

Regional Culture-Based Indonesian E-Books to Improve Learning Motivation and Reading Comprehension Skills: Study on Fourth Grade Elementary School Students

Fajarsih Darusuprati^{1*}, Sujarwo², Supartinah³

¹ M. Pd., Doctoral Study Program in Elementary Education, Faculty of Education, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia, Email: fajarsihdarusuprati2021@student.uny.ac.id

² M. Pd., Doctoral Study Program in Elementary Education, Faculty of Education, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia, Email: sujarwo@uny.ac.id

³ M.Hum., Doctoral Study Program in Elementary Education, Faculty of Education, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia, Email: supartinah@uny.ac.id

*Corresponding Author: fajarsihdarusuprati2021@student.uny.ac.id

Citation: Darusuprati, F., Sujarwo, & Supartinah, (2025). Regional Culture-Based Indonesian E-Books to Improve Learning Motivation and Reading Comprehension Skills: Study on Fourth Grade Elementary School Students, *Journal of Cultural Analysis and Social Change*, 10(4), 3911-3921. <https://doi.org/10.64753/jcasc.v10i4.3683>

Published: December 26, 2025

ABSTRACT

Practical e-book as teaching materials is necessary to develop to comprehend learning experience due to global internet-based learning appliance. Whereas regional cultured-based of Bahasa Indonesia e-books are not being widely developed yet. This research aims to develop feasible, practical, and effective e-book of Bahasa Indonesia teaching materials with regional culture-based learning to enhance the learning motivation and reading comprehension skills of fourth grade elementary school students. This research was based on the Research and Development (R&D) Theory of Borg and Gall. The research subjects were fourth grade educators and students of 14 elementary schools located in the Daerah Istimewa Yogyakarta Province. Questionnaires, written tests, and structured interviews were used as data collection techniques. Instruments were validated using expert judgement, early/limited validation, and main/extended validation. Descriptive statistics and two-way ANOVA were used as data analysis. The results of this study are e-book teaching materials with: 1) the eligibility criteria based on media experts getting scores of 51 and 53 (very feasible category), then material experts getting scores of 53 and 54 (very feasible category), and by educators based on the educators' questionnaire in the initial/limited field trial getting a score range of 105-112 (very feasible category) and the student questionnaire getting a score range of 26-44 with the very feasible category; 2) the practicality criteria based on the educators' questionnaire in the main/expanded field trial got a score of 21 (very practical category) and the students' questionnaire got a score of 89-111 (very practical category); and 3) the effectiveness criteria based on data analysis was a significance level of $0.000 < 0.05$. The results showed that the e-book teaching materials can improve learning motivation and reading comprehension skills of fourth grade elementary school students.

Keywords: Bahasa Indonesia, E-Book Teaching Materials, Learning Motivation, Reading Comprehension Skills, Regional Culture.

INTRODUCTION

Policy changes were implemented, including provisions on the basic framework, competencies, curriculum structure, learning, assessment, and educational resources provided by the government to address the learning crisis caused by Covid-19. The Merdeka Belajar curriculum emphasizes "independent learning" for students. This

curriculum focuses on student personality development through effective learning and communication activities between educators and students. Furthermore, this curriculum is flexible enough to emphasize the use of technology and opportunities for skill acquisition in all learning lessons (Marisa, 2021).

One component of learning is teaching materials, which are systematically utilized by educators and students during the learning process to support the implementation of a free curriculum (Hidayah et al., 2023). Dafit & Mustika (2021) define teaching materials as a collection of information, tools, and scripts that are methodically organized and present comprehensive material based on the skills taught to students. These learning resources are utilized during the learning process with the aim of implementing learning, planning, and evaluating student support to help them understand and achieve the expected skills (Magdalena et al., 2020).

In the preliminary study, elementary schools were selected based on the consideration that they use teaching materials from the Merdeka Belajar curriculum platform, resulting in the lack of varied teaching materials tailored to the learning needs and characteristics of elementary school students. They also lacked the use of technology to contextualize Bahasa Indonesia teaching materials. The study involved 14 teachers from 14 elementary schools or *Sekolah Dasar Negeri* (SDN) consisting SDN Godean 1, SDN Godean 2, SDN Sidoarum, SDN Tegalrajo 1, SDN Tegalrejo 2, SDN Tegalrejo 3, SDN Petinggen, SDN Bangirejo 1, SDN Sekarsuli, SDN 1 Salakan, SDN Jurugentong, SDN Ngentak, and SDN Banguntapan in the Special Region of Yogyakarta Province. The aim was to identify the development and use of teaching materials as a support system during the Merdeka curriculum.

The pilot analysis of teaching materials in elementary schools indicates that they generally lack textbooks that are contextually relevant to students, and textbooks contain material that lacks contextual relevance to the students' environment. This impacts student learning motivation, which leads to boredom and a lack of enthusiasm, especially in reading comprehension. Research by Sas'diyah (2023) found that a lack of innovative teaching materials leads to decreased student learning motivation and difficulty engaging in reading comprehension activities. This is evident when students are asked questions based on a reading text they have read, but are unable to answer the questions clearly.

