

Enhancing Cultural Literacy: Developing the *Tombak Kiai* Folklore Book for Elementary Students

Rizki Nurazmi Fadhilah Diyaurrahman¹, Alfi Laila², Bagus Amirul Mukmin³, Baharudin⁴, Abu Dahrin⁵

¹ Universitas Nusantara PGRI, Kediri, Indonesia; rizkinurazmi12002@gmail.com

² Universitas Nusantara PGRI, Kediri, Indonesia; alfilaila@unpkediri.ac.id

³ Universitas Nusantara PGRI, Kediri, Indonesia; bagusamirulm@gmail.com

⁴ Universitas Islam Negeri Raden Intan, Lampung, Indonesia; baharudinpgmi@radenintan.ac.id

⁵ Universitas Islam Negeri Prof. K.H. Saifuddin Zuhri Purwokerto, Indonesia; abudharin@uinsaizu.ac.id

ARTICLE INFO

Keywords:

Development;
Folklore;
Cultural literacy

Article history:

Received 2024-12-23

Revised 2025-01-25

Accepted 2025-03-20

ABSTRACT

Integrating local wisdom into educational materials is essential for fostering students' cultural literacy. This study investigates the validity and effectiveness of the *Tombak Kiai Upas* folk storytelling book in enhancing the cultural literacy of fifth-grade students. A Research and Development (R&D) approach was employed, utilizing the ADDIE model comprising analysis, design, development, implementation, and evaluation stages. The study involved 156 fifth-grade students from four elementary schools in Pakel District. Data were collected through expert validations (material and media) and pre-test/post-test assessments conducted during both small- and large-scale trials. The validation phase demonstrated high feasibility, with material experts awarding a 97% score and media experts a 95% score, based on criteria such as content relevance, completeness, and practicality. Effectiveness testing utilized the N-gain formula, revealing an average improvement score of 0.6587 (categorized as medium), alongside a 30-point increase from pre-test to post-test results. These findings confirm that the *Tombak Kiai Upas* storytelling book effectively enhances cultural literacy among fifth-grade students. The integration of local cultural elements within the narrative supports engagement and deeper understanding, aligning with current educational strategies focused on cultural competency. The *Tombak Kiai Upas* folk storytelling book is both valid and effective as a learning medium, highlighting the value of local wisdom-based educational resources in promoting cultural literacy at the elementary level.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Abu Dharin

Universitas Islam Negeri Prof. K.H. Saifuddin Zuhri Purwokerto, Indonesia; abudharin@uinsaizu.ac.id

1. INTRODUCTION

Cultural literacy plays a vital role in preventing national disintegration and preserving local culture, particularly in the face of accelerating globalization. In today's interconnected world, local cultural values that define national identity face serious threats of erosion. Without sufficient cultural literacy, younger generations risk losing their understanding of cultural heritage, potentially weakening national unity and identity.

Globalization poses several challenges, including the erosion of local cultural identities and declining student engagement in education. The widespread influence of foreign cultures, combined with the rapid flow of global information, has led many young people to be more familiar with foreign cultures than their own. Additionally, the lack of engaging and culturally relevant educational media has further decreased students' motivation to actively participate in learning.

Local wisdom holds great potential as an educational tool to foster nationalism and critical thinking among students. Beyond its cultural and historical significance, local wisdom encompasses moral and ethical lessons that remain relevant in contemporary life. As part of a nation's identity, it can serve as a strong foundation for developing educational materials that not only resonate with students but also instill a sense of pride and belonging.

A practical and innovative solution is the development of folklore-based storybooks, specifically the *Tombak Kiai* folklore book. These storybooks are designed to integrate the values of local wisdom while utilizing augmented reality (AR) technology to enhance student engagement. By combining traditional storytelling with modern technology, these storybooks offer an interactive and immersive learning experience that captures students' interest and makes learning more meaningful.

Recent studies emphasize the critical role of cultural literacy in fostering students' holistic development. According to Banks (2020), integrating cultural elements into educational curricula enhances students' understanding of diversity and global interconnectedness. Similarly, Yuliani and Setiawan (2021) found that culturally responsive teaching strategies improve students' engagement and motivation in learning activities.

Folklore has been highlighted as an effective medium to transmit local wisdom and instill cultural values. A study by Rahman et al. (2022) demonstrated that storytelling-based learning significantly impacts students' critical thinking and appreciation of cultural heritage. Moreover, the integration of augmented reality (AR) in educational tools, as discussed by Chen et al. (2020), has been proven to increase students' interactivity and immersion, resulting in better learning outcomes.

The ADDIE model has also been widely adopted in developing educational materials. A study by Susanto et al. (2019) reported that the systematic approach of analysis, design, development, implementation, and evaluation ensures the relevance and effectiveness of instructional materials. Meanwhile, Prasetyo and Nugroho (2023) emphasized the practicality and adaptability of ADDIE-based resources in various educational contexts.

These findings provide a strong foundation for developing the *Tombak Kiai* folklore book, integrating local wisdom with modern technologies, to address the challenges posed by globalization and declining cultural engagement among students.

