



## **Reading Workshop-Based Interactive Materials for Enhancing Reading Comprehension in Indonesian Language Learning**

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*Received: 8 February 2025; Revised: 28 May 2025; Accepted: 1 October 2025*

**Abstract:** The reading ability of elementary school students in Indonesia is low. Ineffectiveness in reading learning is one of the causes of the low reading comprehension ability of fifth-grade elementary school students. Therefore, interactive teaching materials are needed that guide students to improve their reading comprehension skills. This study aims to develop interactive teaching materials based on reading workshops that are suitable for use in learning, to determine the practicality and effectiveness of interactive teaching materials based on reading workshops, and to test the effectiveness of interactive teaching materials based on reading workshops in Indonesian language learning elements of reading on the reading comprehension ability of grade V elementary school students. The type of research used was Research and Development (R&D), which adapted the Borg & Gall development model. The study subjects were 39 grade V elementary school students in Karanganyar, Kebumen, Central Java. The data collection technique in this study used tests, interviews, observations, and scales (questionnaires). The analysis techniques used were descriptive analysis, t-test with independent sample t-test, paired sample t-test, and N-gain score. The results of the study show that: 1) the products of research and development in the form of interactive teaching materials based on reading workshops are feasible and practical for use in Grade V Indonesian language learning; 2) the product has proven to be effective in improving the reading comprehension skills of fifth-grade elementary school students; and 3) there is a significant effect on reading comprehension ability, as indicated by a significance value of  $0.000 < 0.05$ , demonstrating that reading workshop-based teaching materials effectively enhance students' reading comprehension skills. This study contributes to the field of language education by providing empirical evidence that integrates the reading workshop approach with interactive teaching materials as an effective instructional model for improving elementary students' reading comprehension.

**Keywords:** interactive teaching materials, reading workshop, reading comprehension, primary school student

**How to Cite:** Ambarwati, A., & Wati, U. A. (2025). Reading workshop-based interactive materials for enhancing reading comprehension in Indonesian language learning. *Jurnal Prima Edukasia*, 13(3), 504-518. DOI: <https://doi.org/10.21831/jpe.v13i3.83194>



### **Introduction**

The results of the Progress in International Reading Literacy Study (PIRLS) study in 2011 reinforce the low literacy skills of students. The study shows that Indonesia is at level 41 of 44 PIRLS participating countries with a score of 428, a fixed rank with an increased score compared to 2006 of 405 (Mullis et al., 2023). However, the average reading score of 4th-grade students in Indonesia is still below the international score of 500 in the PIRLS study.

One of the reading skills that is very important for students is reading comprehension. Aziz & Yasin (2017) suggest that reading comprehension is a complex process in which the reader should be able to combine the information from the text with their background knowledge to understand the written word and the contents being read. Reading comprehension activities aim to help readers understand the content of the text. As Joshi et al. (2017) state that reading comprehension (RC) systems aim to answer any question that could be posed against the facts in some reference text. It means that

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the reading comprehension system aims to answer questions that can be posed against the facts in the reference text. Furthermore, Kaban & Lutmila (2015) divide the category of reading comprehension into four levels: literal, interpretative, critical, and creative.

Smith (in Prayogo et al., 2015) divides reading comprehension skills into several levels, namely: (1) literal comprehension, (2) interpretation, (3) critical/evaluative reading, and (4) creative reading. Literal comprehension is a reading skill where one can obtain the primary meaning of vocabulary, sentences, and ideas in the text. On the other hand, at the interpretation level, it requires thinking skills and identifying reasons, finding concepts of relationships, predicting final solutions, and comparing. The next higher skill is critical reading or evaluating, which requires the abilities at the previous level, then, added with the activity of evaluating the reading, the reader must be able to assess the author's thoughts. Furthermore, the highest level is creative reading, where the reader not only focuses their thoughts on the content of the text. However, it requires the reader to apply the ideas from the text to new situations and combine them with new knowledge to build a new concept or expand old concepts.

The Indonesian language subject in the Merdeka Curriculum contains four elements that learners must master: listening, reading-viewing, speaking, presenting, and writing. Reading is the ability of learners to understand, interpret, and reflect on a text based on specific purposes and interests to develop their attitudes, knowledge, skills, and potential. Viewing is the ability of learners to understand, interpret, and reflect on printed, visual, and audiovisual presentations according to their purposes and interests to develop their attitudes, knowledge, skills, and potential. The components that can be developed in reading and viewing include sensitivity to phonemes, letters, sign systems, vocabulary, language structure (grammar), meaning, and metacognition (Kemendikbud, 2022).

A needs analysis was conducted to determine the conditions in the field. The first step was to collect data on the reading comprehension skills of fifth-grade students in Nusa Cluster, Karanganyar District, Kebumen Regency, namely Candi 1 State Elementary School, Candi 2 State Elementary School, Giripurno 2 State Elementary School, Giripurno 3 State Elementary School, and Plarangan 1 State Elementary School by giving an initial test. The data was collected on May 8<sup>th</sup>-13<sup>rd</sup>, 2023, with the number of respondents in this study consisting of 5 fifth-grade teachers and 113 students. The researcher used literal, interpretative, critical/evaluated, and creative reading indicators to measure students' reading comprehension skills.

