

## Development of Non-Text Teaching Materials to Enhance Social Care Attitudes in Elementary Schools

Nana Sutarna<sup>1\*</sup>, Aim Abdulkarim<sup>1</sup>, Bunyamin Maftuh<sup>1</sup>, Kokom Komalasari<sup>1</sup>

<sup>1</sup> Universitas Pendidikan Indonesia Bandung, Indonesia

 [sutarna89@upi.edu](mailto:sutarna89@upi.edu)\*

### ABSTRACT

The purpose of this study is to develop non-text teaching materials based on the social capital of local wisdom, used as an alternative learning resource in elementary schools to foster students' social care attitudes. This research employed the research and development (R&D) method. The Borg & Gall model served as the foundation, but for practicality, it adopted Sukmadinata's simplification into three major stages: preliminary study, teaching material development, and effectiveness testing. The development of non-text teaching materials rooted in Kuningan's local wisdom was carried out through stages of needs analysis, design, validation, revision, and trials, resulting in a final product ready for dissemination. The content was packaged in the form of 3D illustrated stories that highlight Kuningan's cultural values such as gotong royong (mutual cooperation), silih asih-silih asah-silih asuh (mutual love, care, and guidance), and local traditions, with the aim of cultivating students' social care attitudes. Expert validation indicated a high level of feasibility with minor revisions, while feedback from FGDs emphasized the need for reflective activities and a glossary. Both limited and extensive trials demonstrated that the teaching materials were well received by students, as evidenced by increased comprehension, engagement, and relevance. The effectiveness of the materials was supported by statistical data, where the experimental group's N-Gain reached 51.16% (moderate) compared to the control group's 8.91% (low), with the Mann-Whitney U test showing a significant difference in post-test results ( $p = 0.000$ ). These findings align with Lickona's character education theory and recent research affirming the importance of reinforcing local cultural values, making these materials strategic for fostering elementary students' social care attitudes. This study demonstrates that non-text teaching materials based on local wisdom are effective in developing elementary students' social care attitudes. The practical implication is that teachers can utilize them as contextual alternative learning media, while policymakers may adopt them as references for curriculum development grounded in local cultural values.

**Keywords:** Social Care Attitude, Non-Text Teaching Materials, Social Capital Of Local Wisdom.

### ARTICLE INFO

*Article history:*

Received

April 10, 2025

Revised

October 25, 2025

Accepted

November 17,  
2025

Published by

Website

E-ISSN

Copyright



Institut Agama Islam Ma'arif NU (IAIMNU) Metro Lampung  
<https://journal.iaimnumetrolampung.ac.id/index.php/ji/index>  
2548-7892

This is an open access article under the CC BY SA license  
<https://creativecommons.org/licenses/by-sa/4.0/>  
© 2025 by the authors

### INTRODUCTION

Entering the era of Society 5.0, education is confronted with new challenges that demand the integration of technological advancement with the strengthening of human values. This era emphasizes the utilization of advanced technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), and big data as means to create solutions to social problems and enhance the overall quality of human life. In other words, Society 5.0 is not merely an era of digitalization, but an era in which technology serves as a tool to support human well-being and meaningful existence. As emphasized by the Government of Japan in its original concept,

Society 5.0 is “a human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space.” (Fukuyama, 2018)(Kaspar, K. L., 2023). Therefore, the world of education must be able to prepare human resources who are not only technologically literate, but also possess empathy, ethics, and a strong sense of social awareness(Al-Jbouri, E., Andrews, N. C. Z., Peddigrew, E., Fortier, A., & Weaver, 2023). This is crucial because technological advancement, if not accompanied by human values, has the potential to cause dehumanization in social interactions. Education must serve as the foundation for shaping individuals who are intellectually intelligent, resilient in facing global challenges, and at the same time uphold moral values and concern for others. In this way, a generation will emerge that is not only ready to face the digital era, but also capable of maintaining a balance between technological innovation and humanity.

Amid the progress of the times, various problems concerning the social aspects of human life have emerged. One of the main issues that has surfaced is the decline in social concern, as reflected in the increasing cases of bullying in elementary schools. This phenomenon has been recorded in several prominent cases in Kuningan Regency, West Java. The first case occurred in 2023, as reported by detik.com on October 27, 2023, in an article entitled “Ironi Bocah SD di Kuningan Dibully Teman Sebaya hingga Trauma” (“The Irony of an Elementary School Student in Kuningan Bullied by Peers Until Traumatized”). A second-grade student experienced physical violence to the temple and back, resulting in psychological trauma. Meanwhile, the second case occurred in 2024, based on a report from kabarsbi.com (17 Mei 2024) Meanwhile, the second case occurred in 2024, reported in the news article entitled “Terkait Bullying Kakak Beradik Siswa SD Negeri 1 Paninggaran Perlu Penyikapan yang Serius Pemerintah” (“Regarding Bullying of Siblings at SD Negeri 1 Paninggaran, the Government Needs to Take Serious Action”). In this case, two siblings, Parhan and Muhamad Alfarizi, became victims of bullying at their school. The case received serious attention from the Department of Education and Culture of Kuningan Regency, as stated in an official release through its Instagram account @disdikbud\_kabkuningan pada 18 Mei 2024.

The social concern of elementary school students shows diverse tendencies and has become an important issue in the field of basic education. Saraswati and Apriyani revealed that although some students demonstrate caring attitudes toward their peers and surrounding environment, many still lack strong social awareness (Saraswati et al., 2020) (Apriyani et al., 2021)(Ribosa, J., & Duran, 2022a). Individualistic attitudes and a lack of empathy are often found in daily interactions at school. Environmental factors, parenting styles, and social media also influence the level of social concern among elementary school children. Character education in schools plays an important role, particularly in learning activities that directly involve social values, such as mutual cooperation (gotong royong), group discussions, or contextual learning. (Arif et al., 2021).

Efforts to develop students’ social concern have also been carried out through engaging and contextual learning approaches. Vindaswari developed a picture storybook containing values of social concern, which proved effective in instilling these values in second-grade elementary school students. (Vindaswari & Ulfah, 2018). Meanwhile, Hermanto highlights the role of Social Studies learning in shaping students’ social character, as this subject provides space to understand societal conditions and foster empathy. (Hermanto et al., 2019). With the right approach, both from schools and families, the social concern of elementary school students can be nurtured and strengthened as an essential part of character education.

The needs analysis for the use of teaching materials in elementary schools is essential to ensure the effectiveness of the learning process. Teaching materials must be developed in accordance with the curriculum and the needs of students so that learning becomes more structured and meaningful. (Malahayati & Zunaidah, 2021). This is in line with Rosilia’s findings, which show that elementary school students require teaching materials that are contextual, engaging, and aligned with their cognitive development level. (Rosilia et al., 2020). his needs analysis serves as the foundation for designing teaching materials that can support the achievement of basic competencies set out in the curriculum. Meanwhile, Putri emphasizes the importance of integrating digital literacy content grounded in local wisdom, such as the

Saprahan tradition in Pontianak, as a means of cultural preservation as well as strengthening students' character. (Putri, 2019). These studies indicate that the needs analysis of teaching materials must take into account the cognitive, affective, and socio-cultural aspects of students, so that learning becomes more holistic and meaningful. The importance of local wisdom-based teaching materials in elementary schools lies in their role in shaping students' character and identity from an early age. Haerunnisa conducted research on the integration of local wisdom values found in Kampung Nambangan, which was shown to strengthen character education through Social Studies learning. (Haerunnisa et al., 2020). Values such as mutual cooperation (gotong royong), tolerance, and environmental awareness can be instilled through local cultural stories and practices, making learning more contextual and meaningful for students. This helps students to understand and appreciate their own culture, while also fostering a sense of pride in their local identity. In addition to serving as a medium for character formation, local wisdom-based teaching materials also function as a bridge between the world of formal education and community culture.