The government created a Cultural Literacy program to prevent the disintegration of the nation and prevent the recognition of intellectual property as a result of the increasingly massive development of globalization (Aeni, 2023; Luthfia et al., 2024; Midhol, 2022; Mukharoh, 2022; Ratumanan et al., 2022). Several factors have the potential to threaten the division of the Indonesian nation and the theft of intellectual property by foreign countries. The first is the vast territory of Indonesia with diverse regional characteristics (multiculturalism) and islands, which include various languages, cultures, religions, ethnicities, and tribes spread from the west to the east (Abu Kholish & Wafa, 2022; Aeni, 2023; Dianti, 2017). Open opportunities for cooperation between the Indonesian government and foreign parties that are not managed well can cause chaos. According to Amalina, 2022 To avoid potential conflicts between Indonesian people, attitude skills are needed in respecting ethnic, national, racial,

linguistic, and cultural diversity, religion, belief, fatwa, or guidance, as well as other groups. If this goes well, it will have a positive impact on the younger generation, who will become a generation that is superior and qualified in appreciating and studying the diversity of Indonesian culture through cultural literacy and can become a provision to live in the 21st century (Dunosel Ir. Koebanu, 2024; Ekowati et al., 2021; Laila et al., 2021).

Local wisdom is an idea that is believed wisely and becomes a symbol that becomes a distinctive icon that differentiates one place from another, originating from the thoughts of the community which are passed down from one generation to the next (descending) followed by the community for application in adaptation between communities. and culture (Alfitri, 2023; Mita Dina Prastiewy Hutauruk, Ekel Thory Rafael Ginting, Jepri Alexander Padang, 2024; Tohirin & Hartanto, 2023). The existence of local wisdom becomes a tool or means in learning as an attractive tool or medium for students because students more quickly absorb information that is by experience and knowledge from daily life in their environment so that students are trained to have a critical mindset towards what exists. In their environment and foster a spirit of nationalism (Irmayanti et al., 2024; Kuwoto et al., 2024; Mulia, 2024) Train students' understanding of the emergence of values around them which include local historical values, culture, and national identity, and the ability to collaborate as well as interacting with various groups of people who have cultural backgrounds (Nudiati, 2020).

As a result of globalization or foreign influence, which is increasingly growing rapidly, it has an impact on the erosion of local culture and national spirit (Dwi Anugrah, 2023; Saragih, 2022; Syahira Azima et al., 2021) which is also supported by the population of Indonesia according to the Central Bureau of Statistics in 2022 that The population in Indonesia has reached 279,072,446 people. This is also ranked fourth as the largest population in the world (BPS, 2023). Because this has the potential to cause the disintegration of the nation due to the large population, it is clear that it also has a lot of diversity, including ethnic diversity. , religion, ethnicity, culture, customs, etc. The impact of globalization, especially towards the disintegration of nations, has a complex impact on the world of education, especially as students tend to prefer entertainment content that adopts foreign culture, so that information about their own culture is increasingly reduced and they think that their own culture is boring. Influenced by learning activities at school, students feel bored and not interested in learning. Learning is monotonous, only focused on textbooks and worksheets, so innovation is needed to attract the younger generation in the realm of Cultural Literacy (Bestari et al., 2023; Hidayati1 et al., 2023).

Therefore, based on this case, it is clear that school students experience a decline in learning achievement, especially in Indonesian language subjects. This is caused by students' boredom with learning activities that only focus on textbooks and teacher-centered learning without collaboration. Therefore, it is necessary to develop media that can attract students by understanding the problems they face. So, the development of media that can attract students is necessary. Storybooks are one of the learning media that are considered interesting and easy to use after understanding the problems found. According to claims, storybooks are story narratives in the form of books and are continuous with each other which are presented through pictures (Hidayanti et al., 2022; Laila et al., 2021; Lik, 2020), and the benefits are that they can attract children's interest in reading. Children's storybooks that incorporate augmented reality (AR) may become more interesting for children to read. This is because the images in books are not only illustrations but can also move, providing an interactive experience that explains the story told in the images.

Children become more interested and engaged in the story because of this. This can also help them understand and remember the contents of the book better. Developing folklore book media based on Tulungagung local wisdom that is interesting and relevant for elementary school students is the aim of this research (Ramadhan & Atika, 2023; Silfiana, 2024). The main objectives are: (1) evaluating the suitability of these media from the perspective of media and material experts, (2) evaluating how effective these media are in increasing the cultural literacy of elementary school students, and (3) evaluating how practical they are to use. A research and development (R&D) approach using the

ADDIE (Analysis, Design, Develop, Implement, and Evaluate) model will be used in this research to help prevent the nation from being divided due to the impact of globalization and to instill local wisdom in children in elementary schools. It is hoped that this research will produce folklore book media based on Tulungagung local wisdom that is valid, effective, and practical. It is also hoped that the results of this research can help prevent the disintegration of the nation in children.