In categorizing reading comprehension ability, data obtained 45.5% in the poor category, 33.3% in the sufficient category, 16.7% in the good category, and 5.05% in the outstanding category. It shows that the poor category dominates students' reading comprehension skills. Further analyzed, students began to have difficulty at the interpretation reading stage, evaluating, and then creative reading. At the creative reading stage, students can only retell a text explicitly with vocabulary, phrases, and sentences taken from it without changing it based on their thoughts or reexplaining it with existing knowledge. They also need help constructing new ideas based on the text they have read.

There are still misconceptions about reading by teachers through the interviews of teachers. They only understand reading as translating a series of letters with a certain meaning; reading is limited to recognizing and understanding a reading. Teachers also stated that the reading ability of some of their students is still low because they have yet to be able to understand the implied reading. Some students need to be more fluent in reading and have difficulty understanding reading that contains foreign or new vocabulary. This is confirmed by Liane (in Ariawan & Pratiwi, 2017), that the low capability of teachers in providing feedback results in misconceptions between teachers and students, and the presentation of learning materials that only emphasize the concept of reading texts and answering questions.

The Indonesian Language Teacher's Book for Grade V Merdeka Curriculum, published by the Ministry of Education and Culture in 2021, is complete and sound. In the diagnostic assessment activity of the reading element, the book describes the activities that teachers must carry out with students, such as asking students to read a text. Then, students are asked to mention the title of the book and the author and explain the characters.

The Indonesian language teacher's and students' books for grade V of the Merdeka Curriculum still need to be improved. The shortcoming of the teacher's book is that it needs to explain how the teacher conducts reading instruction before students read independently to find a concept or idea from a text. In addition, the student's book of reading elements presents questions that can be answered explicitly in the text, so that it can only touch the level of literal understanding in reading comprehension skills. Meanwhile, the ability to interpret, evaluate, and critical reading has yet to be explored.

Looking at what was used in the previous year, namely the curriculum 2013, the student handbook is thematic. The subjects of science, social studies, SBdP, PPKn, and Indonesian are merged into one umbrella theme. There is no separation of language skills (listening, speaking, reading and viewing, and writing) as in the Merdeka curriculum, so reading skills are not explicitly taught.

Teachers or students use teaching materials to facilitate the learning process. It is seen as everything that can provide the possibility of obtaining a certain amount of information, knowledge, experience, and skills in learning (Kosasih, 2021). Çetinkaya et al. (2019) argue that activities such as reading interactive books integrated with the learning process will provide alternatives for children and help them learn while having fun. Such activities will also allow students to find other texts to solve problems and find solutions. Hernawan et al. (2023) mentions the function of preparing teaching materials, among others: (1) as a guide for students who direct all learning activities, as well as the substance of competencies that should be learned; (2) guidelines for educators who will direct all activities in the learning process, as well as the substance of competencies that should be taught/trained to students; and 3) an evaluation tool for achieving/mastering learning outcomes.

One of the innovations in developing interactive teaching materials to improve students' reading comprehension skills is the use of reading workshop-based teaching materials. Teaching materials developed in printed form are based on the reason that reading with printed books is more suitable for focused learning. In contrast, digital books are less suitable for reading comprehension (Vargas et al., 2024), as quoted in the Journal of Research in Developmental Disabilities. In Jurnal Mimbar Sekolah Dasar, Setiyadi et al. (2019) describe the results of their research related to the use of reading workshop-based online magazines that have an impact on the reading comprehension skills of elementary school students and the reading workshop approach in facilitating students to develop reading comprehension skills. Setiyadi's research focused solely on testing the effect of using reading workshops as a temporary strategy. In contrast, the reading materials consisted of online magazines that offered free content and lacked specific media development designed to improve reading comprehension. Davakos (2018) reported an increase in learning outcomes after implementing a reading workshop program for third-grade students during the summer reading class. This study was a Classroom Action Research and only measured learning outcomes, without in-depth discussion of the impact of the reading workshop implementation on reading comprehension. Therefore, this study aims to develop reading workshop-based teaching materials to improve reading comprehension in the Indonesian language subject. The novelty of this research is the teaching materials developed based on the reading workshop approach, with a choice of content according to the learning objectives in the reading and viewing elements of the Language subject for fifth-grade elementary school students. The interactive teaching materials based on reading workshops were developed in the Indonesian language subject of the Merdeka Curriculum for the Reading-Viewing Element so that teachers can carry out reading lessons based on reading workshops and can improve the reading comprehension skills of grade V elementary school students.