Another study was conducted (Nofrianti, 2019) which revealed the importance of aligning local wisdom-based teaching materials with the learning content, such as in seloko learning in elementary schools, which contains moral and social values. (Nofrianti, 2019). This integration creates continuity between students' daily lives and what they learn at school. Thus, students do not only learn theory but also directly experience the meaning of cultural values in contexts close to their lives. More broadly, the development of local wisdom-based teaching materials also serves as a means of cultural preservation and heritage transmission. The study conducted by Ulumuddin and Ismawati, although carried out at the higher education level, remains relevant as it demonstrates how local teaching materials can foster a love for culture and encourage active and reflective learning (Srinawati, D. R., Zaman, A. Q., 2023). (Ulumuddin & Ardiana, 2015)(Ismawati et al., 2023). An enrichment book with local content has also been developed for prospective elementary school teachers, indicating the importance of early preparation for educators so that they are able to apply local values in the teaching and learning process. (Sundari et al., 2020). Dengan Thus, local wisdom-based education in elementary schools not only strengthens learning but also ensures the sustainability of the nation's cultural values. Social capital and local wisdom have a close relationship in shaping social cohesion and community empowerment (Soorianarayanan, R. R., & Abd Rahman, 2024). Local wisdom contains values, norms, and traditional practices that have been proven to maintain social harmony within communities, forming the foundation for the development of social capital such as trust, social networks, and cooperation among citizens. Hermanto Suaib and Salim demonstrated that the local wisdom of the Moi and Ulun Lampung communities serves as an important foundation for strengthening community solidarity and creating mutually supportive social systems. (H Hermanto Suaib, 2017)(Salim, 2023). In this context, local wisdom is not merely a heritage culture, but also a social resource that strengthens community resilience against various challenges, including social change and development.

Furthermore, local wisdom and social capital have also been proven effective in fostering community resilience to conflicts and disasters. The integration of local values such as deliberation (musyawarah), mutual cooperation (gotong royong), and customary-based conflict resolution serves as a powerful form of social capital in maintaining peace and environmental sustainability. (Handoko, 2019) (Marfai et al., 2018). Another study by Suryawan and Handayani showed that local traditions, such as Perang Topat, not only strengthen cultural identity but also serve as instruments of value education in Social Studies learning (Jibililu, 2024)(Suryawan, 2017)(Handayani & Abdulkarim, 2024). Therefore, the social capital built from local wisdom not only impacts community empowerment in economic and social aspects but also plays a strategic role in maintaining social integration and harmony among groups.

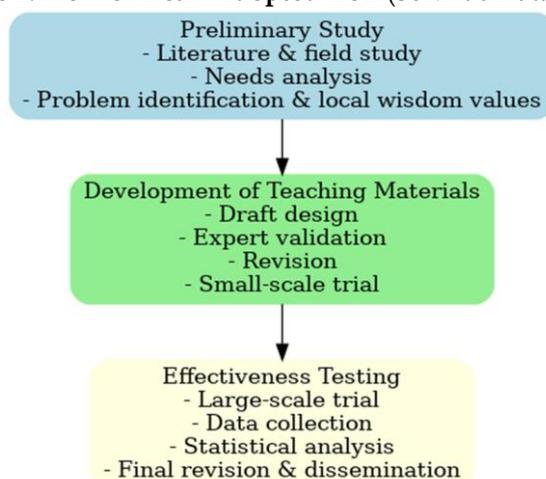
This study aims to develop non-text teaching materials based on the social capital of local wisdom that can be used as an alternative learning resource in elementary schools to foster students' social care attitudes. By integrating social and local cultural values into the teaching materials, this research seeks to provide contextual and meaningful learning experiences that are relevant to students' everyday life (Ribosa, J., & Duran, 2022b)(Srinawati, D. R., Zaman, A.

Q., 2023). In addition, the study also aims to examine the feasibility, effectiveness, and attractiveness of these non-text materials in supporting a learning process that is not only oriented toward cognitive knowledge but also toward the formation of social character rooted in the cultural values and local wisdom of the Kuningan community. Thus, the results of this study are expected to make a tangible contribution to the development of character education in elementary schools.

## METHOD

This study employs the Research and Development (R&D) method with the aim of producing non-text teaching materials based on the social capital of local wisdom that can enhance the social care attitudes of elementary school students. The R&D model Borg & Gall (Borg, W.R and Gall, 2003) served as the foundation; however, to facilitate implementation, the researcher adopted a simplification from (Sukmadinata, 2013) into three main stages, namely preliminary study, development of teaching materials, and effectiveness testing. Each stage was systematically designed to ensure that the resulting product is relevant to students' needs, contextualized within local culture, and applicable in the learning process.

**Figure 1. Flow of R&D Adopted from(Sukmadinata, 2013).**



The preliminary study was carried out through a literature review and field study. The literature review focused on materials related to teaching resources, social capital, local wisdom, and social care attitudes. Meanwhile, the field study was conducted in several elementary schools in Kuningan Regency to explore factual information about learning conditions, school readiness, as well as the needs of teachers and students. The results of these two methods served as both a conceptual and practical foundation in designing appropriate teaching materials. At this stage, the researcher also developed research instruments in the form of questionnaires, observations, and documentation to obtain more accurate data. The following are the research sites and subjects.

**Table 1. Research Sites and Subjects**

No	Elementary School Name	Grade	Description
1	SDN 2 Kutakembaran	IV	Limited Trial Location
2	SDN 2 Ciloa	IV A	Extensive Trial Location
3	SDN 2 Ciloa	IV B	Extensive Trial Location
4	SDN 1 Cengal	IV	Extensive Trial Location
5	SDN Garawangi	IV A	Teaching Material Effectiveness Test
6	SDN Garawangi	IV B	Teaching Material Effectiveness Test
7	SDN 1 Bojong	IV	Teaching Material Effectiveness Test
8	SDN 1 Karoya	IV	Teaching Material

The development stage of the teaching materials was carried out gradually, starting with the design, which was validated by experts, teachers, and principals through Focus Group Discussion (FGD). After receiving feedback, the draft of the teaching materials was tested on a limited scale in one elementary school. The results of the limited trial were then evaluated and revised for use in a broader trial at two elementary schools. This process produced a final draft ready to be tested in the next stage. The final stage was the effectiveness test, conducted in three elementary schools using a quasi-experimental design with a non-randomized control group, pretest-posttest. At this stage, data were collected through questionnaires, observations, documentation, and statistical analysis, including normality testing, hypothesis testing, and N-Gain testing. The results of this stage are expected to demonstrate the effectiveness of non-text teaching materials based on social capital and local wisdom in improving elementary school students' social care attitudes, as well as to contribute to the development of education grounded in local wisdom.