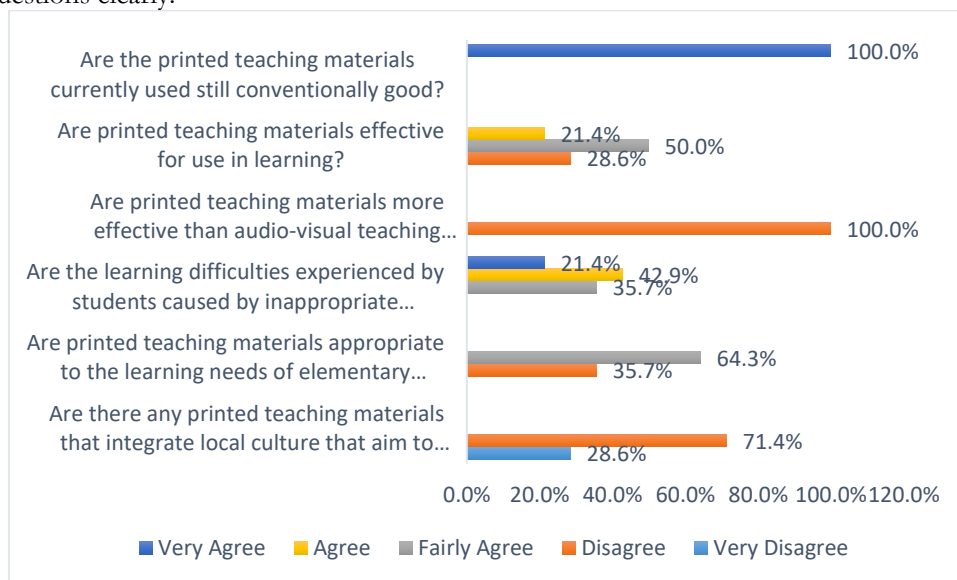


Figure 1. Pilot Study to Assess Need-Based Analysis of Cultural-Based Teaching Materials for Fourth Grade Students

Figure 1 shows the existence of teaching materials in elementary schools. The results of the first item indicate that 100% of educators stated their agreement with the type of conventional printed teaching materials. In the second item, which refers to the effectiveness of the use of printed teaching materials, the data obtained showed that 21.43% of educators stated their agreement, 50.00% somewhat agreed, and 28.57% disagreed. The third item, which discusses the comparison of the effectiveness between printed and audio-visual teaching materials, noted that 100% of educators disagreed with printed teaching materials. Furthermore, in the fourth item that identified conventional teaching materials as a factor in students' difficulties in understanding the material, it was recorded that 21.43% of educators strongly agreed, 42.86% agreed, and 35.71% somewhat agreed. The fifth item, which assesses the extent to which printed teaching materials can facilitate students' needs in the technological era, showed that 64.29% of educators somewhat agreed, while 35.71% disagreed. Finally, regarding the sixth item, which discusses the integration of regional culture into printed teaching materials to facilitate understanding, all educators (100%) strongly disagreed. These results suggest that the use of traditional teaching materials in elementary schools is inappropriate for students' learning needs of Bahasa Indonesia in today's technologically advanced age.

Learning motivation enables students to achieve the highest possible learning outcomes, which impacts skill performance (Rahman, 2022). According to Hendrapipta & Rokmanah (2023), learning motivation is a crucial element influencing student learning success. Learning motivation is closely related to providing energy, direction, and maintaining student behavior while achieving goals. Students who are highly motivated to learn acquire their skills more quickly (Hong et al., 2016: 339).

Interviews with six educators revealed that students' attitudes, behaviors, and actions demonstrated a low and lack of willingness to learn Bahasa Indonesia. They were sleepy and fell asleep in class, did not participate in activities and ran around the classroom, were unable to concentrate, wanted to play outside, and frequently asked to use the restroom. Furthermore, they talked during class and lacked enthusiasm. This indicates low levels of student motivation to learn. Low learning motivation impacts students' talents, which is closely related to their drive to learn. Motivation is a student's psychological state that guides and motivates activities to achieve specific educational goals (Arafah & Binfas, 2024).

Reading skills must be mastered so that elementary school children can reach their full potential. It was found that learning motivation is related to students' reading comprehension (Morgan et al., 2008: 387). Reading skills, which are considered very important for elementary school children, must have reading comprehension skills so that they do not have difficulty progressing in education. This is because comprehension is the foundation of a successful learning experience for students. Furthermore, almost every modern daily activity, intentionally or unconsciously, excludes reading (Rahman & Haryanto, 2014: 128).

Interviews with six educators revealed that students can read but do not comprehend the information they read. As a result, students fail to grasp the purpose of questions and answer them inadvertently. Some students may also respond by pasting the full text into the question or response field. Learning at the elementary level involves prioritizing. Students who read fluently but do not understand the material due to excessive attention (Sarika et al., 2021). Mumpuni (2023) found that elementary school children continue to have poor reading levels. Students' reading skills impact low learning outcomes. Research by (Tiyustina, 2015) also showed that students' reading comprehension skills are still inadequate (Rahmawati et al., 2022). Reading comprehension skills impact performance and learning quality, such as students' failure to recognize relevant information and solve problems during the lesson of Bahasa Indonesia (Sari et al., 2021).

Formal education is one of the most effective ways to teach regional culture to the younger generation (Daniah, 2016: 10). Therefore, the promotion of regional culture should be a key component of educational programs at all levels and types. Educational materials can be used to facilitate learning about regional culture. Elementary school students may be more interested in learning and understanding reading materials using books based on regional culture. One benefit of using e-books is that they can provide learning materials in context through interactive displays and features.