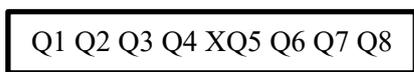
### **Methods**

The research type was development research or Research and Development (R&D) from Borg & Gall. This research aimed to develop products in the form of interactive teaching materials based on the Reading Workshop for Indonesian subjects in the Merdeka Curriculum to improve the reading skills of fifth-grade students. The steps of product development included research and information collection. Data were obtained through literature study, needs analysis, and preliminary research. A literature study was carried out to obtain information about library resources that will serve as the purpose of product development through articles in reputable journals on reading comprehension skills and reading workshops, analysis of textbooks used by students and teachers in both the curriculum 2013 and the Merdeka curriculum, and other teaching materials such as Student Worksheets used by schools, interviews with teachers and students regarding the needs of teaching materials. The second step was planning, in the form of activities to determine the purpose of product development, determine product users, analyze learning outcomes in reading level on Grade V Indonesian subjects, analyze materials and learning objectives, collect supporting materials for teaching materials, which include text, images, and worksheets, compile teaching material outlines, compile teaching materials on Canva, print teaching materials with A4 paper size, 70-gram HVS, and ivory covers.

The third step was developing a preliminary through several steps, including making research instruments, compiling, and developing interactive teaching materials based on reading workshops. The research instruments developed include observation sheets, material and media experts, teacher and student response questionnaires, and reading comprehension tests. The fourth step was Preliminary Field Testing. Six students at Plarangan 1 State Elementary School participated in the trial, with a sample representation of 6 students with two students in each category of students with high, medium, and low academic abilities. The data was taken on 25-28 March 2024. Initial field trials were conducted to obtain data related to the implementation of learning and the practicality of teaching materials and to analyze the shortcomings of teaching materials.

The fifth step was primary product revision. After analyzing all the information collected in the limited trial, the researcher revised the product based on feedback from teachers and students so that it was ready to be tested more widely. The sixth step was the main field testing. Teaching materials were tested on 12 students at Panjatan State Elementary School, with consideration of 4 students each in the high, medium, and low academic ability categories. The data were taken on 3-6 April 2024. The subject selection was based on the opinion of Dick et al. (2009) regarding the number of small-group trial subjects, namely 8-20 students. At this stage, researchers conducted a practicality test through teacher and student response questionnaires and conducted learning observations to determine the product's weaknesses to be improved.

The seventh step was operational product revision. Researchers improved and refined the Teaching Materials based on the information and input collected from the expanded field test results. After the revision, the teaching materials developed were expected to be operational and ready for use. The eighth step was operational field testing. Operational field trials used a type of quasi-experimental design with a time series design type. This is the experimental design (Time Series):



**Figure 1.** The Experimental Design

That design did not use a control class but only used one experimental class. The groups used in this study were not randomly selected. Before being given treatment, the group was given a pretest up to four times, aiming to determine the stability and clarity of the state of the group before given treatment. If the results of the pretest for 4 times showed different values, then the group was unstable, inconsistent, and uncertain. After the group's stability was known, treatment was given. The reason for using this technique was to consider the purpose of this study, which was to test the effectiveness of teaching materials in improving reading skills that needed to be seen periodically.

An operational trial was conducted by treating the experimental class, namely teachers and fifth-grade students of Candi 2 State Elementary School, who were not the subjects in the initial and field trials. This trial determined the product's practicality and effectiveness. The data were taken on 22 April 2024 - 18 Mei 2024. After the field trial, final product improvements are made so that the product is ready for dissemination. Dissemination was done on a limited basis by giving the product to other schools and through seminars.

The techniques used include observation, questionnaires, interviews, and tests. The observation used in this study was a structured observation. Observations were made to collect information about the implementation and practicality of the learning process using reading workshop-based teaching materials. Observations were carried out during the learning process during the initial field trial, extended field trial, and operational field trial.

This study uses the Likert scales and Guttman scales. The Likert scale was used for feasibility testing by material experts and media experts. The answers to each instrument in the Likert scale had favorable to negative gradations, with a score range of 1-5. The teacher and student response questionnaires used for the practicality test used a Guttman scale. This scale only provides two answer options, namely yes and no. The positive answers are given a value of 1, and the negative answers are given a value of 0.

Interviews were used to obtain teacher responses related to reading workshop-based teaching materials and student responses related to learning using reading workshop-based teaching materials.

The interview used was unstructured because the researcher wanted to dig deeper into the teacher's response to teaching materials and student responses to learning. Interviews were conducted after the learning was implemented using reading workshop-based teaching materials.

The tests used in this study were in the form of multiple-choice and description. The tests were developed based on reading comprehension ability indicators. Tests in the form of multiple-choice questions were used to measure the level of literal comprehension, interpretation, and evaluation. Evaluation questions were used to measure creative reading indicators. To determine the effectiveness of teaching material products in improving reading comprehension skills, the test results were compared before and after using reading workshop-based teaching materials in the experimental group.

Reading comprehension ability was revealed using a test of 10 multiple-choice questions with a score of 1 and 2 descriptive questions with a score distribution of 1-4. The possibility of respondents getting a maximum score of 100 and the possibility of respondents getting a minimum score of 0. According to the prepared assessment rubric, students' answers to multiple-choice questions were scored 0-1, while the description questions were scored 0-4 (Tables 1 and 2).

