student activities in improving learning achievement. LKPD contains guidelines for learners who are used in solving problems, LKPD has a great influence on the learning process, LKPD can encourage students' thinking processes so that it makes it easier for students to solve a problem [18].

LKPD is very good to be used as an LKPD to support a more innovative, interesting and not boring learning process, because LKPD contains an attractive and colorful design, this is also because LKPD contains materials and work instructions so that it is easy for students to understand. Therefore, the development of LKPD based on ethnopedagogy of Singosari Temple is a necessity that can help students understand writing skills more contextually with the help of the "ADIKSIMBA" technique and improve students' cultural literacy. With this approach, it is hoped that students will be able to understand explanatory texts or interview experiences of resource persons and observation can develop the cultural literacy needed to face future challenges.

II. RESEARCH METHODOLOGY

Development research aims to produce and develop prototypes, learning media designs, learning materials, media, learning evaluation strategies and tools in teaching and learning activities. This is in accordance with the opinion of Sabariah (2022) that the purpose of development research is to improve the quality of learning. To support learning activities, it is necessary to develop media that is able to provide an interesting learning experience so that students are more motivated and there is an increase in learning outcomes. This research was carried out at SD Negeri 1 Pagentan Jalan Panglima Sudirman Number 17, Pagentan, Singosari, Malang Regency, East Java Province. The subject of this study is a grade VI student, SD Negeri 1 Pagentan.

The method of this research is Research and Development. This method describes the manufacturing steps that must be followed to submit an LKPD. The ADDIE model consists of five stages consisting of the analysis stage, the design stage, the development stage, the implementation stage and the evaluation stage as seen in the image [19].

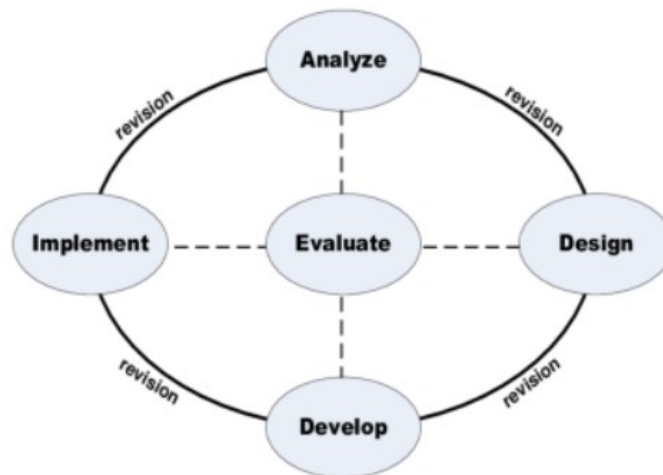


Figure 1 ADDIE Model Development Stage

The ADDIE model scheme in Figure 1 contains several stages in implementing the development of the ADDIE model [20].

1. Analysis
Validation of performance gaps, formulating instructional objectives, identifying student characteristics and needed resources, determining learning strategies
2. Design
Verifying media performance, composition, objectives, strategies and appropriate methods
3. Develop
Producing and validating learning resources
4. Implement
Preparing the learning environment, teachers and students
5. Evaluate
Measuring the quality of products and processes before and after implementation

This ADDIE model is very easy to use as a basis or guideline in developing a product, because the ADDIE model aims for a product approach with efficient and intuitive development. The ADDIE model is a direct system that is useful for realizing planning where the cycle can be applied in different settings as a result of its general design.

Students' abilities are declared complete if they reach the Minimum Completeness Criteria (KKM) which is 75% with the minimum good category. Meanwhile, the classical completeness of the class is at least 85% of the total number of students in the class. If students have achieved the set completeness, the quality of the media has met the feasibility [21]. The validity criteria for the test results use the percentage scale found in table 1, the effectiveness criteria are in table 2 while the practicality criteria are in table 3.