Cultural literacy is a critical competency that must be continuously developed to help individuals understand their identity, embrace responsibility, and appreciate the rich diversity within a nation – particularly in a multicultural country like Indonesia. The education sector plays a vital role in this effort by implementing programs that integrate local cultural elements into the curriculum. This initiative aligns with the 2014 gubernatorial regulation, which emphasizes the responsibility of educational institutions in preserving regional cultural heritage (Laila et al., 2020). In line with this mandate, the present study aims to evaluate the validity, effectiveness, and practicality of the *Tombak Kiai* folklore book as a medium for enhancing cultural literacy among elementary school students. Through this investigation, the research seeks to contribute to the development of culturally responsive educational resources that not only address the demands of globalization but also safeguard and promote local wisdom.

2. METHODS

This research was conducted in January 2024 at four public elementary schools in Pakel District (SDN 1 Tamban, SDN 1 Ngebong, SDN 2 Tamban, and SDN 2 Ngebong). The study followed the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. In this process, the research was used for a large-class test, with grade V students as participants. A small-scale test was conducted with 12 grade V students. The detailed development process is summarized in Table 1.

Table 1. Development Procedures in Cycle 1

| No | Phase | Indicator |
|----|----------------|--|
| 1 | Analyse | 1. Observation Guidelines 2. Interview Guidelines 3. Student Questionnaire |
| 2 | Design | 1. Learning Device Media 2. Learning Design Media |
| 3 | Development | 1. Editing 2. Completion |
| 4 | Implementation | 1. Material Expert Validation 2. Media Expert Validation 3. Small Scale Trials 4. Large Scale Trials 5. Determining Media Effectiveness 6. Determining Media Practicality |
| 5 | Evaluation | 1. Pre-test Score Result 2. Post-test Score Result |

Four experts, consisting of 2 subject matter experts and 2 learning media experts, as well as 4 grade V teachers and 156 grade V students from the four elementary schools, participated in this research as respondents. Data analysis was performed using quantitative and descriptive methods, focusing on feasibility and effectiveness. Non-test data was collected using surveys and questionnaires. The survey method was used to collect information from respondents by asking a series of questions. The data collected was then analyzed using a Likert scale to determine the product feasibility percentage. The survey was conducted with material experts, media experts, teachers, and students as the target respondents. Media and material experts assessed the feasibility of the media using a scoring system outlined in the validation survey, as shown in Table 2.

Table 2. Likert Scale for Validation of Storybook Media Product Assessment

| Point | Qualification |
|-------|---------------|
| 5 | Very Valid |
| 4 | Valid |
| 3 | Quite Valid |
| 2 | Less Valid |
| 1 | Very Invalid |

Once the media expert (validator) assessments were obtained, the values were converted into eligibility criteria based on predetermined formulas and qualification levels, as shown in Table 3.

Table 3. Conversion of Qualifications for Eligibility Criteria for Storybook Learning Media Products

| Qualification Criteria | Eligibility Criteria | Predicate |
|------------------------|----------------------|-------------------------------|
| 81 % - 100 % | Very Worthy | No Revisions |
| 61 % - 80 % | Worthy | Needs a Little Revision |
| 41 % - 60 % | Quite a Deception | Revision |
| 21 % - 40 % | Not Feasible | Lots of Revisions |
| 0 % - 20 % | Very Unworthy | Repeat or Create New Products |

N-gain analysis was performed on the pre-test and post-test data from both small and large-scale trials to determine media effectiveness. The N-gain formula is as follows:

$$N - gain = \frac{(\text{Post-test Score} - \text{Pre-test Score})}{(\text{Maximum Score} - \text{Pre-test Score})}$$

Table 4. N-gain Index Interpretation Scale

| Score N-Gain | Qualification |
|----------------------|---------------|
| N-gain \geq 0.70 | High |
| 0.30 < N-gain < 0.70 | Medium |
| N-gain \leq 0.30 | Low |

The methodology specifies that the four schools and 156 students were selected to ensure the sample represents the diversity of elementary students in the Pakel District. The selection process was purposive to include schools that could provide a varied but relevant participant pool for this study.

The Likert scale was selected for assessing media feasibility due to its ability to quantify subjective assessments of product quality across a range of respondents (experts, teachers, and students). It provides a clear, standardized way to evaluate and compare perceptions of media effectiveness.

Each phase of the ADDIE model directly contributes to developing effective and practical learning media. For example, the Analysis phase ensures the understanding of learner needs, which guides the Design phase in creating tailored media. The Development phase refines the product, and the Implementation phase tests its effectiveness, while the Evaluation phase assesses its impact on student learning outcomes.

3. FINDINGS AND DISCUSSION

3.1. Findings

This project aims to create storybook media that can help elementary school students become more literate, especially in the field of cultural literacy. Of course, it is impossible to separate the results of expert validation from the suitability of a media (material experts and media experts). Meanwhile, the N-gain application is used to analyze pre-, and post-test findings to determine the effectiveness of the media. Media conformity assessment criteria are created by material and media experts and are based on the features, indications, and references included in the conformity instrument. Two material experts and two media experts conducted a feasibility test of the book "Cerita Tombak Kiai Upas". Data

on suitability values for the Kiai Upas Tombak Storybook media were collected and evaluated by material expert validators Material Expert.