**Table 1.** Lattice of Reading Comprehension Ability Instrument

Level of Reading Skills	Indicators
Literal Understanding Interpretation	Students can retell the information on the fiction or non-fiction text explicitly.
	Students can identify the reason related to any topic.
	Students can find the concept of the relation among the elements in the text.
	Students can predict the events that will happen, yet happen or the final solution.
	Students can compare the elements of the text.
Critical Reading	Students can make decisions from the text.
	Students can evaluate the author's thinking
Creative Reading	Students can rewrite the story
	Students can write a story with a specific topic.

**Table 2.** Criteria for achieving reading comprehension skills

Final Score	Criteria
75.00 < score ≤ 100.00	Excellent
58.33 < score ≤ 75.00	Good
41.67 < score ≤ 58.33	Enough
25.00 < score ≤ 41.67	Deficient
0 ≤ score ≤ 25.00	Very Deficient

These criteria are used to classify the reading skills and determine whether the students have improved in reading comprehension skills after treatment using reading workshop-based teaching material. Teaching material suitable data was obtained through validation by a media expert and a material expert. The feasibility of the material is reviewed based on the aspects of content feasibility, presentation feasibility, language assessment, development of reading workshop-based teaching materials, and usability. Meanwhile, the media expert validation sheet is used some indicators: (1) outcomes addressed to students and the usage if the textbook must improve in learning process; (2) the right information and updated materials; (3) the language used is appropriate for the age of students; (4) the topic presented is interesting so students are actively in learning process; (5) the material presented was representative of the best media and technology; (6) the textbook is easy to use and follows a certain pattern; (7) No bias which is objectional and advertising; (8) the textbook presents a usage guide to be used by students; (9) the textbook is presented at the right reading level so that students can understand the information; (10) the material is presented as well as possible, so students can use the information. In addition, the test of reading comprehension was validated by an expert, and the suitability of the test instrument was reviewed based on the accuracy of questions according to the question indicators at the reading comprehension level (Table 3).

**Table 3.** Lattice of Test Reading Comprehension

No.	Indicators	Explanation of Indicators	Question Items
1.	Literal	Retell or reexplain the information	4
2.	Interpretation	Interpret the content of the text	6
3.	Critical	Evaluate the content of the text	2
	Reading/Evaluation		
4.	Creative Reading	Write a text based on the topic/theme	2
Number of Questions			14

The validity of the instrument is carried out by expert judgment, and then external validity is carried out by students of Karangkemiri 1 State Elementary School and Giripurno 3 State Elementary School, which are not part of the sample in this research. Test validity uses Pearson product-moment moment statistically. The internal reliability test in this research is measured using Alpha Cronbach.

### The Data Analysis Techniques

The data analysis is carried out to know the eligibility and the effectiveness of the reading workshop-based teaching materials. The next step is counting the average scores based on the collected data. If the average score is eligible, then the instrument and the product are worth trying. The percentage of the score is changed to a qualitative value with the following criteria (Table 4).

**Table 4.** The Category of the Eligibility Instrument

No.	Percentage of Score	Category
1.	<21%	Very Not Eligible
2.	21% - 20%	Not Eligible
3.	41% - 40%	Quite Eligible
4.	61% - 80%	Eligible
5.	81% - 100%	Very Eligible

The analysis of practicality starts to change the qualitative data to quantitative data with a range of 5-1, 5 for very good, 4 for good, 3 for enough, 2 for poor, and 1 for very poor. The quantitative data is changed to a percentage form and then classified by some criteria (Table 5).

**Table 5.** Criteria of Practicality Test of Product

Criteria (%)	Level of Practicality
81 - 100	Very Practical
61 - 80	Practical
41 - 60	Practical enough
21 - 40	Less Practical
0 - 20	Very impractical

The average score of practicality compared to the criteria. If the average practicality score is in the very practical category or the practical category, the product is worth trying. Meanwhile, if the criteria are not practical enough, less practical, or very impractical, the product needs improvement.

### The Analysis of The Effectiveness of Teaching Material-Based Reading Workshop

The analysis of the effectiveness of reading workshop-based teaching materials aims to determine the effect of reading workshop-based teaching materials on reading comprehension skills. The analysis of the effectiveness of reading workshop-based teaching materials uses a t-test analysis to compare two different conditions. Before conducting a t-test, a prerequisite test must first be conducted with details: the prerequisite test and the effectiveness test.

Prerequisite tests include normality tests and homogeneity tests. The normality test is used to determine whether the distribution or spread of the data used is normal or not in the experimental group. This study uses the SPSS 25 for Windows program with the Shapiro-Wilk sample test. Data is normal if the significance ( $\alpha$ ) is  $> 0.05$ . Conversely, data is abnormally distributed if the significance ( $\alpha$ ) is

$<0.05$ . If the data is normally distributed, a t-test is carried out with an independent sample test, but if the data is not normal, the Wilcoxon Test will be carried out.