Based on the description above, it can be concluded that 14 schools, namely SDN Banguntapan, SDN Ngentak, SDN Jurugentong, SDN 1 Salakan, SDN Sekarsuli, SDN Bangirejo 1, SDN Petinggen, SDN Tegalrejo 3, SDN Tegalrejo 2, SDN Tegalrejo 1, SDN Tinom, SDN Sidoarum, SDN Godean 2, and SDN Godean 1 require the development of teaching materials in the form of e-book teaching materials of Bahasa Indonesia based on regional culture with the aim of increasing learning motivation and reading comprehension skills in fourth grade elementary schools in Bantul Regency, Yogyakarta City Regency, and Sleman Regency, Daerah Istimewa Yogyakarta Province. The aim of this research is to produce e-book of Bahasa Indonesia as innovative teaching materials based on regional culture that are suitable, feasible, practical, and effective to increase learning motivation and reading comprehension skills of fourth grade elementary school students.

METHOD

Research Approach

This study uses a mixed method approach by combining quantitative and qualitative methods (Creswell, 2009: 215). The development model applied in this study is Research and Development (R&D) as proposed by (Gall et al., 1996: 772). The R&D approach explores the need to develop theoretical products through basic research. There are 10 stages that must be carried out when developing a product, namely: 1) research and information collection, 2) planning, 3) develop a preliminary form of product, 4) preliminary field testing, 5) main product revision, 6) main field testing, 7) operational product revision, 8) operational field testing, 9) final product revision, and 10) dissemination and implementation.

Research Samples

The subjects in this product and research instrument feasibility trial involved five expert judges with doctoral and professorial qualifications from Universitas Negeri Yogyakarta (2 material experts, 2 media experts, and 1 research instrument expert).

In the initial field trial, four educators and 12 fourth-grade students from SDN Tegalrejo 1, SDN Tegalrejo 2, SDN Tegalrejo 3, and SDN Godean 1 were randomly selected to assess their learning motivation and reading comprehension skills.

The subjects used in the main field trial were five educators and 30 fourth-grade students from SDN Tegalrejo 1, SDN Tegalrejo 2, SDN Tegalrejo 3, SDN Godean 1, and SDN Godean 2. Students with learning motivation and reading comprehension skills were selected using a random sampling technique.

The operational field trial involved 10 educators and 40-200 fourth-grade students in five experimental classes of fourth-grade students at SDN Jurugentong, SDN Ngentak, SDN Banguntapan, SDN 1 Salakan, and SDN Sekarsuli. The control classes included fourth-grade students at SDN Bangirejo 1, SDN Petinggen, SDN Tegalrejo 3, SDN Tinom, dan SDN Sidoarum.

Data Collecting Technique

This research used Focus Group Discussion (FGD) with experts to validate the design of learning model products created by researchers. The step involved educational doctors and professors who have expertise in Bahasa Indonesia as Indonesian language learning materials for elementary schools, as well as learning media and research instrument.

The second data collecting technique was interviews in three stages according to Borg & Gall R&D stages. The structured interviews were conducted after field trial to assess the feasibility of developing e-book teaching materials with 4 educators and 4 fourth-grade students, after the main/advanced field trial with 5 educators and 5 fourth-grade students, and after operational field test—before (pretest) and after (posttest)—with 10 educators and 10 fourth-grade students. The representing experimental classes of fourth-grade students were at SDN Jurugentong, SDN Ngentak, SDN Banguntapan, SDN 1 Salakan, SDN Sekarsuli while the representing control classes were at SDN Bangirejo 1, SDN Petinggen, SDN Tegalrejo 3, SDN Tinom, and SDN Sidoarum.

The third data collecting technique was questionnaires using Likert scale, including: 1) questionnaires of expert judgments, practitioners, and students to measure the validity, practicality, and effectiveness of e-book teaching materials product; 2) questionnaires of teachers' perception of e-book teaching materials product's feasibility and students' perception of convenience aspect of the e-book; and 3) learning motivation questionnaire based on indicators to measure the effectiveness of students' learning motivation before (pretest) and after (posttest) using the product.

Researchers then created a descriptive test with a scoring rubric to analyze students' reading comprehension skill indicators. This study administered written tests at the beginning (pretest) and at the end (posttest) of a preliminary/limited trial to 12 fourth-grade students to assess the success of improving their reading comprehension skills after using the e-book.

Data Analysis Technique

This R&D data analysis technique was using descriptive statistics to determine: 1) instrument's content validity (mean score and standard deviation) and construct validity (Pearson's Product Moment), 2) reliability of the product (Cronbach's Alpha), 4) normality test (Kolmogorov-Smirnov), and 5) homogeneity test (Levene); 6) product's validity with expert assessment of e-book product to test the feasibility of e-book products; 7) practicality test to assess the ease and convenience aspect of using regional culture-based e-book teaching materials in learning Bahasa Indonesia; and 8) effectivity test to examine the effectiveness and efficiency of e-book teaching materials designed to improve students' learning motivation and reading comprehension in the pretest and posttest stages with experiment and control classes.