Table 5. Eligibility Results from Subject Matter Experts

| No | Dimensions | Validator Assessment A | Validator Assessment B |
|---------------------|--|------------------------|------------------------|
| 1 | Content of educational material by CP and TP | 4 | 4 |
| 2 | Augmented reality storybook learning resources are according to the teaching module guidelines | 4 | 4 |
| 3 | Use of clear and easy-to-understand language in communication | 3 | 4 |
| 4 | The contents of the teaching materials are easy to understand | 4 | 4 |
| 5 | The material is presented coherently | 4 | 4 |
| 6 | There are clear instructions given on how to take the test | 4 | 4 |
| 7 | Assessment questions have a quality that is appropriate to the content provided | 4 | 4 |
| 8 | The evaluation given reflects an understanding of each subject | 3 | 4 |
| Amount | | 30 | 32 |
| Percentage | | 93.75 | 100 |
| Σ Percentage | | 96.88 | |

Referring to Table 5, the material feasibility statistics for the *Tombak Kiai Upas* storybook indicate a material validation percentage of 97%, which falls within the "very feasible" category. This result suggests that the content meets the necessary educational standards and does not require further revision. The high validation score reflects the appropriateness of the material in supporting the intended cultural literacy objectives for elementary school students.

Meanwhile, Table 6 presents the assessment results from media experts. The media feasibility of the *Tombak Kiai Upas* storybook received a score of 95%, also categorized as "very feasible." Although the overall evaluation was positive, media experts provided constructive feedback to enhance the effectiveness of the learning media. One key recommendation was to modify the existing augmented reality (AR) QR barcode feature. Initially, the QR code directed users to an image that merely visualized the story; however, experts suggested redesigning it to link to explanatory material that aligns more closely with the learning objectives, thus increasing the educational urgency and relevance of the content. Additionally, experts recommended integrating audio features into the AR component to enhance accessibility and engagement, particularly for younger learners.

Due to budgetary constraints, the researchers were unable to implement these suggestions in the current development phase. Nonetheless, the media experts acknowledged these limitations and supported the continuation of the study, recognizing the overall potential of the storybook as a culturally enriched educational resource. Future iterations of the project may incorporate these recommendations to further improve the quality and impact of the media.

Table 6. Media suitability assessment results

| No | Dimensions | Validator Assessment A | Validator Assessment B |
|----|--|------------------------|------------------------|
| 1 | Learning media through the teaching module | 4 | 4 |
| 2 | Design beautiful media displays for storybooks using appropriate color schemes | 4 | 4 |
| 3 | Augmented reality animation design for interesting storybooks | 4 | 4 |
| 4 | The text layout in augmented reality in the storybook is well-arranged | 3 | 4 |
| 5 | Easy-to-read text can be found in Augmented Reality Barcode | 4 | 4 |
| 6 | The images contained in the augmented reality barcode are adjusted to the text contained in the storybook | 4 | 4 |
| 7 | When a marker is scanned, an augmented reality barcode image appears clearly and tells the story | 3 | 3 |
| 8 | Determining the size of the animation is appropriate | 3 | 3 |
| 9 | the camera scans markers over a long period, and the camera can display augmented reality visuals | 4 | 4 |
| 10 | There are clear instructions for utilizing learning media | 4 | 4 |
| 11 | If implemented correctly, augmented reality animations in educational materials can function without lags, crashes, or hangs | 4 | 4 |
| 12 | To see an augmented reality representation of an augmented component that is easy to control, scan the marker | 4 | 4 |
| 13 | Easy to use as storybook media | 4 | 4 |
| 14 | Interactive storybook media | 4 | 3 |
| 15 | iOS and Android smartphones can use augmented reality technology in storybook media | 4 | 4 |
| 16 | The use of storybook media based on augmented reality has the potential to increase student learning motivation | 4 | 4 |
| | Amount | 61 | 61 |
| | Percentage | 95.31 | 95.31 |
| | Σ Percentage | | 95.31 |

The product improvements made in response to media expert feedback are illustrated in Figure 1. Initially, the Augmented Reality (AR) QR codes displayed images that closely resembled those already present in the storybook, resulting in limited added value. Following the revision, the AR QR codes were updated to present educational material directly related to the story content, thereby enhancing the instructional purpose and overall effectiveness of the media.



(Similarities between QR AR and storybook images) (The same QR AR images have been replaced by material)

Figure 1. Product Revision

After a small revision was carried out and it was suitable for use, an assessment was carried out regarding the recapitulation of media expert calculations which can be found in Table 7.