The data analysis program used is SPSS 25 for Windows with a one-way ANOVA test. The calculation of homogeneity is based on the following hypothesis. Ho: The variance in each group is the same (homogeneous). Ha: The variance in each group is not the same (heterogeneous). The research sample comes from a homogeneous population at a significance level of 5% if the calculation probability is  $\geq 0.05$  or Ho is accepted if  $(\alpha) > 0.05\%$ .

Data processing in the form of pretest and post-test scores used a paired sample t-test to test the difference in pretest and post-test scores based on the following hypotheses. Ho: There is no significant increase in reading comprehension ability before and after using reading workshop-based teaching materials. Ha: There is a significant increase in students' reading comprehension ability before and after using reading workshop-based teaching materials. The testing criteria in the paired sample t-test are as follows: If significance  $> 0.05$ , then Ho is accepted. If significance  $< 0.05$ , then Ho is rejected

The level of effectiveness can be calculated by calculating the normalized Gain score, also known as Normalized Gain (N-gain). The calculation of effectiveness in this study uses the N-gain of the average by calculating the average pretest and post-test of the class. The calculation method is by calculating the average pretest and post-test of the class.

### **Product Specifications**

Reading workshop-based teaching materials were developed for fifth-grade elementary school students in the Indonesian language subject, including reading and viewing. The teaching materials include a cover, a foreword, a table of contents, instructions for use for teachers, learning outcomes, content or learning materials, and activities based on the steps of the reading workshop, which include short lessons, independent reading, and sharing.

The instructions include instructions on how to use the teaching materials, an explanation of the reading workshop, special notes related to the teaching materials, and a link/barcode for a learning video using the reading workshop. The teaching materials include: (1) literal meaning, identifying phenomena and characters in a story, (2) descriptive text, (3) narrative text, and (4) expository text. Student activities in the teaching materials are based on the steps of the reading workshop, including (1) short lessons, which present images/texts used by the teacher to model reading; (2) independent reading, which involves reading activities carried out independently, and the teaching materials provide two student worksheets to accommodate the differentiation of students' reading abilities; (3) Sharing, teaching materials contain presentation activities in various forms, such as poster making, presentations in large and small groups, concept map creation, and gallery work. These teaching materials are also equipped with images to support the material and links/barcodes containing theoretical explanations of each topic.

## **Results and Discussion**

### **Results**

The validity test of the instrument construction of the reading comprehension test questions was carried out by material experts. The validation process was carried out once, and a very feasible category was obtained, so that the test instrument was ready to be used for external validity testing. External validity was tested on 30 students, including 15 students of Karangemiri 1 State Elementary School and 15 students of Giripurno 2 State Elementary School, both of which schools had used the Merdeka Curriculum. With 30 students as respondents at a significance level of 5%, the r table was 0.3494. There are 12 valid questions, namely 10 multiple-choice questions and two essay questions. There are two invalid question items. Invalid questions will not be used in the study.

The reading comprehension ability test instrument is reliable, with a reliability coefficient 0,703. The interpretation of the reliability test is acceptable. Thus, the test instrument has met the feasibility and validity requirements.

After the reading workshop-based teaching materials were finished, validation was carried out by material experts and media experts. The material expert validator stated that the teaching materials were very suitable for use, with a score percentage of 92%. The same thing was also given by the media

expert validator, who gave a score percentage of 84% in the feasible category, after going through 2 revisions.

**Initial Field Product Trial**

After the teaching materials and instruments were declared suitable for use by the validator, an initial field product trial was conducted. The initial field test aims to find out things that need to be improved in the teaching materials and the limited practicality of the teaching materials.

Learning was carried out in 4 meetings. The implementation of learning in the initial field trial was 100%. The results of the practicality test showed that the reading workshop-based teaching materials were very practical to use, with an average score of 97%.

In addition to analysing and evaluating interactive learning materials based on the reading workshop, researchers also evaluated the learning process. Evaluation of the learning process aims to improve the learning process in the next trial. Obstacles encountered during the learning process were: (1) teachers did not explore students' knowledge in the "connection" activity in material 1; (2) Students had difficulty finding the meaning of difficult words by just reading; (3) Difficulty in the "sharing" session because most students chose text 2 in material 4, which was considered easier. Solutions to overcome these obstacles were: (1) opening up more effective opportunities for discussions related to reading workshop-based learning before the implementation of learning; (2) providing a link or barcode to access KBBI Online so that students can find the meaning of difficult words; (3) Providing instructions before independent reading activities related to group divisions that were divided fairly by the teacher.

**Field Trial Expanded**

The expanded field trial aims to determine the practicality of the Teaching Materials in a wider scope. Learning observations were conducted in 4 meetings, with a percentage of learning implementation of 100%. The practicality test in the expanded field trial obtained an average score of 96%, so the teaching materials are very practical to use in learning. Suggestions given for improving interactive teaching materials based on the reading workshop are (1) reducing the number of questions on the LKPD or reducing the workload on LKPD material 4; and (2) changing the type of binding, from spiral binding to book binding. The purpose of changing to bookbinding is to make it stronger and less easily torn.