The results of data collection were analyzed using a two-way Analysis of Variance (ANOVA). The F-test statistical value was compared with the F-table value to determine whether H_0 was accepted or rejected. The hypotheses criteria for measuring the effectiveness of e-book teaching materials based on the regional culture of this research are: 1) H_{01} : If the significance value (Sig.) < 0.05 , it means that there is a difference in the average group using e-book teaching materials based on regional culture to increase students' learning motivation. and 2) H_{02} : If the significance value (Sig.) < 0.05 , it means that there is a difference in the average group using e-book teaching materials based on regional culture to improve students' reading comprehension skills. The increase before and after learning using e-book teaching materials is calculated using the normalized N-Gain formula (Sundayana, 2016: 151).

RESULTS AND DISCUSSION

Results of Analysis of Elementary School Teaching Materials

The questionnaire was distributed to 14 fourth grade educators to collect information regarding the development of teaching materials.

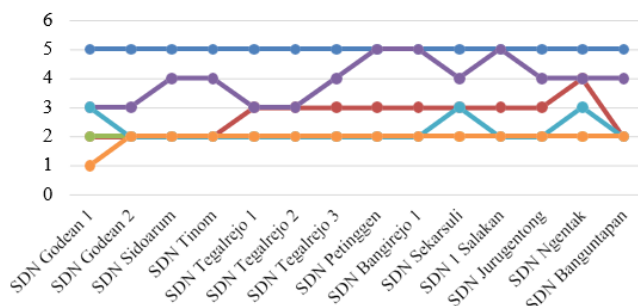


Figure 2. Analysis of Elementary School Teaching Materials

The analysis of elementary school teaching materials in Figure 2 shows that question 1, printed teaching materials currently used are still conventional, obtained a response from educators who answered 100% strongly agree. Question 2, printed teaching materials are effectively used in learning, obtained a response from educators who answered 10.53% agree, 63.16% quite agree, and 26.32% disagree. Question 3, printed teaching materials are effective compared to audio-visual teaching materials, obtained a response from educators who answered 100% disagree. Question 4, students' difficulty in understanding the material is caused by conventional teaching materials, obtained a response from educators who answered 27.27% strongly agree, 50.91% agree, and 21.82% quite agree. Question 5, printed teaching materials are in accordance with the needs of students in the technological era, obtained a response from educators who answered 70.97% quite agree and 29.03% disagree. Question 6, printed teaching materials integrate regional culture to make it easier for students to understand the material, obtained a response from educators who answered 96.30% disagree and 3.70% strongly disagree. Most teachers showed high enthusiasm toward developed e-book.

Structured interviews with 4 educators from elementary schools strengthened the questionnaire results, as the educators' comments indicated the use of traditional teaching resources in Bahasa Indonesia acquisition in elementary schools. As a result, students' motivation to learn becomes unstable because the learning approach used is still not aligned with the characteristics of elementary school students. Furthermore, educators stated that students' reading skills are still lacking, as evidenced by difficulties interpreting, finding important information or concepts, and expressing what they read.

"I assigned students one by one to read the passage and listen. However, only the top students were active, while the rest were passive. Students lacked consistent motivation to learn, sometimes motivated, sometimes not. I always tried to provide meaningful motivation for success. Reading comprehension skills were still low, as evidenced by students' difficulty retelling the text. We preferred using visual media to facilitate student comprehension. During the Merdeka Belajar curriculum, we only received printed teaching materials. I believe it's important to provide teaching materials that meet students' needs." – Teacher of SDN 1 Salakan

A product development needs analysis based on interviews with instructors found that the teaching materials used in elementary schools are still traditional and ineffective in supporting the learning process. This makes it difficult for students to understand Bahasa Indonesia learning materials. The materials presented are not tailored to the characteristics and learning needs of students, who should utilize technology and incorporate teaching materials relevant to the surrounding environment and integrate local culture.

Results of Analysis of Elementary School Students' Learning Motivation

Analysis of learning motivation using a questionnaire to 360 fourth grade elementary school students aimed at identifying the situation and conditions of students' learning motivation problems in learning Bahasa Indonesia.

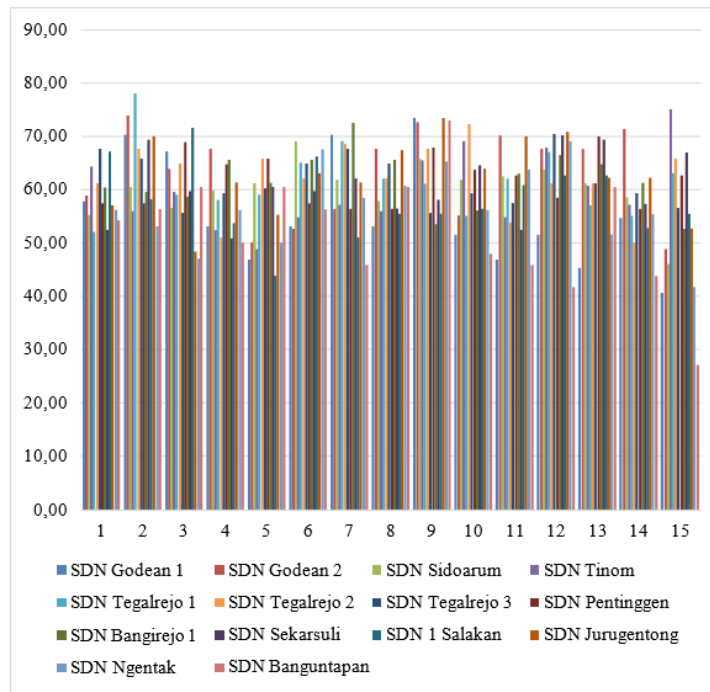


Figure 3. Analysis of Student Learning Motivation

Analysis of learning motivation of fourth grade students on Figure 3 shows that the low learning motivation of fourth grade elementary school students can be observed from attitudes and behaviors that 1) are not yet fully serious about acquiring self-skills to achieve goals, 2) are still easily discouraged in facing challenges to gain knowledge, 3) have not been encouraged by environmental influences to achieve goals, and 4) have not yet fully serious about completing tasks to successfully achieve goals.