TABLE I.
VALIDITY CRITERIA

Creteria	Validity Level
75,01%-100%	Very Valid
50.01%-75,00%	Valid
25,01%-50,00%	Loss Valid
00,00%-25,00%	Not Valid

TABLE II.
EFFECTIVENESS CRITERIA

Average Value (%)	Description
76-100	Highly effective
51-75	Effective
26-50	Less Effective
00-25	Very Less Effective

TABLE III
 PRACTICALITY CRITERIA

Criteria	Validity Level
75,01%-100%	Very practical
50.01%-75,00%	Practical
25,01%-50,00%	Less practical
00,00%-25,00%	Impractical

III. RESULT AND DISCUSSION

Results

In the early stages of this development model, it was found that the learning process with conventional assignments was boring and reluctant to be motivated to learn. After the selection of materials, a questionnaire was prepared for material experts, linguists and student trials. At the product development stage, you can use the Canva application. At the beginning of the display, there are instructions for use, a table of contents, sub-chapters of the material presented and several questions as a measure of the extent of students' understanding of the previous material. For development products can be seen below:



Figure 2. Front Cover

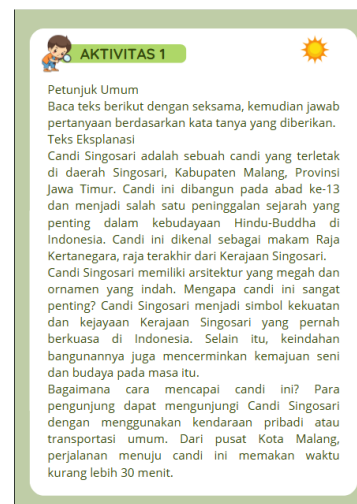


Figure 3. Activities 2

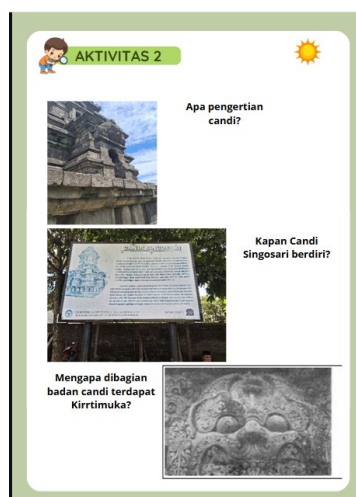


Figure 4. Activities 2



Figure 5. Assignment

This ethnopedagogy-based LKPD development product is made to make it easier for students to learn as well as motivate them to learn, it is hoped that students can improve cultural literacy and be enthusiastic about the next materials so that each student can learn independently anywhere and anytime. Validity tests, effectiveness tests and practicality tests are carried out to determine the feasibility of the product, this test is carried out by subject matter

experts, linguists and for student trials with 3 stages including individual trials, small group trials and large group trials.

Expert

Testing

Validation testing carried out by material experts in this study had 27 aspects assessed. The results of scoring assessment items from the material expert validation test can be seen in table 4 below:

TABLE IV.
 RESULTS OF SCORING THE ASSESSMENT ITEMS OF THE SUBJECT MATTER

No	Assessment Criteria	Assessment Score			
		1	2	3	4
1	Materials in accordance with the established CP				√
2	LKPD materials are in accordance with the level of student development.			√	
3	The accuracy of selecting CP that is in accordance with the materials used				√
4	The accuracy of describing indicators in the developed teaching materials			√	
5	The accuracy of formulating learning objectives in the developed teaching materials				√
6	The accuracy of selecting learning sources and media			√	
7	The accuracy of compiling student activity sheets made to achieve learning objectives			√	
8	The meaningfulness of learning designed in teaching materials				√
9	The suitability of teaching materials with the characteristics of contextual learning				√
10	The materials presented are appropriate in elementary schools				√
11	The use of the surrounding environment as a source and media			√	
12	The use of real life situations, authenticity of learning experiences			√	
13	The availability of learning resources in the immediate environment.				√
14	Directing students to instill positive character values.				√
15	Encouraging students to build their own knowledge.				√
16	Encouraging student interaction with learning resources.				√
17	Encouraging student curiosity.				√
18	Directing students to think logically.				√
19	The description of the material follows the flow of thinking from simple to complex				√
20	Directing students to obtain concepts from various activities carried out			√	
21	hActivities provide direct and meaningful experiences for students.				√
22	Encourage students to think creatively.			√	
23	Encourage students to apply the knowledge gained in everyday life.				√
24	Train students to be able to apply and relate what is learned to various problems that arise.				√
25	The accuracy of the level of difficulty of the evaluation questions with student characteristics				√
26	The accuracy of the assessment instrument for the evaluation assessment				√
27	Evaluation questions made according to learning objectives				√
Score Total				24	76
Total				100	

Based on Table 4, the validation test data of material experts was obtained at 100 or 92.59%. This shows that the ethnopedagogy-based lkpd at Singosari Temple has a level of validity with very valid criteria. Even though it is included in the criteria is very valid, in order for the lkpd to have better and relevant content, the validator provides some suggestions and inputs as shown in Table 5 below.