In addition to analysing and evaluating interactive teaching materials based on reading workshops, researchers also evaluated the learning process. The obstacles encountered during the learning process include: (1) teachers are still lacking in detail in conveying how to develop main ideas into paragraphs; (2) teachers have not explained that main ideas and main sentences are different so that when students are asked to determine the main idea, the answer given is the main sentence; (3) teachers have not explored the teaching materials in more depth so that the delivery of the material tends to be textbook, as a result, teachers do not convey more detail about the differences between facts and opinions. The solution is that teachers must study the teaching materials in depth and detail so that they can explore further regarding the material to be delivered.

**Operational Trial**

The data obtained from the operational trial were used to determine the practicality and effectiveness of the Interactive Teaching Materials product based on the reading workshop. Treatment was given at each meeting, with a total of 4 meetings. After the experimental class was given treatment, a post-test was given. The experimental group in this study was 21 fifth-grade students of Candi 2 State Elementary School who were not the subjects of the initial trial and the expanded trial.

**Table 6. Product Practicality Data**

<b>Practicality Data</b>	<b>Score Percentage</b>	<b>Level of Practicality</b>
Scale of teacher responses	98%	Very Practical
Scale of student responses	95%	Very Practical
Average score of teacher and student responses	96.5%	Very Practical

Based on Table 6, the teacher's response scale shows that the practicality of the teaching materials is in the "very practical" category. The average response scale of teachers and students is 96.5%, so the interactive teaching materials based on the Reading Workshop are very practical to use.

### Reading Comprehension Ability in Experimental Class

**Table 7.** Experimental Class Reading Comprehension Ability Test Results

Final Score	Category	Pretest	Post-test
75,00 < score ≤ 100,00	Very Good	0	15
58,33 < score ≤ 75,00	Good	7	5
41,67 < score ≤ 58,33	Enough	12	1
25,00 < score ≤ 41,67	Poor	2	0
0 < score ≤ 25,00	Very Poor	0	0

Based on the data shown in Table 7, with the post-test results showing that there were no students in the poor category, even as many as 15 students were in the very good category, it can be concluded that there was an increase in reading comprehension skills in the experimental class.

To determine the effect of using interactive teaching materials based on the reading workshop on reading comprehension skills, an effectiveness test was conducted. The results of the normality test calculations for reading comprehension ability are normally distributed, so the next analysis is with a parametric test, namely the t-test.

**Table 8.** Normality Test of Reading Comprehension Ability Data

Data	Sig.	Information
Pretest	0.106	Normal
Post-test	0.239	Normal

Based on Table 8, it is known that the level of significance of the reading comprehension ability data is more than 0.005, so it can be concluded that the pretest and post-test data of reading comprehension ability are normally distributed. Then, a paired sample t-test was conducted to test whether there was an increase in reading comprehension skills before and after using interactive teaching materials based on the reading workshop.

**Table 9.** Paired t-test Results Data for Reading Comprehension Ability Variables

Variable	Data	Sig. (2-tailed)	Information
Reading Comprehension Skill	Pretest Post-test	0.000	There is a significant difference

As shown in Table 9, the reading comprehension ability data shows a significance of 0.000. The value in the data is smaller than 0.05, so  $H_0$  is rejected, and  $H_a$  is accepted. This means that there is a significant difference in students' reading comprehension ability before and after using interactive teaching materials based on the reading workshop.

Based on research data on the experimental group, the following presents descriptive data on the reading comprehension ability variable.

**Table 10.** Reading Comprehension Ability Score Statistics

Information	Pretest	Post-test
Number of Students	21	21
Minimum Score	72	100
Maximum Score	28	50
Average Score	53	80
Average N-Gain	0.5911 (medium)	
N-Gain Percentage	59% (quite effective)	

Table 10 shows that the average reading comprehension ability score of the experimental class, before and after the use of interactive teaching materials based on the reading workshop, increased by

27, namely from 53 to 80. This can also be observed from the N-Gain results, namely 0.5911, which is classified as moderate, and the N-Gain percent value of 59% is included in the fairly effective category, which means that the use of interactive teaching materials based on the reading workshop is quite effective in improving reading comprehension skills.

Table 11 shows an analysis of the average score and the average percentage of the post-test score for each indicator in the experimental group. This is to determine the student's reading comprehension ability for each indicator in detail.

**Table 11.** Results of Reading Comprehension Ability Analysis for Each Indicator

Indicators	Average Score	Max Score	Percentage Score
Literal Understanding	0.916	1	91.6%
Interpretation	0.742	1	72.4%
Evaluate	1	1	100%
Creative Reading	3.14	4	78.5%

Based on the average percentage of scores, the “interpretation” indicator got the lowest percentage, while the “evaluation” indicator got the highest percentage. Overall, students were able to achieve all reading comprehension indicators.