Results of Analysis of Students’ Reading Comprehension Skills

Analysis of reading comprehension skills using written tests for 360 fourth grade elementary school students aimed at identifying students’ reading comprehension skills in learning Bahasa Indonesia so far.

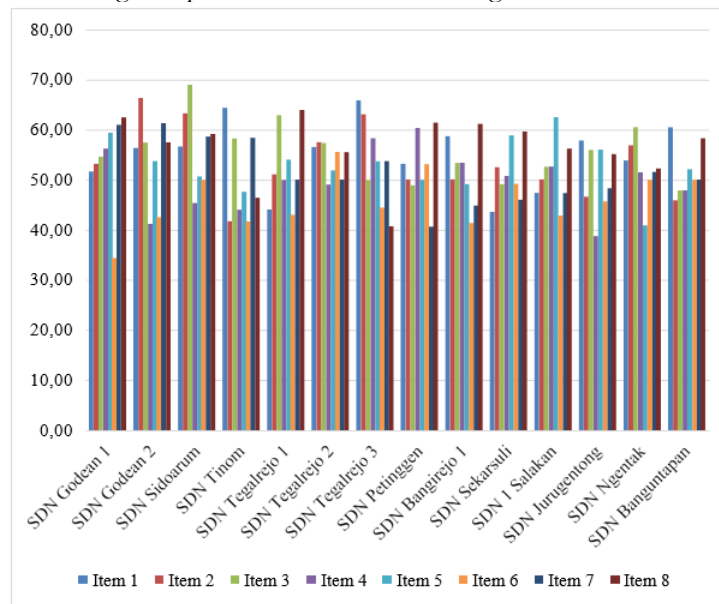


Figure 4. Analysis of Students’ Reading Comprehension Skills

Respondents who answered eight questions based on reading comprehension skill indicators showed that elementary school students had difficulty answering questions related to discourse. This was evident in the students’ inability to understand the content/information in the process of reading/discourse that had not been contextualized, which resulted in a lack of reading comprehension skills.

Results of Instrument's Content Validity

The expert judgment results of research instruments were: 1) very suitable questionnaire used to measure the learning motivation of elementary school students in the pretest and posttest, 2) very suitable observation sheet is a supporting instrument to collect in-depth data about the attitudes or behavior of students during learning Bahasa Indonesia, 3) very suitable written test of reading comprehension skills that have been synthesized, therefore, this test is considered suitable for use in measuring the reading comprehension skills of elementary school students in the pretest and posttest stages.

Results of Instrument's Construct Validity

Construct validity is used to ensure that a number of variables represent the theoretical latent construct being measured. The construct validity test uses random sampling to assess the validity of the research instruments, namely the learning motivation questionnaire and the reading comprehension skills test, on 120 students.

The Pearson Correlation analysis shows that the reading comprehension skills test developed based on indicators consisting of statements in item 1, item 2, item 3, item 4, item 5, item 6, item 7, and item 8 obtained a Sig. (2-tailed) value < 0.05 , meaning that the items on the reading comprehension skills test instrument were declared valid.

Results of Product's Reliability

The construct reliability test in this study was conducted using Cronbach's Alpha values with the help of SPSS software version 25.0. The researcher based the interpretation of the reliability coefficient on the questionnaire items on the basis of decision making if $r_{11} \geq$ coefficient 0.60.

The Cronbach's Alpha value is 0.818 with a total of 23 items, meaning that the learning motivation questionnaire instrument consists of 15 items and the reading comprehension skills test consists of 8 items in the reliable category, therefore the instrument is relied upon to provide relatively consistent results.

Results of Data Normality Test and Homogeneity Test

In this study, the Kolmogorov-Smirnov test was used to test the normality of pretest and posttest data in the experimental class, with the interpretation of decisions based on the probability value (Sig.).

Table 1. Normality Test Result

Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Experiment	Pretest	.080	133	.037	.976	133	.017
	Posttest	.142	133	.008	.969	133	.007
Control	Pretest	.073	133	.081	.986	133	.209
	Posttest	.129	133	.006	.969	133	.007

^aLilliefors Significance Correction

The results of the normality test using the Kolmogorov-Smirnov test showed that the pretest data in the experimental class had a signal value of 0.37 and a posttest signal value of 0.08; the control class data had a signal value of 0.81 and a posttest signal value of 0.06. These results indicate that there is no signal value greater than 0.05. Therefore, it can be concluded that the pretest and posttest data from the control class student learning motivation questionnaire are normally distributed.

Table 2. Homogeneity Test Result

		Levene Statistic	df1	df2	Sig.
Experiment	Based on Mean	9.579	1	264	.010
	Based on Median	8.711	1	264	.007
	Based on Median and with adjusted df	8.711	1	243.865	.007
Control	Based on trimmed mean	9.648	1	264	.009
	Based on Mean	5.681	1	264	.018
	Based on Median	5.778	1	264	.017
	Based on Median and with adjusted df	5.778	1	256.592	.017
	Based on trimmed mean	5.896	1	264	.016

The questionnaire data of homogeneity test on the learning motivation of fourth-grade elementary school students has a homogeneous variance. The results show a mean Sig. value of 0.10 in the experimental class and a mean Sig. value of 0.18 in the control class; both results are compared with a Sig. value of more than 0.05.