TABLE V
 SUGGESTIONS AND INPUTS OF SUBJECT MATTER EXPERT VALIDATORS

Validator	Suggestions and Comments
Subject Expert	1. This LKPD is very good and the material is very suitable for learning to appreciate historical heritage
	2. Simplify the use of sentences

Linguist Testing

The validation test by linguists in this study has 15 aspects of assessment. The results of the validation of media experts are presented in the following table 6:

TABLE VI.
 RESULTS OF SCORING LINGUIST ASSESSMENT ITEMS

No	Assessment Criteria	Assessment Score			
		1	2	3	4
1	The use of sentences in LKPD represents the content to be achieved				√
2	Use of simple and easy-to-understand sentences				√
3	Consistency in using words or terms				√
4	Messages are presented in interesting, clear, targeted language, and do not cause double meanings				√
5	The language used arouses a sense of pleasure when students read it and encourages students to study LKPD thoroughly				√
6	The language used directs students to be active in learning			√	
7	The language used forms student interaction				√
8	The language used is easy for students to understand				√
9	The language used is in accordance with the level of student development				√

No	Assessment Criteria	Assessment Score			
		1	2	3	4
10	The language used is in accordance with the characteristics of students				√
11	Writing sentences in accordance with the Enhanced Spelling (EYD)				√
12	Writing sentences in accordance with good and correct sentence structure				√
13	Writing sentences in accordance with the level of student understanding				√
14	Use of symbols in accordance with the provisions				√
15	Consistency in the use of symbols or icons in LKPD				√
Total Score				3	56
Total					59

Based on Table 6, data from the language validation test results were obtained with a validity rate of 59 or 98.33%. These results show that pedagogy-based LKPD according to historical heritage materials in the local environment has very valid criteria, meaning that the products developed have generally met the criteria of feasibility for use in learning activities. However, to produce even better products, validators provide some suggestions and inputs contained in the following table 7.

TABLE VII
 LINGUIST VALIDATOR'S ADVICE AND INPUT

Validator	Suggestions and Comments
Subject Expert	Some of the background is changed to bright colors

These suggestions and comments are a reference to improve the LKPD so that it becomes more suitable for use in learning. Therefore, the LKPD was revised in accordance with the advice of linguists, namely by changing the background color so that the writing can be read properly.

Limited Scale Trials

After validation by several experts, the trial stage of a limited scale product was then carried out. The trial stage of a limited-scale product was carried out to find out the level of attractiveness of the developed product, namely LKPD based on ethnopedadodi respecting historical heritage in the local environment. The results of the limited-scale product trial obtained from the results of the student questionnaire can be described in Table 8 below.

TABLE VIII
 RESULTS OF STUDENT LIMITED-SCALE PRODUCT TRIALS

No	Aspects assessed	Student Assessment									
		1	2	3	4	5	6	7	8	9	10
1	The words in the LKPD are easy to understand	4	3	4	3	4	3	3	3	4	3
2	I can understand the sentences in the LKPD	4	3	3	4	4	3	3	4	3	4
3	I can easily understand the activities in the LKPD	3	4	4	3	3	3	4	4	4	4
4	I can do activities according to the instructions in the LKPD	4	3	3	3	4	3	4	3	4	3
5	I can easily understand the material in the LKPD	3	3	3	3	3	3	3	3	3	3
6	I can easily read the writing in the LKPD	3	4	3	4	3	3	3	4	3	4
7	I can easily understand the questions in the LKPD	3	4	4	3	3	4	3	4	3	4
8	The learning activities in the LKPD can help me understand the material	3	4	4	3	3	4	4	3	4	4
9	The pictures in the LKPD make it easy for me to understand the material	3	4	3	4	3	4	3	4	3	4
10	I can make conclusions	3	4	3	4	3	4	3	4	4	4
11	I am interested in reading the LKPD	4	3	4	3	4	4	4	3	4	3
12	I am interested in the appearance in the LKPD	3	3	3	3	4	4	4	3	4	3
13	I am interested in the activities in the LKPD	4	3	3	3	3	3	3	3	4	4
14	Learning activities in the LKPD give me new knowledge	4	3	4	4	3	4	4	4	4	3
15	Learning activities make me want to care about the environment	3	4	3	4	4	3	4	4	3	4
16	I feel happy and enthusiastic about doing the activities in the LKPD	3	3	3	4	4	4	3	3	3	3
17	The presentation in the LKPD makes me excited to learn	3	4	4	4	3	4	3	4	3	4
18	The pictures used are interesting and make it easy for me to understand the material	4	3	3	3	4	3	3	3	4	3
Total Score		61	62	61	62	62	63	61	63	64	64
Total		623									