**Table 2. Quasi-Experimental Design**

Group	Pretest	Independent Variable	Posttest
Eksperimen	O1	X1	O2
Kontrol	O3		O4

O1 : Pretest in the experimental group

O2 : Posttest in the experimental group

O3 : Pretest in the control group

O4 : Posttest in the control group

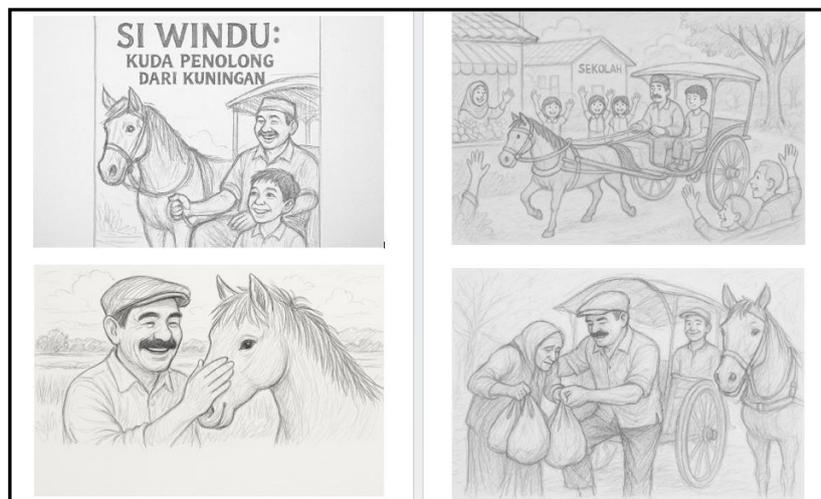
X1 : Treatment, non-text teaching material product based on social capital and local wisdom

## RESULT AND DISCUSSION

### 1. Development of Non-Text Teaching Materials Based on Social Capital and Local Wisdom

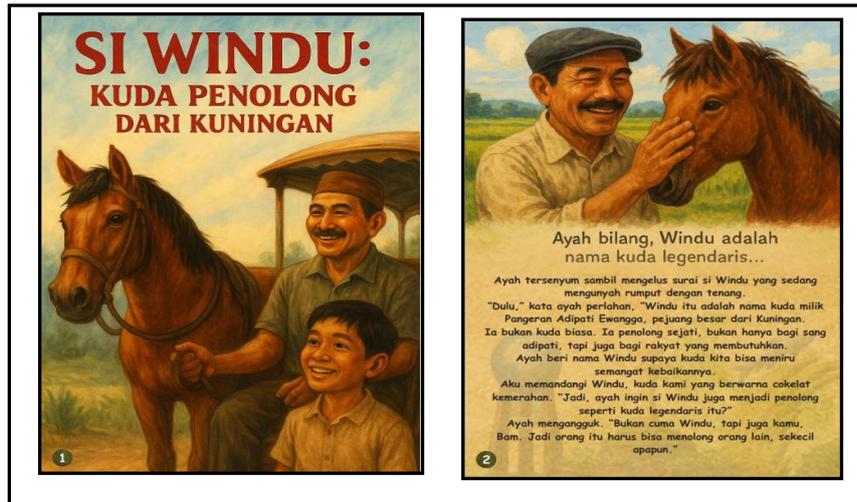
The development of non-text teaching materials based on social capital and local wisdom was carried out through a systematic process, starting from the preliminary study, needs analysis, to expert validation. The identification of problems in the field, particularly the low level of social care attitudes among elementary school students, served as the basis for designing a product that integrates the distinctive social values of the Kuningan community, such as *rereongan* (mutual cooperation), *silih asih-silih asah-silih asuh* (mutual affection, learning, and care), and respect for ancestral traditions. These values were then combined with more operational indicators of social care attitudes, such as helping, cooperating, sharing, honesty, and generosity, in accordance with the early B3 reading level for fourth-grade elementary school students. These teaching materials are designed not only as a means of literacy but also as a medium for instilling character values through reading, illustrations, and activities that support children's sociocultural experiences. The following is a sketch of the storyboard for the non-text teaching materials based on social capital and local wisdom.

**Figure 2. Storyboard of Chapter 1 Non-Text Teaching Materials**



The content of the teaching materials is presented in five story chapters, each highlighting a social care value – helping, cooperation, sharing, honesty, and generosity – using local legends and traditions of Kuningan as the context. The stories are developed in the form of panel illustrations, narratives, dialogues, and reflective activities that are engaging and easy for students to understand. To ensure message clarity and visual appeal, the researcher created a storyboard as an initial design, which was later refined into colored illustrations with simple text. Revisions were made so that the storyline, images, and text were well-integrated in accordance with the guidelines for non-textbook leveling. The final result is a prototype of non-text teaching materials that meet regulatory standards, are contextualized with local culture, and are effective in fostering social care attitudes among elementary school students.

**Figure 3. Developed Non-Text Teaching Materials**



Next, the validation stage of the non-text teaching material draft was carried out by involving two experts, namely Prof. Dr. Nana Supriatna, M.Ed. as an expert in social capital and local wisdom, and Prof. Dr. Isah Cahyani, M.Pd. as an expert in non-text teaching materials for the B3 level. The validation aimed to assess the appropriateness of content, language, and visuals to ensure the teaching materials align with the competencies and cognitive development of elementary school students. The analysis results showed that the content aspect received the highest score with a percentage of 90.00% (very feasible), while vocabulary, language structure, length, and format were categorized as feasible. Meanwhile, the visual aspect obtained the lowest score, 73.33%, thus becoming the main focus for improvement. Overall, the expert validation of the teaching materials produced an average score of 80.00% in the feasible category, indicating that the product can already be used with minor improvements on the visual side.

**Table 3. Results of Expert Validation Analysis of Non-Text Teaching Materials**

No	Assessment Aspect	Percentage	Category
1	Content (material)	90.00%	Very Feasible
2	Vocabulary	80.00%	Feasible
3	Language Structure	86.67%	Feasible
4	Visuals	73.33%	Feasible
5	Length and Format	80.00%	Feasible
<b>Total Average Percentage</b>		<b>80.00 %</b>	<b>Feasible</b>

(Source: Researcher's Data, 2025)

**Table 4. Results of Material Expert Validation Analysis**

No	Assessment Aspect	Percentage	Category
1	Relevance of content to Kuningan local wisdom	94.00%	Very Feasible

2	Accuracy	85.00%	Very Feasible
3	Presentation	90.00%	Very Feasible
4	Language Appropriateness	88.00%	Very Feasible
<b>Total Average Percentage</b>		<b>87.00 %</b>	<b>Very Feasible</b>

(Source: Researcher's Data, 2025)

In terms of content substance, the expert validation results indicate very high quality, with an average percentage of 87.00%. The aspect of content relevance to local wisdom received the highest score (94.00%), confirming that the cultural values of Kuningan were successfully integrated appropriately. The aspects of presentation, accuracy, and language appropriateness were also categorized as very feasible, demonstrating that the material has been presented systematically, accurately, and in accordance with the students' developmental level. These findings show that the non-text teaching materials are not only formally feasible but also possess substantive depth relevant to the goals of character- and culture-based learning.

The validation results were further reinforced through a Focus Group Discussion (FGD) involving the promotor, teachers, principals, and experts. The discussion produced several recommendations for improvement, such as refining the titles, using fonts more suitable for elementary school students, adding reflective activities in each chapter, preparing a simple glossary, and improving layout and headings. These suggestions were incorporated into the final draft revision with the involvement of an illustrator to ensure that visual quality, language, and content were more integrated. Thus, expert validation and the FGD played a crucial role in ensuring that the developed non-text teaching materials not only meet academic standards but are also engaging, communicative, and ready to be used as a learning resource that supports the development of students' social care attitudes. The next stage was the limited trial implementation. This phase was conducted with 24 fourth-grade students at SDN 2 Kutakembaran to test the initial feasibility of the non-text teaching materials based on social capital and local wisdom. The following are the results of the limited trial conducted.