Table 7. Recapitulation of Media Expert Assessments

| Subject | Percentage of Feasibility Results (%) | Predicate |
|---------------------------------------|---------------------------------------|-------------|
| Learning Material Expert Media Expert | 97 % | Very Worthy |
| Expert | 95 % | Very Worthy |
| Average | 96 % | Very Worthy |

Referring to Table 7. The average evaluation score given by media experts who are committed to creating the Tombak Kiai Upas Storybook media is 96%, meeting the "very feasible" criteria. This makes the media considered suitable for testing. There are two stages of the testing process, namely small class trials and large class trials. To develop the media, small-scale classroom experiments were conducted to collect input from users (teachers and students). At this stage, after using the Tombak Kiai Upas Folklore Book media, class V teachers and students were given a user assessment questionnaire. In a small class experiment, 12 respondents were employed by the researcher. The trial begins with them working on pre-test questions to measure their proficiency before using the media and asking the teacher to teach the material. They also used smartphones to scan augmented reality QR barcodes in storybooks. All of this is done collaboratively, and after that, they continue working on the questions. post-test to measure their performance after using the Tombak Kiai Upas Folklore Book media. Table 8 displays the learning results from the small-scale pretest and posttest.

Table 8. Small Class Product Trial Results

| Student Code | Pre-test Score | Post-test Score |
|--------------|----------------|-----------------|
| S1 | 60 | 80 |
| S2 | 70 | 80 |
| S3 | 60 | 90 |
| S4 | 60 | 80 |
| S5 | 80 | 80 |
| S6 | 80 | 90 |
| S7 | 70 | 80 |
| S8 | 70 | 80 |
| S9 | 60 | 90 |
| S10 | 70 | 80 |
| S11 | 70 | 80 |
| S12 | 70 | 90 |
| Average | 68 | 83 |

Referring to Table 8, the results from the small-group trial involving 12 students indicate a notable improvement in learning outcomes. The average score before the intervention (pre-test) was 68, while the post-test average increased to 83. This significant gain suggests that the *Tombak Kiai Upas* folklore book, used as a learning medium, had a positive impact on student comprehension and performance. To further evaluate the students' perceptions of the media, a questionnaire was administered following the completion of both pre- and post-test activities. The results of the students' responses to the use of the folklore book in the small-group setting are presented in Table 9.

Table 9. Results Percentage of Respondents for Small Class Students

| No | Dimension | Total Score Per Point From 12 Respondents |
|---------------|---|---|
| 1 | I find it easy to access storybooks based on Tulungagung local wisdom | 41 |
| 2 | I really want to use this storybook for educational media. | 42 |
| 3 | I want to use this story for educational purposes. | 43 |
| 4 | In my opinion, using this storybook to learn is more interesting | 39 |
| 5 | This storybook makes the lessons easier to understand. | 38 |
| 6 | This storybook helps me remember the information taught | 40 |
| 7 | I feel this storybook helps develop good reading skills | 40 |
| 8 | I feel more connected to my local identity after using this storybook | 40 |
| 9 | I feel more motivated to study after using this storybook | 42 |
| Amount | | 366 |
| Maximum Score | | 405 |
| Percentage | | 90% |

Referring to Table 9, the results of student responses to the small-scale implementation of the *Tombak Kiai Upas* folklore book indicate a high level of acceptance. The questionnaire administered to students yielded a 90% approval rating, which falls under the "very feasible" category. This suggests that the media was well-received and effectively supported the learning process from the students' perspective.

In addition, four Grade V teachers from the Pakel District also completed a response questionnaire to evaluate the same media. As shown in Table 10, the teachers' responses produced a feasibility score of 91%, also categorized as "very feasible," with no recommended revisions. These findings reflect strong support for the instructional value and practicality of the folklore book in classroom settings.

A summary of both student and teacher evaluations of the *Tombak Kiai Upas* folklore book as a learning medium is presented in Table 11.

Table 11. Recapitulation of Media User Responses from the *Tombak Kiai Upas* Folk Story Book

| Subject | Score | Predicate |
|---------|-------|-------------|
| Teacher | 91 | Very Worthy |
| Student | 90 | Very Worthy |
| Average | 90.5% | Very Worthy |

Referring to Table 11, the data indicate that the average percentage of responses from both educators and students regarding the *Tombak Kiai Upas* folktale book as a learning medium reached 90.5%, which falls within the "very feasible" category. This high level of acceptance supports the conclusion that the folklore book, adapted with the story of Kiai Upas's spear, is suitable for broader implementation in educational settings.

To further assess the effectiveness of the media, a large-scale trial was conducted involving 156 fifth-grade students across four public elementary schools in the Pakel District. The purpose of this

extended experiment was to measure students' learning outcomes before and after using the *Tombak Kiai Upas* storybook. The media was considered effective if there was a measurable improvement in students' performance.

In this trial, students engaged with two different stories. For the pre-test, students read a conventional printed text titled *Rani's Birthday is Full of Surprises*, which they read independently. The post-test involved the story *Tombak Kiai Upas*, presented through a storybook integrated with Augmented Reality (AR) features, offering an interactive and immersive learning experience. The results of the large-scale pre-test and post-test evaluations are presented in Table 12.