Based on table 8, the average gain was 86.52%. This shows that the product developed in the form of pedagogy-based LKPD has a high level of attractiveness. Students feel interested in using the LKPD because the pictures and materials discussed in the LKPD are relevant to the student's environment. In addition, students also find it easy to use the LKPD because the language, student activity sheets, and materials in the LKPD are easy to understand. In addition to providing assessments, students also provide suggestions and input on this LKPD. These suggestions

and inputs include errors in typing words contained in the LKPD. The suggestions and inputs are as shown in table 9.

TABLE IX
 STUDENT SUGGESTIONS AND FEEDBACK

No	Page	Error Write	Revision Result
1	17	The first letter should be large	Revision Finish

Data on the trial of limited-scale products was also obtained from questionnaires given to teachers. The questionnaire was related to the attractiveness of LKPD. The results of the questionnaire can be described in Table 10.

TABLE X |
 THE RESULTS OF THE LIMITED SCALE TRIAL FROM THE TEACHER RESPONSE QUESTIONNAIRE

No	Assessment Criteria	Assessment Score			
		1	2	3	4
1	Motivates me to carry out creative and fun learning				√
2	Makes me excited about teaching			√	
3	Encourages students to be active in learning				√
4	Forms cooperation between students			√	
5	The images displayed are in accordance with the material				√
6	Grows students' enthusiasm in learning			√	
7	Motivates me to be responsive to the surrounding environment				√
8	Motivates me to always relate students' daily lives to learning materials				√
9	The material is easy to understand and easy to learn			√	
10	The material presented is in accordance with learning objectives				√
11	The material presented is in accordance with student characteristics			√	
12	The contents of the LKPD direct students to be responsive and critical of the conditions around them			√	
13	The activities in the LKPD are in accordance with the material			√	
14	The activities in the LKPD support the achievement of learning objectives				√
15	Evaluation is appropriate for measuring the achievement of learning objectives			√	
16	The language used is easy to understand				√
17	The media used is in accordance with the material			√	
18	The material in the LKPD is in accordance with contextual learning				√
19	The use of terms is in accordance with the level of student understanding			√	
20	Activities in the LKPD form meaningful learning			√	
21	Activities in the LKPD make it easier for me to carry out contextual learning				√
Total Score				33	40
Total				73	

Based on table 10, the percentage of the score was 73 or 86.90%. This shows that the product developed in the form of LKPD has a high level of attractiveness. Teachers find it easy to use the LKPD because it has contained materials and student activity sheets. In addition to providing an assessment of the LKPD, teachers also provide suggestions and input on this LKPD. These suggestions and inputs include the design of the LKPD. These suggestions and inputs are presented in the following

TABLE 11.
 TABLE XI TEACHERS' SUGGESTIONS AND INPUTS

No	Suggestions and Input	Revised Results
1	LKPD Design is given a Border	LKPD has been given a border list

Field Trials

In this large group test or also called field trial, 28 students were used. Before the test was carried out, there were several pretest tests by teachers and students. The test results were before the results of observation of teacher and student activities before learning was carried out using LKPD. The results of the learning test of teacher and student activities before the use of LKPD can be seen in Table 12 and Table 13.