**Table 5. Students' Responses in the Limited Trial**

No	Assessment Aspect	Percentage
1	Understanding	77.43%
2	Interest	76.64%
3	Relevance	77.98%
4	Ease of Use	77.60%
<b>Total Average Percentage</b>		<b>77.29 %</b>

The student response questionnaire results showed an average of 77.29%, categorized as good. The understanding aspect scored 77.43%, interest 76.64%, relevance 77.98%, and ease of use 77.60%. These findings indicate that the teaching materials were fairly well understood, engaging, relevant to students' lives, and easy to use, although improvements were still needed in visual appeal and language simplification.

Based on these results, the researcher revised the product before the broader trial. Improvements focused on adding colored illustrations, inserting reflective questions, simplifying language, preparing a glossary, and optimizing the layout to be more child-friendly. The relevance aspect was maintained by adding contextual examples closely related to local culture. These revisions aimed to enhance the effectiveness of the teaching materials so that in the extensive trial stage, their quality could approach the very good category. The large-scale trial was then conducted with 66 students across three classes from two schools, namely SDN 2 Ciloa and SDN 1 Cengal. The students' responses showed a significant improvement, with an average score of 87.29% categorized as very good. All assessment aspects scored above 85%, with the highest score in ease of use (87.14%). This demonstrates that the revised product is easier to understand, more engaging, relevant, and practical to use. Therefore, the developed non-text teaching material is proven to be feasible, effective, and ready for dissemination to support learning and foster students' social care attitudes in elementary schools.

No	Assessment Aspect	Percentage
1	Understanding	86.44%
2	Interest	85.44%
3	Relevance	85.88%
4	Ease of Use	87.14%
<b>Total Average Percentage</b>		<b>87.29 %</b>

(Source: Researcher's Data, 2025)

After completing all these stages, the final product was obtained. The final non-text teaching material is the result of development through the design, expert validation, limited trial, and extensive trial stages. The trial results showed significant improvements in understanding, interest, relevance, and ease of use, all categorized as very good. Thus, the teaching materials are deemed feasible, effective, and ready for dissemination as a learning resource that supports the strengthening of social care character, the instillation of local wisdom values, and alignment with the principles of the Independent Curriculum.

**Figure 4. Cover and Table of Contents of the Final Non-Text Teaching Material Product**



2. Effectiveness of Non-Text Teaching Materials Based on Social Capital and Local Wisdom

The findings from the limited and extensive trials served as the basis for refining the teaching materials to produce a final design ready to be tested in the effectiveness stage. This stage aimed to measure the extent to which the non-text teaching materials based on social capital and local wisdom could achieve the learning objectives. The study involved three elementary schools: SDN Garawangi as the experimental school with two classes (IV A with 20 students and IV B with 25 students), and SDN 1 Karoya and SDN 1 Bojong as control schools, each with one class (27 students at SDN 1 Bojong and 17 students at SDN 1 Karoya). The presence of control schools was important for comparison to observe differences in learning outcomes and social attitudes between students using the new teaching materials and those who did not.

The effectiveness test was conducted in stages, starting at SDN Garawangi on August 13, 2025, followed by SDN 1 Karoya on August 19, 2025, and SDN 1 Bojong on August 21, 2025. This sequential schedule allowed the researcher to reflect and make technical adjustments to minimize challenges in subsequent implementations. At this stage, the researcher acted as an observer to ensure the trial was conducted according to plan while collecting representative data. A comprehensive evaluation was conducted to assess the effectiveness of the teaching materials in real classroom settings, and the results were analyzed using descriptive statistics in

SPSS 26 to observe trends, score distribution, and consistency in the improvement of students' social care attitudes.

**Table 7. Descriptive Statistics Results for Experimental and Control Groups**

Descriptives					
	Kelompok		Statistic	Std. Error	
NGain_Persen	Eksperimen	Mean	51.1564	1.94731	
		95% Confidence Interval for Mean	Lower Bound	47.2318	
			Upper Bound	55.0809	
		5% Trimmed Mean	51.6971		
		Median	52.6316		
		Variance	170.641		
		Std. Deviation	13.06297		
		Minimum	6.25		
		Maximum	74.07		
		Range	67.82		
		Interquartile Range	19.20		
		Skewness	-.831	.354	
		Kurtosis	1.789	.695	
	Kontrol	Mean	8.9116	2.65390	
		95% Confidence Interval for Mean	Lower Bound	3.5595	
			Upper Bound	14.2637	
		5% Trimmed Mean	10.1988		
		Median	9.3478		
		Variance	309.901		
		Std. Deviation	17.60401		
		Minimum	-42.11		
		Maximum	40.00		
		Range	82.11		
Interquartile Range	22.22				
Skewness	-1.083	.357			
Kurtosis	1.458	.702			

(Source: Research Data Analysis Results, 2025)

The descriptive analysis results showed that the experimental group achieved an average of 51.16%, significantly higher than the control group, which only reached 8.91%, indicating a substantial positive impact of using the non-text teaching materials on improving students' social care attitudes. The median of the experimental group was 52.63%, consistent with the mean, while the control group's median was only 9.34%, reflecting minimal improvement. The score range in the experimental group (6.25%–74.07%) showed that nearly all students experienced positive gains, whereas in the control group, some students even experienced a decrease of up to -42.11%.

Furthermore, the standard deviation of the experimental group (13.06) was smaller than that of the control group (17.60), indicating more stable and consistent results. Overall, these findings reinforce that non-text teaching materials based on social capital and local wisdom not only enhance learning outcomes but also produce more consistent student achievements, in contrast to the control group, whose results were more variable. The next step was to conduct a normality test, the results of which can be seen in the table below.

**Table 8. Tests of Normality**

	Group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PreTest	Experimental	.098	45	.200*	.969	45	.273
	Control	.140	44	.029	.946	44	.039

PosTest	Experimental	.181	45	.001	.948	45	.043
	Control	.173	44	.002	.968	44	.248

\*. This is a lower bound of the true significance.

#### a. Lilliefors Significance Correction

Based on the results of the Kolmogorov-Smirnov and Shapiro-Wilk normality tests, the data distribution of the experimental and control groups showed different patterns. In the experimental group, the pre-test data were normally distributed with a significance value of 0.273 ( $>0.05$ ), indicating that students' initial abilities were relatively uniform. However, in the post-test, the significance value dropped to 0.043 ( $<0.05$ ), meaning the data were not normally distributed. This condition indicates a significant effect of the treatment, namely the use of non-text teaching materials based on social capital and local wisdom, which caused student achievements to concentrate at higher scores. Conversely, in the control group, the pre-test data were not normally distributed (Sig. 0.039  $<0.05$ ) due to considerable differences in students' initial abilities, but in the post-test, the distribution became normal (Sig. 0.248  $>0.05$ ), even though the increase in average scores was not significant.

Overall, these differences in distribution indicate that the intervention in the experimental group had a real impact on student achievement, although it caused the data to become skewed. Meanwhile, the control group showed a stabilization of score distribution without any significant improvement in performance. The implication of these findings is that the assumption of normality was not fully met, making the use of parametric statistical tests, such as the t-test, less appropriate. Therefore, the researcher employed the non-parametric Mann-Whitney U Test, which is more suitable for data with a non-normal distribution, allowing for a more accurate and valid comparison between the experimental and control groups.