## Discussion

Interactive teaching materials based on reading workshops are developed as an innovation in learning guides in the form of interactive guidebooks for teachers and students. These teaching materials only focus on the reading and viewing elements of the Indonesian Language subject of the Independent Curriculum for Class V. It is hoped that these interactive teaching materials can improve reading comprehension skills. This interactive teaching material presents three main steps in the reading workshop, namely mini-lessons (short lessons), independent reading, and sharing. The mini-lesson stage (short lessons) is the main foundation in the reading workshop strategy, where the teacher models before asking students to do independent reading activities.

The mini-lesson stage (short lessons) consists of several activities, namely 1) connection (the teacher connects the material to be studied with the knowledge that students already have previously), in the connection the teacher can use various media such as book covers or pictures then explore students' knowledge with a series of trigger questions; 2) teaching point (learning objectives), at this stage the teacher conveys the learning objectives accompanied by short modeling; and 3) active engagement (active involvement), at this stage students have carried out reading activities according to the modeling carried out by the teacher, but here students are still guided by the teacher. In the mini-lesson activity (short teaching), this teaching material embeds literal and inferential questions that will train students' reading skills during book reading activities together. This is in line with research from (de Koning et al., 2020), which states that children benefit greatly from making conclusions with the inferential questions written in storybooks while reading together.

Then, at the independent reading stage, students carry out independent activities and work on the LKPD (student worksheets) embedded in it. Independent reading activities provide opportunities for students to construct their knowledge when paying attention to a text. This is in line with (Abdelshaheed, 2023), who states that by training students to outline a text, teachers can act as facilitators who have an impact on students' memory and understanding. The last step of the reading workshop is sharing. Sharing is a presentation activity carried out by students with various presentation methods, such as making posters with Canva, shopping for ideas with a gallery work model, and others. As Lestari & Azizah (2023) reveal, sharing is one of the ways to support and facilitate students' needs

This teaching material contains several parts, including 1) title page; 2) foreword; 3) table of contents; 4) instructions for use for teachers; 5) learning outcomes in the elements of reading and viewing; and 6) materials. The four materials include 1) denotative meaning, phenomena, and characters in the text; 2) descriptive text; 3) narrative text; and 4) expository text. In addition, this interactive reading workshop-based teaching material is also supported by multimodal text. Multimodality is the representation of data using information from various entities, often with multiple representations,

which can be images, audio, text, or other forms (Qin et al., 2023). Hernawan (2013) defines multimodal as a term that refers to the way people communicate using different modes simultaneously.

The products developed in this study have several advantages. This product improved reading comprehension skills. This teaching material was created to improve reading comprehension skills. As found by Hardianti & Fitriani (2023), worksheet teaching materials are effective in improving early reading skills in children aged 5-6 years. Furthermore, Puspita et al. (2020) stated that teaching materials, media, LKS, and interesting and practical activities are able to stimulate students in improving reading comprehension skills.

Focusing on reading and viewing elements. The product developed in the form of interactive teaching materials focuses on the reading and viewing elements. The reading and viewing element is one of the language skills in the Indonesian Language subject in the Merdeka Curriculum. This skill was not in the previous curriculum, the 2013 curriculum. The existence of this element must be optimised so that students' reading skills as part of basic literacy can be improved. Product development needs to be carried out to improve the achievement of the reading and viewing elements. As Kartika et al. (2022) stated, the development of an e-module on folk poetry is suitable for achieving the reading and viewing elements.

This reading workshop-based teaching material applies differentiated learning as an effort to improve reading comprehension skills, which is manifested in the availability of 2 student worksheets with different text complexities. The first text tends to be more difficult with more paragraphs than the second text. According to Tomlinson (2014), differentiated learning is an effort to adjust the learning process to meet the learning needs of each student. Pratama (2016) stated that differentiated learning can be a strategy for strengthening literacy at the habituation, development, and learning stages, which have an impact on improving reading comprehension skills in grade V of elementary school. In addition, students' endurance in reading increased from 5-10 minutes to 15-10 minutes, and students were able to make book reviews and then deliver them in front of the class.

This teaching material is said to be interactive because students can access the material through the link/barcode provided, providing instructions for teachers to provide stimuli that will provoke student responses. Interactive teaching materials can improve reading comprehension skills, as stated by Nurkhofifah (2022), who found that the use of smartboard media affects improving the reading comprehension skills of grade IV students. In addition to being interactive, the products developed in this study are also multimodal because the teaching materials are equipped with various texts in various modes, such as images, videos, voice recordings, and writing. Kayati (2022) stated that the use of multimodal texts can help students understand, analyse, and assess language content and elements in the text.

This teaching material is inspired by reading workshops as the main activity of participants in learning to read. The selection of reading workshops is based on the advantages of reading workshops as a reading learning strategy that makes the process the main foundation and effectively influences students' reading comprehension skills. This is in line with the findings of Setiyadi et al. (2019), that the use of online magazines based on reading workshops has an impact on improving the reading comprehension skills of grade IV students. Furthermore, Cárdenas (2020) stated that intensive reading comprehension has had a positive impact on reading comprehension skills since they started the reading workshop. Likewise, Lain (2017) said that reading workshops help students learn to read. The use of appropriate reading strategies has an impact on students' reading comprehension skills, as stated by Li et al. (2022). The experimental group significantly outperformed the control group in reading comprehension after reading strategy instruction. This interactive teaching material is also developed by integrating task-based activities that can have a positive learning environment, learning success, and learner satisfaction (Ismail et al., 2023).