TABLE XII
 RESULTS OF OBSERVATION OF TEACHERS' ACTIVITIES BEFORE THE USE OF LKPD

No.	Stage	Indicator	Score			
			1	2	3	4
1	Beginning	1. Carrying out routine activities at the beginning of the face-to-face meeting (greeting, praying, motivating students)				√
		2. Carrying out apperception activities			√	
		3. Delivering learning objectives			√	
2	Core	1. Directing students to be actively involved in learning			√	
		2. Dividing students into groups			√	
		3. Explaining group assignments and deadlines		√		
		4. Explaining that all group members must master the material		√		
		5. Guiding students in discussions			√	
		6. Discussing discussion results			√	

No.	Stage	Indicator	Score				
			1	2	3	4	
3	Closing	7. Contextual learning activities			√		
		8. Teachers distribute students' work results			√		
		9. Use of learning media during learning activities			√		
		10. Teachers carry out learning activities sequentially as in LKPD			√		
		11. Student activity during the learning process			√		
		1. The teacher directs students to conclude the material			√		
		2. The teacher invites students to reflect on the material			√		
		3. The teacher conveys a moral message to students			√		
		4. Closing the lesson				√	
		Amount			6	39	8
		Score			53		

TABLE XIII
 RESULTS OF OBSERVATIONS OF STUDENT ACTIVITIES BEFORE USING LKPD

No.	Indicator	Score			
		1	2	3	4
1	Students can carry out all activities in the LKPD			√	
2	Students are active in following the learning process		√		
3	Students can carry out activities sequentially		√		
4	Students understand the commands and instructions in the LKPD		√		
5	Students are enthusiastic when using the LKPD			√	
6	Students can carry out activities according to the specified time			√	
7	Students can work together well according to the activities in the LKPD				√
Amount			6	9	4
Score		13			

After observation before the use of LKPD is given, a field test is carried out. In general, the field test went well and was in accordance with the learning objectives. This can be seen based on the results of observation of teacher activities shown in Table 14 below:

TABLE XIV
 RESULTS OF OBSERVATION OF TEACHER ACTIVITIES

No.	Stage	Indicator	Score			
			1	2	3	4
1	Beginning	4. Carrying out routine activities at the beginning of the face-to-face meeting (greeting, praying, motivating students)				√
		5. Carrying out apperception activities			√	
	1. Delivering learning objectives				√	
2	Core	12. Directing students to be actively involved in learning			√	
		13. Dividing students into groups			√	
		14. Explaining group assignments and deadlines				√
		15. Explaining that all group members must master the material				√
		16. Guiding students in discussions				√
		17. Discussing discussion results			√	
		18. Contextual learning activities			√	
		19. Teachers distribute students' work results			√	
		20. Use of learning media during learning activities				√
		21. Teachers carry out learning activities sequentially as in LKPD				√
3	Closing	2. Student activity during the learning process			√	
		5. The teacher directs students to conclude the material				√
		6. The teacher invites students to reflect on the material			√	
		7. The teacher conveys a moral message to students				√
		3. Closing the lesson				√
Amount				24	40	
Skor		64				

Based on Table 14 above, the assessment score of teacher activity observation was 64. The score when converted to percent is 88.88%, which means that learning has been carried out very effectively. This is because learning is carried out systematically from the beginning, core, and final activities. The results of observations show that learning using LKPD can facilitate the learning process, make learning fun, and make students active in participating in learning.

In general, students seem enthusiastic in carrying out learning activities in accordance with the steps in the textbook. This can be seen from the results of observations made by researchers as shown in Table 15 below.

TABLE XV
 RESULTS OF OBSERVATION OF STUDENT LEARNING ACTIVITIES

No.	Indicator	Score			
		1	2	3	4
1	Students can carry out all activities in the LKPD				√
2	Students are active in following the learning process			√	
3	Students can carry out activities sequentially			√	
4	Students understand the commands and instructions in the LKPD			√	
5	Students are enthusiastic when using the LKPD			√	
6	Students can carry out activities according to the specified time				√
7	Students can work together well according to the activities in the LKPD				√
Amount				12	12
Skor				24	

Based on the results of observation of student learning activities in learning as shown in Table 15, student activities during the implementation of learning received a score of 24 or 85.71%. The score shows that the criteria for student activity during learning using LKPD are classified as very effective. Students can carry out activities as requested in the LKPD as a whole and are enthusiastic when using the LKPD. The instructions in the LKPD can be understood well by students so that they do not have difficulty in participating in learning activities.