**Table 9. Test Statistics<sup>a</sup>**

	PreTest	PosTest
Mann-Whitney U	929.500	7.000
Wilcoxon W	1919.500	997.000
Z	-.499	-8.085
Asymp. Sig. (2-tailed)	.618	.000

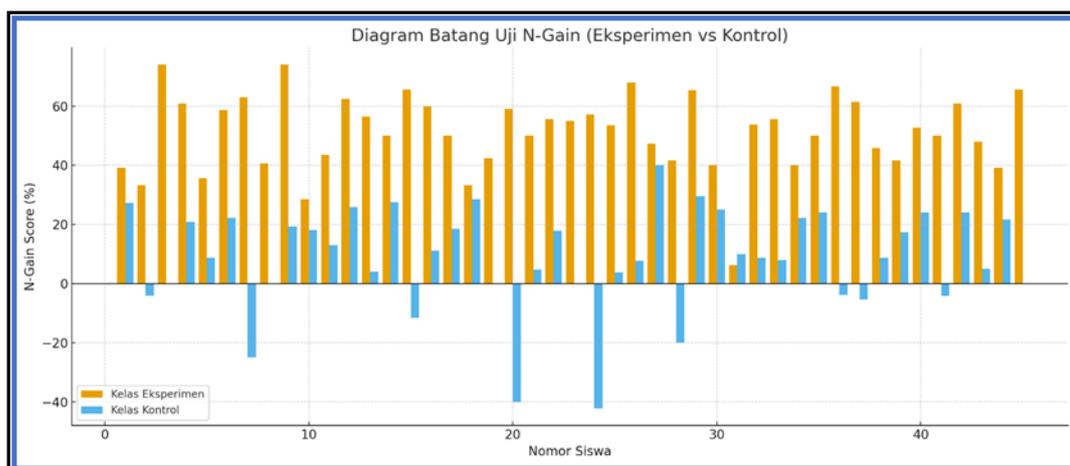
a. Grouping Variable: Kelompok

Based on the analysis presented in the table above, the Mann-Whitney U Test was used to compare two independent groups: the experimental group, which used non-text teaching materials based on social capital and local wisdom, and the control group, which used conventional teaching materials. This test was chosen due to the results of the previous normality test, which showed that the data were not fully normally distributed, making a non-parametric method more appropriate. The pre-test results showed a Mann-Whitney U value of 929.500 with a significance of 0.618 ( $>0.05$ ), indicating no significant difference between the two groups before the treatment was administered. This equivalence in initial conditions ensures that any improvements observed in the post-test can be more reliably attributed to the treatment rather than pre-existing differences among students. In the post-test phase, the analysis revealed a highly significant difference, with a Mann-Whitney U value of 7.000,  $Z = -8.085$ , and  $p = 0.000$  ( $<0.05$ ). These findings confirm that the null hypothesis was rejected and the alternative hypothesis accepted, leading to the conclusion that learning using non-text teaching materials based on social capital and local wisdom has a substantial positive impact on improving students' social care attitudes. This intervention not only provided cognitive understanding but also internalized social values through contextual learning experiences, in accordance with Lickona's (2013) character education theory.

The final step was the N-Gain test, conducted to determine the difference between pre-test and post-test scores, thereby illustrating the magnitude of improvement in students' social care attitudes after the treatment. The analysis showed that the average N-Gain score for the experimental group reached 51.16%, far higher than the control group, which only achieved 8.91%. Additionally, the minimum and maximum values in the experimental group ranged

from 6.25% to 74.07%, whereas in the control group they ranged from -42.11% to 40%. These differences indicate that nearly all students in the experimental group experienced positive improvement, while the control group showed unstable results, with some students even declining. This comparison confirms that the use of non-text teaching materials based on social capital and local wisdom is more effective in fostering students' social care attitudes than conventional learning. The N-Gain data not only demonstrate a higher average improvement but also show consistent learning outcomes within the experimental group. These findings provide empirical evidence that local wisdom-based learning interventions can strengthen character education while highlighting the importance of innovative teaching materials to enhance the quality of elementary school education.

**Figure 5. N-Gain Test of Students' Social Care Attitudes in the Experimental and Control Classes**



The average N-Gain score in the experimental group reached 51.16% or 0.51, which, according to Hake's (1999) classification, falls into the medium gain category. This achievement indicates that the use of non-text teaching materials based on social capital and local wisdom can positively impact the improvement of students' social care attitudes. Although it has not yet reached the high category, the results show that this learning intervention successfully encouraged students to become more sensitive to their social environment, develop empathy, and enhance their sense of social responsibility. Thus, the developed teaching materials not only increase knowledge but also influence students' affective domain, resulting in behavioral changes in a positive direction. These findings provide a strong basis for the wider implementation of similar teaching materials. Moreover, if supported with interactive discussion methods, reflective activities, and more optimal time allocation, the potential exists for the improvement to reach a high category.

In contrast, the average N-Gain score in the control group was only 8.91% or 0.0891, which falls into the low gain category. This indicates that conventional learning without the intervention of innovative teaching materials is not sufficiently effective in improving students' social care attitudes. In fact, some students experienced a decrease in scores (negative N-Gain), suggesting a possible decline in social sensitivity due to monotonous learning that fails to address the affective domain, or influenced by external factors such as classroom dynamics and peer influence. These results highlight the limitations of traditional learning, which focuses solely on informative aspects without contextualizing social values. The stark difference between the experimental and control groups strengthens the empirical evidence that non-text teaching materials based on local wisdom are crucial for fostering social care attitudes in a more meaningful way. These findings provide guidance for educators to not rely solely on textbooks but also to integrate learning strategies that engage students' emotions, empathy, and active participation.

## DISCUSSION

The development of these non-text teaching materials is based on constructivist theory, which emphasizes the active role of students in building knowledge through experience (Vygotsky, 1978). It underscores the importance of teacher scaffolding, making the selection of B3-level non-text books appropriate for fourth-grade students who still require support to understand social values through stories drawn from everyday life. The content of the teaching materials emphasizes Kuningan's social capital and local wisdom, such as *rereongan*, *silih asih-silih asah-silih asuh*, and the *Seren Taun* tradition. This aligns with (Haerunnisa et al., 2020) which states that local content strengthens students' emotional attachment to culture while simultaneously motivating prosocial behavior. Thus, students not only understand moral values but also build their cultural identity. The selection of the B3 level (ages 8–10) follows Puskurbuk guidelines, which align the classification with students' literacy abilities. IKAPI (2022) emphasizes that at this stage, students are beginning to grasp moral messages, so the teaching materials are designed with simple language, short sentences, and 3D illustrations to maintain reading interest and comprehension. The book consists of five chapters containing continuous stories, each highlighting different social values, such as helping, cooperation, sharing, honesty, and generosity. (Kim, 2021) It shows that storytelling is effective in enhancing social-emotional skills because it helps children understand emotions and imitate positive behaviors. 3D illustrations and story panels are used as instructional design strategies to engage students emotionally, in line with (Heinich, R., Molenda, M., Russell, J. D., & Smaldino, 1996) which emphasizes the role of visual media in clarifying abstract concepts. Each chapter is also equipped with reflective activities such as drawing, writing personal experiences, and marking character values, in accordance with the findings (Nurlela et al., 2020) that reflection strengthens the internalization of values while also helping teachers assess students' understanding.

The storyboard development stage was carried out systematically, covering ideas, storyline, characters, and moral messages, with revisions based on expert feedback and limited trials, in accordance with instructional design principles. (Tunmibi et al., 2015). The development also followed educational regulations (Law No. 3/2017; Government Regulation No. 75/2019; Ministry of Education and Culture Regulation No. 22/2022) to ensure quality. As emphasized by (Arif et al., 2021), compliance with national standards facilitates implementation in schools. 3D illustrations were combined with narratives to strengthen students' emotional engagement, in line with (Heinich, R., Molenda, M., Russell, J. D., & Smaldino, 1996; Kim, 2021) who highlight the importance of visuals in conceptual understanding and empathy. The development followed the principle of alignment among objectives, content, and media (Dick, Carey & Carey, 2015), and was validated by experts to ensure the feasibility of content, language, and visuals (Borg, W.R and Gall, 2003). Limited trials were then conducted as formative evaluation to guarantee the product's effectiveness (Tunmibi et al., 2015).