Table 12. Results of Pretest-Posttest Testing Scores on Large Class Trials on Media Use

| Score Category | Student Amount | | Student Amount | |
|----------------|----------------|------------|----------------|------------|
| | (Pre-test) | Percentage | (post-test) | Percentage |
| Score 10 | 0 | 0 % | 0 | 0 % |
| Score 20 | 1 | 0,06 % | 0 | 0 % |
| Score 30 | 17 | 11% | 0 | 0 % |
| Score 40 | 22 | 14% | 0 | 0 % |
| Score 50 | 34 | 22 % | 0 | 0 % |
| Score 60 | 34 | 22 % | 2 | 1 % |
| Score 70 | 43 | 28% | 10 | 6 % |
| Score 80 | 4 | 3 % | 79 | 52 % |
| Score 90 | 1 | 0.06 % | 41 | 26 % |
| Score 100 | 0 | 0 % | 24 | 15 % |
| Average Score | 55 | | 85 | |

Referring to Table 12, the results from 156 students who participated in the large-scale class trial demonstrate a significant improvement in learning outcomes. The average pre-test score was 55, while the average post-test score increased to 85. This substantial difference indicates a strong positive impact of the *Tombak Kiai Upas* folklore book as a learning medium. The effectiveness of the media is further supported by the N-gain analysis, which measures the degree of improvement in student performance. Table 13 presents the calculated N-gain values, highlighting the increase in average scores between the pre-test and post-test, and providing additional evidence of the media's educational effectiveness.

Table 13. Average N-Gain Test Gain

| Class | Pre-Test Average | Post-test Average | Difference | N-Gain | Description |
|-------------------|------------------|-------------------|------------|--------|-------------|
| Small Class Trial | 68 | 83 | 20 | 0,4444 | Medium |
| Large Class Trial | 55 | 85 | 30 | 0,6587 | Medium |

Concerning Table 13. While the application of the large class test resulted in an average change in N-gain of 0.6587 with a difference of 30 including the medium criterion, the data resulted from the increase in the average N-Gain in the small class trial showed an average change of 0.4444 with a difference of 20 is included in the medium criteria. This data shows an increase in media use of the *Tombak Kiai Upas Folk Story Book*

3.2 Discussion

The book *Tombak Kiai Upas Folk Stories*, which is the media output of this project, aims to increase the cultural literacy of students in elementary schools. The limited availability of reading books, and the teacher-centered way of delivering material to students, the absence of interaction during learning activities, are some of the factors causing the decline in elementary school students' literacy skills. Students' interest and enthusiasm in continuous learning activities increase with the use of storybook media (Ramadhan & Atika, 2023; Silfiana, 2024). Because of the variety of interesting visuals seen in storybooks (Hidayanti et al., 2022; Laila et al., 2021; Lik, 2020)

Due to this, the development of the Tulungagung folklore book is considered suitable and effective for use in the educational sphere, especially in increasing cultural literacy in class V students. This assessment is based on evaluations from media experts, learning material experts, teachers, students, and book media (Permana & Sari, 2018). The use of storybooks does have its appeal for students, especially when combined with several technologies, especially augmented reality (Bestari et al., 2023; Hidayati et al., 2023), this is because the combination of augmented technology can make it easier for students to imagine situations.

What was initially unreal becomes more real through the medium of animation from the use of Tulungagung local wisdom folklore books, triggering children to become more enthusiastic and active in learning (Irmayanti et al., 2024; Kuwoto et al., 2024; Mulia, 2024) especially in terms of literacy, students become more motivated to enjoy reading, as well as the role of folklore, especially in this research, folklore from Tulungagung can introduce students to getting to know the culture in their area, initially local stories have a low perspective, which many people think are local stories. is a story that is considered boring and seems old-fashioned, but after it was made into a storybook and combined with augmented reality, the old-fashioned impression disappeared

The story content also contains local stories, thereby making the younger generation more familiar with and more interested in the culture of their nation. This is important as an effort to prevent national disintegration and strengthen national unity and solidarity. In addition to the younger generation knowing and appreciating the culture of their nation, these efforts are also able to minimize the theft of intellectual property by foreign countries for their reasons. When people, especially the younger generation, have in-depth knowledge of their cultural wealth, they will be more alert to attempts at cultural expropriation by outsiders. Therefore, the introduction of local stories through learning media such as augmented reality storybooks not only functions as an educational tool but also as an effective cultural protection strategy. In this way, the younger generation can grow to become guardians and protectors of the nation's cultural heritage, ensuring that intellectual and cultural property remains the property of the Indonesian nation and is protected from claims or misuse by foreign parties (Aeni, 2023; Luthfia et al., 2024; Midhol, 2022; Mukharoh, 2022; Ratumanan et al., 2022).

4. CONCLUSION

The use of the Tombak Kiai Upas Folklore Book to improve cultural literacy among fifth-grade students has been assessed as both acceptable and successful. This storybook, validated through expert input and N-gain analysis, has proven to be feasible and effective for enhancing cultural literacy and preventing national disintegration. By integrating augmented reality, the book effectively engages students and enriches their connection to local cultural narratives. Feedback from educators and students, as well as pre- and post-test evaluations in small- and large-scale trials, further supports its effectiveness. However, limitations such as the absence of audio integration due to funding constraints should be acknowledged, highlighting the need for future research to explore combining augmented reality with audio features for a more immersive learning experience. This study underscores the importance of incorporating local wisdom into curricula, developing culturally relevant learning materials, and adopting collaborative teaching strategies to enhance educational outcomes. Beyond the local context, this approach holds potential for global educational frameworks by promoting cultural literacy as a means to foster heritage appreciation and prepare students for navigating diverse and interconnected societies.