Results of Two-Way ANOVA Test

The data obtained from the pretest and posttest of the students' reading comprehension skills test were processed using the two-way ANOVA test aimed at testing the significance of the differences in the average simultaneously between the 5 experimental classes and the 5 control classes. The research step collected data on a sample of 133 fourth-grade students from elementary school chosen.

Table 3. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Experiment	5987.383 ^a	1	5987.383	1279.668	.000
	Control	638.135 ^b	1	638.135	150.507	.000
Intercept	Experiment	119415.398	1	119415.398	25522.348	.000
	Control	92860.526	1	92860.526	21901.491	.000
Pretest and Posttest	Experiment	5987.383	1	5987.383	1279.668	.000
	Control	638.135	1	638.135	150.507	.000
Error	Experiment	1235.218	264	4.679		
	Control	1119.338	264	4.240		
Total	Experiment	126638.000	266			
	Control	94618.000	266			
Corrected Total	Experiment	7222.602	265			
	Control	1757.474	265			

^aR Squared = .829 (Adjusted R Squared = .828)

^bR Squared = .363 (Adjusted R Squared = .361)

The results of the two-way ANOVA test show that the data on students' reading comprehension skills test has a significance value (Sig.) of 0.000 in the experimental class and 0.000 in the control class, which is the basis for decision making. Hypothesis testing has an impact on decision making based on a significance value (Sig.) of 0.000 in both the experimental and control classes. Thus, it can be concluded the rejection of H₀. It indicates that fourth-grade elementary school students improve their reading comprehension skills by using e-book teaching materials based on regional culture.

Results of N-Gain Test

The success of learning Bahasa Indonesia using the development of e-book teaching material products that integrate regional cultural elements in the experimental class obtained the first N-Gain results, SDN Jurugentong 67.47%. Second, SDN Ngentak 66.34%. Third, SDN Banguntapan 71.02%. Fourth, SDN 1 Salakan 68.20%. Fifth, SDN Sekarsuli 70.61%, therefore it can be concluded that the N-Gain acquisition of the experimental class is in the effective category, this shows that e-books as teaching materials that carry regional culture are proven to be effective in improving students' reading comprehension skills.

The implementation of regional culture-based e-book teaching materials during six meetings in the Bahasa Indonesia subject in fourth-grade elementary school demonstrated an improvement in students' reading comprehension skills. First, they captured explicit ideas in regional cultural discourse, as evidenced by their ability to understand meaning. Second, they were able to recall facts contained in the reading material using their understanding and language. Third, they categorized elements in the reading material intrinsically and extrinsically. Fourth, they summarized the reading material using their understanding and language. The fifth indicator of students' reading comprehension skills was drawing conclusions based on facts and ideas in accordance with the meaning of the text. Sixth, they evaluated the content of the text and supporting learning resources to assess cultural discourse using their understanding and language. Seventh, they responded emotionally appropriately to the context of aesthetic discourse content to construct students' knowledge. Eighth, they identified characters or events in the text based on students' knowledge gained from interactions with their environment regarding regional culture.

The N-Gain score for the first control class, SDN Bangirejo 1, was 34.16%. Second, SDN Petinggen (33.10%). Third, SDN 3 Tegalrejo (28.06%). Fourth, SDN Tinom (27.43%). Fifth, SDN Sidoarum (31.74%). Therefore, it can be concluded that the N-Gain in the experimental class is in the low category, meaning that printed teaching materials provide a low contribution related to students' reading comprehension abilities.

DISCUSSION

The use of e-books based on regional culture is an effort to innovate in the Bahasa Indonesia learning process at the elementary school level through the development of teaching materials using technology. E-books are a form of digital learning media that contain well-developed learning materials, techniques, limitations, and assessment methods that are organized, engaging, and enjoyable to achieve learning objectives and student abilities (Ginting & Simamora, 2022). This encourages students to be more actively involved in the learning process, which can improve their success (Froiland & Worrell, 2016). Learning material becomes easier by connecting real-life events around students that are relevant to local culture (Darajah, 2021).

Learning Bahasa Indonesia with e-books based on regional culture requires an understanding of structure and terminology to understand the cultural background. With a comprehensive and relevant approach, students can improve their reading skills while exploring and appreciating the richness of Indonesian culture. This e-book can be accessed through a structured online connection and includes all necessary learning components, such as learning objectives, student activities, resources, exercises, assessments, and feedback. Furthermore, the e-book includes visual elements, audio, video, practice questions, and feedback.

The advantages of e-books based on regional culture are that they are child-friendly and easy to digest as learning resources, which are highly expected to stimulate students' motivation to learn and develop reading comprehension skills, whether in print or digital format. This is because e-books based on regional culture are easier for Generation Alpha students to use and operate. They utilize multimedia-assisted technology, combining text with visuals, audio, video, quizzes, and assessments, making them understandable and accessible to the abilities of elementary school students in fourth grade. They are directed to contextualize Bahasa Indonesia learning materials by integrating regional culture, which includes internalizing cultural values familiar to students, thereby increasing learning motivation and facilitating elementary school students' comprehension of discourse, thus improving reading comprehension skills.