The expert validation results showed that the content aspect received a very high score (90%), in line with (Majid, 2021), who emphasizes the importance of curriculum relevance. The language and format aspects were rated feasible (80–86.67%) with recommendations for minor revisions, consistent with Vygotsky's ZPD theory (Vygotsky, 1978) and the findings of (Ketut Sudarsana et al., 2019) regarding the importance of age-appropriate language. The visual aspect received the lowest score (73.33%), though still feasible; improvements were suggested to make the illustrations more proportional, in accordance with (Meyers et al., 2013), who highlight the role of illustrations in information retention. Overall, expert validation showed an average feasibility of 80–87%, confirming that the teaching materials based on Kuningan local wisdom are both relevant and effective. This aligns with the culturally responsive teaching approach (Soley & Spelke, 2016) and the findings of (Yusrizal, Intan Safiah, 2017), which show that integrating local culture strengthens students' social care attitudes. Thus, the teaching materials are ready for use and can serve as a reference for developing similar media in other regions.

The limited trial served as a preliminary field testing stage (Borg, W.R and Gall, 2003) to identify product weaknesses before wide implementation and to ensure its utility (Ketut Sudarsana et al., 2019). The selection of fourth-grade students at SDN 2 Kutakembaran was

done purposively (Sugiyono, 2022). The results showed an average student response of 77.29% (good category), indicating comprehension, interest, relevance, and ease of use. This supports (Fandrem & Norman, 2024), user-centered design theory and the findings of (Handayani & Abdulkarim, 2024), which suggest that student feedback can improve teaching material quality by up to 20%. The relevance aspect received the highest score (77.98%), in line with culturally responsive teaching (Gläser & Meier, 2006) and the findings of (Prasetyo, 2015) on the importance of integrating local wisdom. Other aspects (76–77%) still require revisions in visuals, layout, and language, consistent with (Gläser & Meier, 2006) multimedia learning theory and the findings of (Nurlela et al., 2020) (Tohri et al., 2022), which indicate that rich visuals can enhance student engagement. Overall, the limited trial functioned as formative evaluation (Heinich, R., Molenda, M., Russell, J. D., & Smaldino, 1996) (Ilmiyah & Utomo, 2019) to strengthen the quality of the teaching materials before the next stage.

The main field testing involved 66 students from two schools, in accordance with the principles of external validity (Borg, W.R and Gall, 2003). Student responses increased significantly to 87.29% (very good category), supporting (Miller, 2018) theory of formative evaluation and the findings of (Setiawan, 2018) (Maharani, 2024), which show that feedback-based revisions can improve effectiveness by 15–20%. The understanding aspect (86.44%) improved due to simplified language, summaries, and a glossary, consistent with (Sweller's, 2011) cognitive load theory and the findings of (Almasitoh & Nugrahaningsih, 2021). The interest aspect (85.44%) was also good, although the addition of interactive activities was recommended (Sabila et al., 2020).

The final product was developed through the R&D stages of (Borg, W.R and Gall, 2003) incorporating revisions based on the limited trial. Refinements included improvements in visuals, glossary, and reflective activities, in line with the findings of Kurniawan et al. (2023), (Muthaharoh et al., 2019) and Paivio's (1986) dual coding theory. The title "Sekelumit Cerita tentang Kuningan" was chosen to strengthen local identity. Validation results showed a very good category (>85%), consistent with (Arif et al., 2021) indicating that local wisdom-based teaching materials enhance student understanding and engagement.

The effectiveness test, using an experimental design (Creswell & Guetterman, 2021) with 89 students (45 experimental, 44 control), showed an N-Gain of 51.16% (Hanifah et al., 2019) (medium, Hake, 1999) for the experimental group and 8.91% (low) for the control group. The Mann-Whitney U test (Pallant, 2020) yielded  $p = 0.000$  in the post-test, indicating a significant difference, while the pre-test showed equivalent initial conditions ( $p = 0.618$ ). These findings support (Hogenes, Van Oers, 2014) character education theory, local wisdom approaches (Ismawati et al., 2023) and the results of (Misbah et al., 2021) on increased student engagement. Overall, these local wisdom-based teaching materials are effective in fostering students' social care attitudes, align with UNESCO's (2023) recommendations, and have the potential to develop a generation that is both intelligent and socially responsible (Wibowo et al., 2022) (Novitasari & Walid, 2024).

The findings of this study have significant implications for the development of character education in elementary schools, particularly in the context of implementing the Merdeka Curriculum, which emphasizes contextual and value-based learning. The non-text teaching materials based on social capital and local wisdom have been proven effective in enhancing students social care attitudes through meaningful learning experiences that are closely related to their daily lives. This finding indicates that integrating local culture into teaching materials can serve as an effective strategy to strengthen students cultural identity while fostering empathy and social solidarity. Practically, this product can be utilized by teachers as an alternative medium for character education in elementary schools, especially within themes related to the Profil Pelajar Pancasila (Pancasila Student Profile). Furthermore, this research provides a foundation for educational institutions and curriculum developers to incorporate elements of local wisdom as an integral part of national education, aiming to form a generation rooted in its own culture yet open to global values.

Although the results are significant, this study has several limitations. First, the effectiveness test was conducted in only three elementary schools in the Kuningan area with a

limited number of participants; therefore, generalizing the findings to broader contexts should be done cautiously. Second, the research focused primarily on students social care attitudes without deeply examining its influence on cognitive and psychomotor domains. Third, the implementation period of the teaching materials was relatively short, making it difficult to observe the long-term impact on character formation. In addition, external factors such as variations in teaching styles, students social backgrounds, and family support were not fully controlled and may have influenced the outcomes. Hence, while the findings are internally valid, their applicability to different contexts requires further verification using more comprehensive designs and longer study durations.

Based on these findings and limitations, future research is recommended to expand the scope of participants and study locations to ensure the results are more representative of Indonesia sociocultural diversity. Subsequent studies should also integrate a mixed-method approach to explore affective, cognitive, and psychomotor aspects more comprehensively, including longitudinal observations of changes in students social behavior over time. Future research could also develop an interactive digital version of the non-text teaching materials to better align with the era of technology-based learning. Additionally, comparative studies across different regions could be conducted to explore the effectiveness of incorporating diverse local wisdom as a foundation for strengthening character education. Thus, future development should not only focus on the product itself but also on implementation models, teacher training, and educational policies that support the revitalization of local wisdom within character education in elementary schools.