Pratidina & Novaliyosi (2024) conducted a study on how the development or use of teaching materials plays an important role in students' literacy and numeracy skills. The study used the systematic literature review (SLR) method by collecting various scientific articles related to the use or development of teaching materials at elementary, middle, and high school levels from 2017-2023. Various findings state that teaching materials or media designed to suit the level can play an important role in literacy and numeracy skills as Nazilah et al. (2019) said, teaching materials based on socio-scientific issues on global warming affect students' scientific literacy skills, with a significance value of 0.000, where students' scientific literacy skills increase after being given learning using socio-scientific-based

teaching materials. In learning, students need practical teaching materials that can motivate, attract attention, and help students improve their reading comprehension skills. Prastowo (2019) stated that teaching materials that are enchanting, stimulating, comfortable to look at, and have many benefits will encourage students to continue learning from them.

From the product effectiveness test, interactive teaching materials based on reading workshops are more effective in improving students' reading comprehension skills in a sufficient category. This conclusion is supported by Aulia et al. (2020), who found that CIRC-based teaching materials effectively improve the reading comprehension skills of grade IV students. In addition, Gunawan and Suhardi (2019) stated that teaching materials in the form of picture books integrated into thematic learning are effective in improving the reading comprehension skills of elementary school students.

The effectiveness of reading workshops was studied by Davakos (2018), who found that there was an increase in learning outcomes in the form of reading comprehension skills after reading workshops were conducted. Their research led to the creation of an action plan that provides a series of actions for teachers in implementing reading workshops. The effectiveness of printed teaching materials is also supported by research conducted by Budiarti & Haryanto (2016), which stated that developing comic books can improve students' reading comprehension skills and learning motivation. Furthermore, Gunawan & Suhardi (2019) stated that picture books based on integrative thematics significantly influence reading comprehension skills.

When analysed based on the results of observations, interactive teaching materials based on reading workshops improve reading comprehension skills through a series of reading activities and the use of multimodal texts in conveying information. Activities in mini-lessons (short lessons) are an important point where there is modeling carried out by teachers involving students, before students carry out independent reading activities. Modelling is essential in line with Bandura's theory, which states that an individual can have a form of thinking (perception), behaviour, and personality because of the role model, which, by imitating (observational learning), involves symbolic representations that will later be stored in long-term memory. In mini-lessons (short lessons), responsibility and ownership are transferred from the expert (teacher) to the student. The teacher acts as an expert, sending explicit instructions, and from there, the activity moves to guided instruction, where students try new things through close observation of the teacher (Dorfman & Krupp, 2023). After the mini-lesson activity (short lesson), students carry out independent reading activities, where students are working and practising reading (alone, in pairs, or small groups), the teacher has the opportunity to respond and explore students' thinking (Orehovec & Alley, 2003).

This teaching material emphasises reading workshops as the primary activity for participants learning to read. The selection of reading workshops was based on their advantages as a reading learning strategy, making the process the primary foundation and effectively influencing students' reading comprehension skills. This aligns with the findings of Setiyadi et al. (2019), who found that online magazines based on reading workshops significantly improved fourth-grade students' reading comprehension skills. Furthermore, Cárdenas (2020) stated that intensive reading comprehension positively impacted reading comprehension skills from the moment they began reading workshops. Similarly, Lain (2017) noted that reading workshops help students learn to read. Using appropriate reading strategies significantly impacts students' reading comprehension skills, as noted by Li et al. (2022), who found that the experimental group significantly outperformed the control group in reading comprehension after receiving reading strategy instruction.

In mini-lessons, responsibility and ownership are transferred from the expert (teacher) to the students. The teacher acts as an expert in delivering explicit instructions, from which the activity moves to guided instruction, where students try new things through close observation of the teacher (Dorfman & Krupp, 2023). After the mini-lesson, students engage in independent reading, where students are working and practising reading (alone, in pairs, or small groups), and the teacher has the opportunity to respond and explore students' thinking (Orehovec & Alley, 2003).

The absence of a control group makes it difficult to determine whether the changes in the experimental group were due to the treatment or other factors outside the study, such as environmental factors, individual characteristics, or chance. Future researchers could replicate this study using a control group to determine causality. The study could also be expanded to determine the effectiveness of the teaching materials on speaking and writing, as the reading workshop-based teaching materials accommodate these skills.

### **Conclusion**

Based on the research that has been carried out, it can be concluded that: (1) the validation results show that interactive teaching materials based on reading workshops are suitable for use to improve the reading comprehension skills of fifth grade elementary school students; (2) the results of the practicality test of teaching materials based on reading workshops are practically used in fifth grade elementary schools; and (3) interactive teaching materials based on reading workshops effectively influence the reading comprehension skills of fifth-grade elementary school students, and this interactive teaching material based on reading workshops is categorized as quite effective to use.

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