Discussion

The research development model using 4D on LKPD products has been tested for effectiveness, attractiveness, validity and practicality with excellent student responses. Several studies that have reviewed a lot of LKPD have proven that their use for learning is very effective, especially at the elementary school education unit level [22]. Previous studies have shown that learning approaches that are integrated with local cultural contexts significantly improve student engagement and understanding compared to traditional methods that are often abstract and less relevant to the student experience. For example, research on the use of folklore in language learning has shown an increase in students' understanding of cultural values and language skills. A comparative study of the use of local culture-based visual media with textbooks in history learning showed an increase in material retention and student learning interest [16]. This kind of empirical data indicates the potential of ethnopedagogy-based LKPD to go beyond the effectiveness of conventional learning in instilling deeper and more meaningful cultural literacy [23]. The findings on the effectiveness of ethnopedagogy-based LKPD in the context of cultural heritage-based learning significantly enriched the theoretical framework of critical pedagogy and multicultural education. Critical pedagogy emphasizes the importance of connecting learning with students' real experiences and empowering them to analyze power structures and social injustices. The use of cultural heritage as a learning resource, mediated by ethnopedagogy-based LKPD, allows students to critically reflect on historical and cultural narratives, identify perspectives that may be marginalized, and build a more inclusive understanding of identity and diversity. Meanwhile, multicultural education aims to develop an understanding and appreciation of different cultures. Cultural heritage-based learning through ethnopedagogical LKPD directly embodies this principle by exploring local cultural richness and connecting it to the global context, thereby fostering mutual respect and intercultural understanding [24].

The long-term use of ethnopedagogy-based LKPD has the potential to have a sustainable impact on the formation of students' cultural identity and local historical awareness. By constantly interacting with their cultural heritage through structured and reflective activities, students will be able to. The success of the development and implementation of ethnopedagogy-based LKPD is highly dependent on close collaboration with local stakeholders, such as historians and cultural experts. The involvement of these experts will ensure the accuracy of the historical and cultural content in the LKPD, as well as enrich the learning materials with in-depth perspectives and knowledge that may not be available in conventional academic sources. This collaboration can also open up opportunities for more authentic learning activities, such as field trips guided by experts or hands-on knowledge sharing sessions with community leaders. In terms of cost-effectiveness analysis, the implementation of ethnopedagogy-based LKPD has the potential to be more efficient than conventional cultural literacy programs that may require large costs for the procurement of books, commercial learning media, or bringing in external resource persons. The development of LKPD can utilize local resources and voluntary expertise from stakeholders, thereby reducing production costs. In addition, the long-term impact of increasing cultural literacy and historical awareness through this approach can result in much greater social and cultural benefits than the initial investment, making it a more sustainable and cost-effective option [25]. The practicality of LKPD is very noticeable when its use is accompanied by the right learning strategy. Various forms of LKPD are currently emerging, but their use in theoretical learning is very appropriate to be used even in practical learning can be optimized with various offline or online media. Moreover, the characteristics of elementary school students who tend to think concretely, with a full color display and the right learning video, students will be able to understand in detail material that cannot be illustrated with printed books [26]. Ethnopedagogy-based LKPD can improve cultural literacy as well as be the right learning

innovation to be used to provide student responses who have audio, visual and kinesthetic learning styles [27]. The benefits of research and development products in the form of LKPD focus on the local history of Singosari Temple in the local environment which can be used as an independent learning resource for students and are easy to learn because they are developed based on the needs of students [28]. This LKPD was developed with the aim of bringing students closer to the local environment so that students understand the local history of the area where they live, understand and appreciate the historical heritage in their environment, and understand the importance of protecting the environment. In addition, LKPD can later help students to improve their mastery of competency goals.

IV. CONCLUSION

The conclusion of this study is in accordance with the purpose of the research, which is based on the results of testing and analysis from material experts who state that ethnopedagogy-based LKPD can be used in the learning process. The use of the ADDIE development model used in this study can make the product with systematic and well-structured steps. Linguists stated that LKPD based on eth-nopedagogy is feasible and valid to be applied to students. In small group and large group trials, ethnopeda-gogy-based LKPD was attractive and effectively applied to students. The development of products in the form of LKPD is expected to become an artificial intelligence-based LKPD so that students are always challenged in the use of technology that is so fast as it is today.

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