## CONCLUSION

The development of non-text teaching materials based on Kuningan local wisdom was carried out systematically through stages of needs analysis, design, validation, revision, and field testing, resulting in a final product suitable for dissemination. The content is presented as 3D illustrated stories that showcase values characteristic of Kuningan culture, such as gotong royong, silih asih-silih asah-silih asuh, and local community traditions, with the aim of fostering students' social care attitudes. Expert validation showed a high level of feasibility, requiring only minor revisions, while feedback from the Focus Group Discussion (FGD) emphasized the importance of adding reflective activities and a glossary to enrich the learning experience. Limited and extensive field tests confirmed that the teaching materials were well-received by students, evidenced by increased comprehension, interest, and relevance in use. The final product, titled "Sekelumit Cerita tentang Kuningan", was designed with simple language, contextual illustrations, and reflective activities, making it ready for broader use as a support tool for the Merdeka Curriculum to strengthen character while preserving local cultural identity. The effectiveness of the teaching materials was supported by empirical data. Statistical analysis showed that the average N-Gain of the experimental group reached 51.16% (medium category), far higher than the control group at 8.91% (low category). The Mann-Whitney U test reinforced this finding, showing a significant difference in post-test results ( $p = 0.000$ ), while the pre-test results ( $p = 0.618$ ) confirmed that both groups had equivalent initial abilities. In addition to increasing the average achievement, the score distribution in the experimental group was more consistent, indicating that the teaching materials had a positive impact across all students. These findings align with character education theory, which emphasizes the integration of moral values into the learning process (Lickona, 2013), and support recent studies highlighting that reinforcing local cultural values in education can enhance engagement and social value internalization. Therefore, non-text teaching materials based on social capital and local wisdom are not only academically effective but also strategically viable for widespread implementation as a sustainable effort to cultivate social care character in elementary school students.

## ACKNOWLEDGEMENT

Acknowledgements are extended to the Center for Higher Education Research and Development (Puslapdik) of the Ministry of Higher Education, Science, and Technology for

providing the Indonesian Education Scholarship (BPI), which supported the completion of this study and facilitated the preparation of this scientific paper as part of the requirements for the Stage I defense. Sincere gratitude is also expressed to the leadership of Universitas Pendidikan Indonesia, where the author conducted the study, and to the Promotor Team (Prof. Dr. Aim Abdulkarim, M.Pd., Prof. Dr. Bunyamin Maftuh, M.Pd., M.A., and Prof. Dr. Kokom Komalasari, M.Pd.), who tirelessly guided the author in completing the dissertation. Thanks are also extended to the academic community of Universitas Muhammadiyah Kuningan, where the author is affiliated. Finally, appreciation is conveyed to all parties who assisted in the preparation of this scientific paper, including reviewers and journal editors, enabling the author to publish this work.

## REFERENCES

- Al-Jbouri, E., Andrews, N. C. Z., Peddigrew, E., Fortier, A., & Weaver, T. (2023). Building elementary students' social and emotional skills: A randomized control trial to evaluate a teacher-led intervention. *School Mental Health*. <https://doi.org/10.1007/s12310-022-09538-x>.
- Almasitoh, U. H., & Nugrahaningsih, T. K. (2021). Pengembangan Keterampilan Berpikir Tingkat Tinggi Berbasis Strategi Metakognitif Problem Solving Pada Siswa Sekolah Dasar Di Klaten. *Jurnal Ilmiah Aquinas*, 4(1), 104-112. <https://doi.org/10.54367/aquinas.v4i1.1001>
- Apriyani, N. M., Soleh, D. A., & Sumantri, M. S. (2021). Tingkat Kepedulian Sosial Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar Perkhasa: Jurnal Penelitian Pendidikan Dasar*, 7(2), 110-117.
- Arif, M., Rahmayanti, J. D., & Rahmawati, F. D. (2021). Penanaman karakter peduli sosial pada siswa sekolah dasar. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 13(2), 289-308.
- Borg, W.R and Gall, M. D. (2003). *Educational Research: An Introduction 4th Edition*. London:
- Fandrem, H., & Norman, J. O. (2024). *International Perspectives on Migration, Bullying, and School: Implications for Schools, Refugees, and Migrants*. Taylor & Francis.
- Fukuyama, M. (2018). Society 5.0: Aiming for a new human-centered society. *Japan Spotlight*, 27(5), 47-50.
- Gläser, G., & Meier, M. (2006). Teacher education. *Language Teaching*, 39(4), 294-304. <https://doi.org/10.1017/s0261444806253850>
- H Hermanto Suaib, M. M. (2017). *Suku Moi: nilai-nilai kearifan lokal dan modal sosial dalam pemberdayaan masyarakat*. An1mage.
- Haerunnisa, N., Wahyudi, A., & Nasution, N. (2020). Pengembangan Bahan Ajar Berbasis Kearifan Lokal Kampung Nambangan Sebagai Sumber Pendidikan Karakter Siswa pada Pembelajaran IPS di SD. *ELSE (Elementary School Education Journal): Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, 4(2), 19-40.
- Handayani, N., & Abdulkarim, A. (2024). Value learning: integrasi modal sosial bermuatan nilai kearifan lokal tradisi perang topat melalui pembelajaran IPS. *Didaktika: Jurnal Kependidikan*, 13(1), 1051-1062.
- Handoko, S. T. (2019). Kearifan lokal sebagai modal sosial dalam mengembangkan perdamaian di Papua. *MASA: Journal of History*, 1(2).
- Hanifah, H., Supriadi, N., & Widyastuti, R. (2019). Pengaruh Model Pembelajaran E-learning Berbantuan Media Pembelajaran Edmodo Terhadap Kemampuan Pemecahan Masalah Matematis Peserta Didik. *NUMERICAL: Jurnal Matematika Dan Pendidikan Matematika*, 3(1), 31-42. <https://doi.org/10.25217/numerical.v3i1.453>
- Heinich, R., Molenda, M., Russell, J. D., & Smaldino, S. E. (1996). *Instructional media and technologies for learning (5th ed.)*. NJ: Prentice-Hall.
- Hermanto, Japar, M., & Utomo, E. (2019). Implementasi Pembelajaran Ilmu Pengetahuan Sosial (IPS) dalam Membentuk Karakter Siswa (The Implementation of Social Science Learning in Building Students' Characters. *Jurnal Pendidikan Dasar Islam*, 6(1), 1-6.
- Hogenes, Van Oers, D. (2014). The impact of music on child functioning. *The European Journal of Social & Behavioural Sciences*.