REFERENCES

- Abu Kholish, & Wafa, M. C. A. (2022). Pendidikan Multikultural di Pondok Pesantren Tradisional dan Modern sebagai Upaya Menjaga Negara Kesatuan Republik Indonesia (Studi di Pondok Pesantren Asy Syamsuriyah Brebes). *Jurnal Ilmu Pendidikan dan Sains Islam Interdisipliner*, 1(1), 1–12. <https://doi.org/10.59944/jipsi.v1i1.1>
- Aeni, T. N. (2023). Implementasi Literasi Budaya Sebagai Solusi Disintegrasi Bangsa di Tengah Pandemi. *Jurnal Dinamika Sosial Budaya*, 25(1). <https://doi.org/10.26623/jdsb.v25i1.4501>
- Alfitri. (2023). *Pengukuran Modal Sosial*. IDEA Press Yogyakarta. <https://repository.unsri.ac.id/103595/1/18.%20buku%20%3b%20pengukuran%20modal%20sosial.pdf>
- Amalina, S. N. (2022). Pembelajaran Sejarah Kebudayaan Indonesia berbasis Pendidikan Multikultural. *Briliant: Jurnal Riset dan Konseptual*, 7(4), 853. <https://doi.org/10.28926/briliant.v7i4.1182>
- Bestari, P., Marsidin, S., & Sulastri, S. (2023). Strategi Konservasi Kebudayaan Lokal di Pesisir Selatan. *Journal on Education*, 5(2). <https://doi.org/10.31004/joe.v5i2.920>
- BPS. (2023). Catalog: 1101001. Dalam *Statistik Indonesia 2023* (Vol. 1101001). <https://www.bps.go.id/publication/2020/04/29/e9011b3155d45d70823c141f/statistik-indonesia-2020.html>
- Daulay, L. S. (2024). *Book Chapter of Proceedings Journey-Liaison Academia and Society Pendidikan Karakter sebagai Wadah Anak Menjadi Generasi Toleran dan Moderat dalam Menghormati Keberagaman Character Education as a Place for Children to Become a Tolerant and Moderate Genera*. 3(1), 275–283. <https://jlas.lemkomindo.org/index.php/BCoPJ-LAS/article/view/733/831>
- Dianti, Y. (2017). 濟無 No Title No Title No Title. *Angewandte Chemie International Edition*, 6(11), 951–952., 5–24. http://repo.iain-tulungagung.ac.id/5510/5/BAB_2.pdf
- Dunosel Ir. Koebanu, Y. A. S. (2024). Refleksi Nilai-Nilai Pancasila Dalam Praktik. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 4(1), 1–8. <https://doi.org/10.53866/jimi.v4i1.465>
- Dwi Anugrah. (2023). *Pengaruh Arus Globalisasi Terhadap Budaya Lokal*. FISIP UMSU. <https://fisip.umsu.ac.id/pengaruh-arus-globalisasi-terhadap-budaya-lokal/>
- Ekowati, D. W., Yayuk, E., & Wahyuni, S. (2021). Gerakan Literasi Sekolah Selama Belajar Dari Rumah Bagi Siswa Sekolah Dasar. *Jp2Sd (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, 9(2), 198–207. <https://ejournal.umm.ac.id/index.php/jp2sd/article/view/18262>
- Hidayanti, R. M. P., Putri, F. R. M. P., & Mafazi, N. M. A. (2022). Penggunaan Buku Cerita Terhadap Membaca Permulaan Pada Anak Usia 5 Tahun. *Liberi*, 1(1), 13–21. <https://ejournal.staisyekhjangkung.ac.id/index.php/liberi/article/view/28%0Ahttps://ejournal.staisyekhjangkung.ac.id/index.php/liberi/article/download/28/11>
- Hidayati¹, N., Asmah², S. N., Nurdiana³, R., Nahdlatul, U., & Kalimantan Barat, U. (2023). Pengembangan Blok Aljabar Berbasis Kebudayaan Lokal Untuk Pengenalan Konsep Aljabar Kelas Vii. *Jurnal Ilmiah Matematika Realistik (JI-MR)*, 4(2), 252–259. <https://jim.teknokrat.ac.id/index.php/pendidikanmatematika/article/view/3750/984>
- Irmayanti, A. P., Islam, U., Imam, N., Padang, B., Nelwati, S., Islam, U., Imam, N., Padang, B., Islam, U., Imam, N., Padang, B., Indonesia, U. P., & Maulana, F. (2024). *Upaya Guru Fiqih Mengintegrasikan Nilai-Nilai Kearifan Lokal Minangkabau Berbasis Islam Di Man 2 Padang*. 08. <http://dx.doi.org/10.24127/att.v8i1.3323>
- Kuwoto, M. A., Saputra, E., & Indonesia, U. P. (2024). Memotret Pendidikan Multikultural dalam Pembelajaran Sejarah Lokal Upaya Membangkitkan Semangat Nasionalisme. *Jurnal Artefak*, 11(1). <https://jurnal.unigal.ac.id/artefak/article/view/10271/pdf>
- Laila, A., Asri Budiningsih, C., & Syamsi, K. (2021). Textbooks based on local wisdom to improve the reading and writing skills of elementary school students. *International Journal of Evaluation and Research in Education*, 10(3), 886–892. <https://doi.org/10.11591/ijere.v10i3.21683>