Wendo et al. (2022) stated that e-book learning materials covering various types of text can be an effective choice of teaching materials with various functions, producing an engaging and relevant learning experience. E-book learning materials contain relevant text, images, audio, and video (multimedia) elements to encourage increased student motivation and enthusiasm for learning (Seso et al., 2018). Research by Hanikah et al. (2022) found that students who use interactive e-books for learning can improve their learning enthusiasm and academic performance compared to students who only study from textbooks. Puspita et al. (2021) found that the use of e-books for elementary school students can provide a variety of learning methods that can enhance their understanding and have been shown to help students achieve learning objectives that focus on regional culture to improve learning outcomes (Harjuni et al., 2023).

E-book teaching materials related to regional culture have content that is appropriate to the context, by combining Yogyakarta culture using visual elements and learning videos providing a real picture of cultural activities that support learning needs and make it easier for elementary school students to understand information or material content aimed at developing reading skills and understanding of fourth grade students at the elementary school level. In line with the research of Syajar & Khasanah (2024) found that third grade elementary school students in the Indonesian language subject can develop their reading skills by using e-books. Rizky (2020) stated that teaching materials that are compiled and developed with reference to regional culture and related to the environment and daily activities of students help improve students' reading skills. In her research, Lestari (2023) found that educational games based on regional culture have been created in e-book intended to develop the reading skills of elementary school students at the initial stage.

CONCLUSION

Regional culture-based of Bahasa Indonesia e-book as teaching materials are stated as feasible, suitable, effective, practical, and efficient teaching materials to support the improvement of learning motivation and reading comprehension skills. There is an average difference between the group that uses regional culture-based Indonesian language e-book teaching materials in improving learning motivation and reading comprehension skills of fourth-grade elementary school students and the group that uses conventional teaching materials already available in schools.

RESEARCH LIMITATION

The development of e-book teaching materials based on regional culture has research limitations, namely: 1) low effectiveness if internet access does not support access to web links and 2) the need for a large allocation of

time to be adjusted to the various understanding abilities of elementary school students. The use of e-book also requires educators' skills in using technology in the learning process to create more interesting and meaningful Bahasa Indonesia learning which aims to increase the learning motivation of elementary school students.

REFERENCES

- Arafah, N., & Binfas, M. A. M. (2024). Motivasi Belajar dalam Meningkatkan Keterampilan Membaca Siswa MTS Negeri 2 Kota Makassar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 9(2), 3230–3241. <https://doi.org/10.23969/jp.v9i2.13756>
- Creswell, J. W. (2009). *Research Designs: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Dafit, F., & Mustika, D. (2021). Pengembangan Bahan Ajar Membaca Berbasis Higher Order Thinking Skills pada Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 4889–4903. <https://doi.org/10.31004/edukatif.v3i6.1565>
- Daniah, D. (2016). Kearifan lokal (local wisdom) sebagai basis pendidikan karakter. *PIONIR: Jurnal Pendidikan*, 5(2). <https://jurnal.ar-raniry.ac.id/index.php/Pionir/article/view/3356>
- Darojah, R. (2021). Persepsi guru sekolah dasar terhadap integrasi budaya pada pembelajaran bahasa indonesia. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 3748–3757. <https://doi.org/10.31004/edukatif.v3i6.1202>
- Froiland, J. M., & Worrell, F. C. (2016). Intrinsic motivation, learning goals, engagement, and achievement in a diverse high school. *Psychology in the Schools*, 53(3), 321–336. <http://dx.doi.org/10.1002/pits.21901>
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction*. Longman Publishing.
- Ginting, Y. F., & Simamora, H. (2022). Penggunaan E-Book Dalam Pembelajaran di Sekolah Dasar. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 1(01), 36–39. <https://doi.org/10.47709/educendikia.v1i1.1774>
- Hanikah, H., Faiz, A., Nurhabibah, P., & Wardani, M. A. (2022). Penggunaan media interaktif berbasis ebook di sekolah dasar. *Jurnal Basicedu*, 6(4), 7352–7359. <https://doi.org/10.31004/basicedu.v6i4.3503>
- Harjuni, M. R., Halidjah, S., & Ghasya, D. A. V. (2023). Pengembangan Suplemen Bahan Ajar Ebook Berbasis Kearifan Lokal di KALBAR Bermuatan Nilai Karakter. *Journal on Education*, 6(1), 6048–6055. <https://doi.org/10.31004/joe.v6i1.3806>
- Hendracipta, N., & Rokmanah, S. (2023). Peran motivasi dalam meningkatkan keberhasilan belajar siswa sekolah dasar. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(5), 1236–1245. <https://doi.org/10.36989/didaktik.v9i5.2051>
- Hidayah, N., Sumarno, S., & Dwijayanti, I. (2023). Analisis bahan ajar terhadap kebutuhan guru dan peserta didik kelas V. *Jurnal Ilmiah Pendidikan Dasar*, 10(2), 128–142. <https://doi.org/10.30659/pendas.10.2.128-142>
- Hong, Z.-W., Huang, Y.-M., Hsu, M., & Shen, W.-W. (2016). Authoring robot-assisted instructional materials for improving learning performance and motivation in EFL classrooms. *Journal of Educational Technology & Society*, 19(1), 337–349. <https://www.jstor.org/stable/jeductechsoci.19.1.337>
- Lestari, N. D. (2023). Pengembangan E-Book Berbentuk Education Games Berbasis Budaya Lokal Untuk Keterampilan Membaca Permulaan Bagi Siswa Kelas 1 MI/SD. Disertasi. UIN Raden Intan Lampung.
- Magdalena, I., Sundari, T., Nurkamillah, S., Nasrullah, N., & Amalia, D. A. (2020). Analisis bahan ajar. *Nusantara*, 2(2), 311–326. <https://doi.org/10.36088/nusantara.v2i2.828>
- Marisa, M. (2021). Inovasi kurikulum “Merdeka Belajar” di era society 5.0. *Santhet (Jurnal Sejarah Pendidikan Dan Humaniora)*, 5(1), 66–78. <https://ejournal.unibabwi.ac.id/index.php/santhet>
- Morgan, P. L., Fuchs, D., Compton, D. L., Cordray, D. S., & Fuchs, L. S. (2008). Does early reading failure decrease children's reading motivation? *Journal of Learning Disabilities*, 41(5), 387–404. <https://doi.org/10.1177/00222194083211>
- Mumpuni, A. (2023). Peran Pembelajaran Berbasis Internet dalam Meningkatkan Keterampilan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Ilmiah Wahana Pendidikan*, 9(4), 71–76. <https://doi.org/10.5281/zenodo.7677785>
- Puspita, E. I., Rustini, T., & Dewi, D. A. (2021). Rancang bangun media e-book flipbook interaktif pada materi interaksi manusia dengan lingkungannya sekolah dasar. *Journal of Educational Learning and Innovation (ELIa)*, 1(2), 65–84. <https://doi.org/10.46229/elia.v1i2.307>
- Rahman, B., & Haryanto, H. (2014). Peningkatan keterampilan membaca permulaan melalui media flashcard pada siswa kelas I SDN Bajayau Tengah 2. *Jurnal Prima Edukasia*, 2(2), 127–137. <https://doi.org/10.21831/jpe.v2i2.2650>
- Rahman, S. (2022). Pentingnya motivasi belajar dalam meningkatkan hasil belajar. *Prosiding Seminar Nasional Pendidikan Dasar*. <https://ejournal.pps.ung.ac.id/index.php/psnnpd/article/view/1076>
- Rahmawati, D. N., Rukayah, R., & Ardiansyah, R. (2022). Analisis minat baca dan motivasi dalam kemampuan