- Ilmiyah, R., & Utomo, U. (2019). The Development of Local Wisdom-Based Contextual Social Science Teaching Materials with The Theme of Indahnya Kebersamaan (The Beauty of Togetherness) for The Fourth Grade Level of Elementary School. *Journal of Primary Education*, 8(3), 291–298. <https://journal.unnes.ac.id/sju/index.php/jpe/article/view/27622>
- Ismawati, D., Afrodita, M., Sari, D. L., & Gusti, R. (2023). Pengembangan Bahan Ajar Mata Kuliah Keaksaraan Fungsional Berbasis Kearifan Lokal Untuk Mahasiswa Pendidikan Nonformal FKIP Universitas Bengkulu. *Journal Of Lifelong Learning*, 6(2), 113–120.
- Jibililu, O. S. (2024). Evaluating the Impact of Instructional Materials on Social Studies Learning Outcomes in Senior High Schools of the Bono East Region of Ghana. *Social Education Research*. *Social Education Research*. <https://doi.org/10.37256/ser.5220244881>
- Kaspar, K. L., & M. (2023). Implementing Social-Emotional Learning in the Elementary Classroom. *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-022-01324-3>
- Ketut Sudarsana, I., Bagus Made Anggara Putra, I., Nyoman Temon Astawa, I., & Wayan Lali Yogantara, I. (2019). The use of Google classroom in the learning process. *Journal of Physics: Conference Series*, 1175(1). <https://doi.org/10.1088/1742-6596/1175/1/012165>
- Kim, J. (2021). *education*. 20.
- Maharani, S. (2024). To Develop the Local Wisdom Learning Material Based on Contextual Teaching and Studying for Increasing Social Character. *Randwick International of Education and Linguistics Science Journal*, 5(2), 394–401. <https://doi.org/10.47175/rielsj.v5i2.979>
- Majid, A. (2021). *Perencanaan pembelajaran: Mengembangkan standar kompetensi guru*. PT Remaja Rosdakarya.
- Malahayati, E. N., & Zunaidah, F. N. (2021). Analisis kebutuhan bahan ajar mata kuliah kurikulum. *Jurnal Basicedu*, 5(6), 6218–6226.
- Marfai, M. A., Rahayu, E., & Triyanti, A. (2018). *Peran kearifan lokal dan modal sosial dalam pengurangan risiko bencana dan pembangunan pesisir: (Integrasi kajian lingkungan, kebencanaan, dan sosial budaya)*. Ugm Press.
- Meyers, E. M., Erickson, I., & Small, R. V. (2013). Digital literacy and informal learning environments: An introduction. *Learning, Media and Technology*, 38(4), 355–367. <https://doi.org/10.1080/17439884.2013.783597>
- Miller, T. (2018). Developing numeracy skills using interactive technology in a play-based learning environment. *International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0135-2>
- Muthaharoh, F., Pamungkas, A. S., & Alamsyah, T. P. (2019). Pengembangan Media Pembelajaran Berbasis Lectora Inspire Materi Asmaul Husna Pada Siswa Kelas VII Di Mts Negeri 1 Bantul. *Jurnal Dimensi Pendidikan Dan Pembelajaran*, 7(2), 74–85.
- Nofrianti, W. (2019). *Analisis kesesuaian bahan ajar kearifan lokal terhadap pembelajaran seloko di sekolah dasar*. Universitas jambi.
- Novitasari, N., & Walid, A. (2024). Character Education Based on Local Wisdom in Learning Science: A Systematic Literature. *PPSDP International Journal of Education*, 3(2), 295–301. <https://doi.org/10.59175/pijed.v3i2.313>
- Nurlela, S. K., Pratiwi, A. S., Permana, R., Nugraha, M. F., Hendrawan, B., Mujiarto, & Nurkamilah, M. (2020). Development of kite number learning media help adobe flash cs6 on the concept of place number values in elementary school 2 Singaparna. *Journal of Physics: Conference Series*, 1477(2). <https://doi.org/10.1088/1742-6596/1477/2/022002>
- Prasetyo, S. (2015). Pengembangan Media Lectora Inspire dalam Pembelajaran Sains di Madrasah Ibtidaiyah. *Jurnal Pendidikan Islam*, 4(2), 319–337. <https://doi.org/10.14421/jpi.2015.42.319-337>
- Putri, A. E. (2019). Analisis kebutuhan bahan ajar berbasis literasi digital nilai-nilai kearifan lokal pada tradisi saprahan di Pontianak. *Yupa: Historical Studies Journal*, 3(1), 1–7.
- Ribosa, J., & Duran, D. (2022a). Do students learn what they teach when generating teaching materials for others? A meta-analysis through the lens of learning by teaching. *Educational Research Review*. <https://doi.org/10.1016/j.edurev.2022.100475>
- Ribosa, J., & Duran, D. (2022b). Student-Generated Teaching Materials: A Scoping Review

- Mapping the Research Field. *Education in the Knowledge Society (EKS)*. <https://doi.org/10.14201/eks.27443>
- Rosilia, P., Yuniawatika, Y., & Murdiah, S. (2020). Analisis kebutuhan bahan ajar siswa di kelas III SDN Bendogerit 2 Kota Blitar. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 10(2), 125.
- Sabila, A. M., Susanto, H., & Saputro, A. D. (2020). Education Thought Imam Zarkasyi and Relevance to the Development of Islamic Education in Indonesia. *Istawa: Jurnal Pendidikan Islam*, 5(1), 19. <https://doi.org/10.24269/ijpi.v5i1.2271>
- Salim, L. (2023). Kearifan Lokal Sebagai Modal Sosial Ulun Lampung. *RESIPROKAL: Jurnal Riset Sosiologi Progresif Aktual*, 5(1), 103–114.
- Saraswati, A. J., Bramasta, D., & Eka, K. I. (2020). Nilai kepedulian sosial siswa sekolah dasar. *Jurnal Riset Pendidikan Dasar (JRPD)*, 1(1), 1–5.
- Setiawan, F. (2018). Dampak Perilaku Bullying Terhadap Kehidupan Sosial Siswa Sekolah Dasar Di Kecamatan Driyorejo Kabupaten Gresik. *INVENTA: Jurnal Pendidikan Guru Sekolah Dasar*, 2(1), 87–92.
- Soley, G., & Spelke, E. S. (2016). Shared cultural knowledge: Effects of music on young children's social preferences. *Cognition*, 148, 106–116. <https://doi.org/10.1016/j.cognition.2015.09.017>
- Soorianarayanan, R. R., & Abd Rahman, S. N. (2024). Non-Technological Teaching Aid: Effectiveness in Developing Young Learners' Grammatical Accuracy. *Journal of Linguistics*. <https://doi.org/10.5296/ijl.v16i5.22130>.
- Srinarwati, D. R., Zaman, A. Q., D. (2023). Development of children's social care attitudes through advocacy activities. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*. <https://doi.org/10.29210/020233176>.
- Sukmadinata, N. S. (2013). *Metode Penelitian Pendidikan*. Remaja Rosdakarya.
- Sundari, R., Karyono, T., & Soeteja, Z. (2020). Pengembangan Buku Pengayaan Bermuatan Lokal Bagi Mahasiswa PGSD. *Muallimuna: Jurnal Madrasah Ibtidaiyah*, 6(1), 27–39.
- Suryawan, N. (2017). Kearifan lokal sebagai modal sosial dalam integrasi antara etnik Bali dan etnik Bugis di Desa Petang, Badung, Bali. *Jurnal Kajian Bali*, 7(01), 17–32.
- Tohri, A., Rasyad, A., Sururuddin, M., & Istiqlal, L. M. (2022). The urgency of Sasak local wisdom-based character education for elementary school in East Lombok, Indonesia. *International Journal of Evaluation and Research in Education*, 11(1), 333–344. <https://doi.org/10.11591/ijere.v11i1.21869>
- Tunmibi, S., Aregbesola, A., Adejobi, P., & Ibrahim, O. (2015). Impact of E-Learning and Digitalization in Primary and Secondary Schools. *Journal of Education and Practice*, 6(17), 53–58.
- Ulumuddin, A., & Ardiana, E. (2015). Dosenmenumbuhkan Sikap Mencintai Kearifan Lokal Melalui Pengembangan Bahan Ajar Mata Kuliah Menulis Karya Ilmiah Untuk Mahasiswa Pbsi Tahun Akademik 2014/2015. *Media Penelitian Pendidikan: Jurnal Penelitian Dalam Bidang Pendidikan Dan Pengajaran*, 9(1).
- Vindaswari, R. F., & Ulfah, A. (2018). Pengembangan Buku Cerita Anak Bergambar Berbasis Nilai-Nilai Kepedulian Bagi Peserta Didik Kelas 2 Sekolah Dasar. *Jurnal Fundadikdas (Fundamental Pendidikan Dasar)*, 1(3), 148.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. MA: Harvard University Press.
- Wibowo, A., Lestari, E., & Rahayu, P. (2022). Model pemberdayaan sentra pisang berbasis kearifan lokal dan modal sosial di kabupaten karanganyar, jawa tengah. *Jurnal Penyuluhan*, 18(02), 347–358.
- Yusrizal, Intan Safiah, N. (2017). *Kompetensi Guru dalam Memanfaatkan Teknologi informasi dan komunikasi sebagai media pembelajaran di SD Negeri 16 Banda Aceh*. 2(2), 126–134.