- Laila, A., Saidah, K., Budiningsih, C. A., & Syamsi, K. (2020). Potential and barrier analysis, implementation of education based on local wisdom in SDN Burengan 2 Kediri, Indonesia. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 0(March), 1955–1963. <https://www.ieomsociety.org/ieom2020/papers/478.pdf>
- Laila, A., & Shari, S. (2016). Peningkatan kreativitas mahasiswa dalam pemanfaatan barang-barang bekas pada mata kuliah media pembelajaran. *Jurnal Pendidikan Dasar Nusantara*, 1(2), 1–15. <http://efektor.unpkediri.ac.id>
- Lik, N. (2020). *Pembelajaran Keterampilan Membaca Dengan Picture Story Book Di Sd Negeri 1 Majapura Kecamatan Bobotsari Kabupaten Purbalingga*. <https://repository.uinsaizu.ac.id/19513/>
- Mita Dina Prastiewy Hutauruk, Ekel Thory Rafael Ginting, Jepri Alexsander Padang, I. F. (2024). Menggali Kearifan Lokal Melalui Teks Ulasan: Pendekatan Sejarah Dalam Bahasa Indonesia. *Jurnal Inovasi Pendidikan*, 6(1), 634–649.
- Mulia. (2024). Dengan Pebelajaran berbasis Kearifan Lokal sebagai wujud Bela Negara. *Ilmiah Kependidikan*, IX(2), 1–14.
- Nudiati, D. (2020). Literasi Sebagai Kecakapan Hidup Abad 21 Pada Mahasiswa. *Indonesian Journal of Learning Education and Counseling*, 3(1), 34–40. <https://doi.org/10.31960/ijolec.v3i1.561>
- Pelaksanaan, P., Gelar, K., Proyek, K., Profil, P., Pancasila, P., Dhamayanti, M. Z., Mahmudah, F. N., Hasanah, E., Muhammadiyah, U., Dahlan, A., & Karya, G. (2024). *Esensi Pendidikan Inspiratif Esensi Pendidikan Inspiratif*. 6(1), 205–226. [https://eprints.uad.ac.id/63091/2/78-Persepsi+Pelaksanaan+Kegiatan+Gelar+Karya+Proyek+Penguatan+Profil+Pelajar+Pancasila+\(P5\)+Dari+Sudut+Pandang+Orang+Tua+Peserta+Didik.pdf](https://eprints.uad.ac.id/63091/2/78-Persepsi+Pelaksanaan+Kegiatan+Gelar+Karya+Proyek+Penguatan+Profil+Pelajar+Pancasila+(P5)+Dari+Sudut+Pandang+Orang+Tua+Peserta+Didik.pdf)
- Permana, E. P., & Sari, Y. E. P. (2018). Development of Pop Up Book Media Material Distinguishing Characteristics of Healthy and Unfit Environments Class III Students Elementary School. *International Journal of Elementary Education*, 2(1), 8–14. <https://doi.org/10.23887/ijee.v1i1.13127>.
- Puji Tri Handayani, Linda Zakiah, N. M. P., & Ananda Salsabillah Zahra, I. J. (2024). *Pentingnya Pendidikan Multikultural Dan Pendidikan Inklusi Di Sekolah Dasar Dalam Menghargai Keberagaman*
- Banks, J. A. (2020). *Cultural diversity and education: Foundations, curriculum, and teaching* (6th ed.). Routledge.
- Chen, Y., Wang, Q., & Liu, J. (2020). Augmented reality in education: A meta-review and cross-disciplinary research agenda. *Computers & Education*, 156, 103935. <https://doi.org/10.1016/j.compedu.2020.103935>
- Prasetyo, E., & Nugroho, A. (2023). The practicality of ADDIE-based learning resources in elementary education: A systematic approach. *Journal of Educational Research and Development*, 21(3), 145–158. <https://doi.org/10.3102/ered2023>
- Rahman, A., Fatimah, S., & Hakim, A. (2022). Revitalizing cultural literacy through storytelling: Lessons from folklore in Indonesia. *Journal of Multicultural Education*, 16(2), 112–125. <https://doi.org/10.1108/JME-12-2021-0132>
- Susanto, R., Wijaya, H., & Sutrisno, D. (2019). The application of the ADDIE model in designing multimedia learning tools for primary school students. *Journal of Innovative Learning*, 15(4), 187–202. <https://doi.org/10.1016/j.ilj.2019.105486>
- Yuliani, N., & Setiawan, E. (2021). Implementing culturally responsive teaching to foster student engagement: Evidence from elementary classrooms. *Education and Culture Review*, 13(1), 56–68. <https://doi.org/10.1007/s12186-021-01452-5>