- membaca pemahaman literal pada teks cerita narasi pada peserta didik kelas V sekolah dasar. *Didaktika Dwija Indria*, 10(2), 13–18. <https://doi.org/10.20961/ddi.v10i2.64889>
- Rizky, I. (2020). Pengembangan Bahan Ajar Berbasis Lokal Untuk Meningkatkan Kemampuan Membaca Pemahaman Siswa Kelas IV SDN Denasri Wetan 03 Kecamatan Batang. *Jurnal Pendidikan*, 3(1), 1–20. <https://lib.unnes.ac.id/39949>
- Sari, N. R., Oktrifianty, E., & Magdalena, I. (2021). Hubungan Antara Kebiasaan Membaca Dengan Kemampuan Menulis Siswa Kelas IV SD Negeri Kunciran 06 Kota Tangerang. <https://doi.org/10.31949/educatio.v7i1.847>
- Sarika, R., Gunawan, D., & Mulyana, H. (2021). Analisis kemampuan membaca pemahaman siswa kelas V di SD Negeri 1 Sukagalih. *CaXra: Jurnal Pendidikan Sekolah Dasar*, 1(2), 62–69. <https://doi.org/10.31980/caxra.v1i2.801>
- Seso, M. A., Laksana, D. N. L., & Dua, K. (2018). Pengembangan bahan ajar elektronik bermuatan multimedia untuk siswa sekolah dasar kelas Iv Di Kabupaten Ngada. *Journal of Education Technology*, 2(4), 177–185. <https://doi.org/10.23887/jet.v2i4.16546>
- Ssa'diyah, K. (2023). Pengembangan Bahan Ajar Menulis Teks Anekdote Berbasis E-Comic. Disertasi. Universitas Muhammadiyah Purwokerto.
- Sundayana, R. (2016). *Statistika penelitian pendidikan*. Alfabeta.
- Syajar, S. T. F., & Khasanah, L. A. I. U. (2024). Penerapan media e-book untuk meningkatkan keterampilan membaca pemahaman pada siswa kelas III di sekolah dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 9(1), 1350–1358. <https://doi.org/10.23969/jp.v9i1.12595>
- Tiyustina, T. (2015). Upaya meningkatkan kemampuan membaca pemahaman siswa melalui pembelajaran terpadu di kelas II SDN Klender 16 Pagi Jakarta Timur. *Jurnal Ilmiah PGSD*, 7(1), 153–159. <https://journal.unj.ac.id/unj/index.php/pgsd/article/view/7988>
- Wendo, E. S., Wau, M. P., & Noge, M. D. D. (2022). Pengembangan bahan ajar elektronik berbasis kearifan lokal ngada pada tema Selalu Berhemat Energi untuk siswa sekolah dasar kelas IV di Kabupaten Ngada. *Jurnal Citra Pendidikan*, 2(1), 190–203. <https://doi.org/10.38048/jcp.v2i1.541>.