

Assessing the Suitability of Fifth Grade Textbooks on 'Ecosystems and Our Environment' in Lebong Elementary Schools

Guntur Gunawan¹, Andri Aprillia², Yosi Yulizah³, Yuyun Yumiarty⁴

¹ Institut Agama Islam Negeri Curup, Indonesia; unturgunawan@iaincurup.ac.id

² Institut Agama Islam Negeri Curup, Indonesia; andriaprillia005@gmail.com

³ Institut Agama Islam Negeri Curup, Indonesia; chieyosi@iaincurup.ac.id

⁴ Institut Agama Islam Negeri Curup, Indonesia; yuyunyumiarty@iaincurup.ac.id

ARTICLE INFO

Keywords:

Eligibility analysis;
Textbook;
Elementary schools

Article history:

Received 2024-02-02

Revised 2024-05-08

Accepted 2024-06-12

ABSTRACT

This descriptive-quantitative study assesses the eligibility of Grade 5 student textbooks on ecosystems and the environment at Lebong Regency Elementary School. Data collection involved surveys and observations, with quantitative analysis applied to the findings. The study sampled 93 elementary schools and 180 fifth-grade teachers using regional sampling, a random selection technique per sub-district. Primary data were collected via questionnaires, with secondary data sourced from textbooks for class IV students on the theme "Ekosistem dan Lingkungan Sahabat Kita." The research revealed that the conformity of material descriptions with Core Competencies (KI) and Basic Competencies (KD) averaged 56.76%, deemed quite appropriate. Material accuracy met the requirements with a 62.92% rating. Learning support materials also met the requirements, scoring 64.3%. Overall, the suitability of material descriptions with KI and KD, material accuracy, and learning support materials achieved a 62.47% rating. The study concludes that the fifth-grade textbooks on ecosystems and the environment at Lebong Regency Elementary School are eligible, meeting criteria such as material conformity with KI and KD, material accuracy, and learning support. Positive aspects include alignment with Core Competencies and accuracy. However, recommended improvements involve better alignment with curriculum guidelines, enhancing content clarity, optimizing learning support materials, and conducting continuous evaluations for improved educational impact.

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



Corresponding Author:

Guntur Gunawan

Institut Agama Islam Negeri Curup, Indonesia; unturgunawan@iaincurup.ac.id

1. INTRODUCTION

Scientific literacy is the capacity to perceive, understand, and apply scientific knowledge and concepts in everyday situations. The significance of scientific literacy is shown by the use of textbooks as one of the primary methods for acquiring scientific understanding and abilities. Expert theories support the use of textbooks to increase scientific literacy. According to Jean Piaget's (2013) Constructivism theory,

textbooks serve as instruments for students to develop an understanding of the world of science via controlled learning experiences. Meanwhile, Lev Vygotsky's (2018) Social Constructivism theory emphasizes the significance of social interaction and cooperation in the learning process, suggesting that textbooks may be used to facilitate learning and scientific discourse.

In addition, Cognitive theory, as proposed by Jerome Bruner (2006), highlights the importance of effective representation in information textbooks to help students better organize and convey science concepts. Thus, textbooks are not only a source of information, but also a tool that facilitates the construction of deeper and more sustainable knowledge in scientific literacy. In this context, an understanding of scientific literacy and the important role of textbooks becomes essential in supporting the development of scientific skills that are strong and relevant for learning and everyday life.

In the educational context, textbooks are one of the main sources of information used to form scientific literacy in students. Therefore, analyzing the feasibility of textbooks is very important. Feasibility analysis is a systematic process assessing the viability of a project, product, or service, identifying potential risks and challenges, and providing strategic insights for decision-making (Bowen, et al., 2009). Through this analysis, we can evaluate the extent to which the textbook complies with curriculum standards, whether the material presented is accurate and relevant, and whether the textbook can support the development of a comprehensive understanding of science concepts. By paying attention to the importance of scientific literacy and analyzing the appropriateness of textbooks, we can ensure that the science education provided to the younger generation is not only informative but also forms strong critical and scientific thinking.

In addition to being interested in and knowledgeable about the world around them, science-literate people can identify questions, gather information, draw conclusions from skeptics' evidence, challenge other people's questions regarding scientific matters, and make well-informed decisions regarding their health and well-being as well as the environment. Understanding science, communicating science, and using science to solve issues are all components of science literacy. Teachers must think about learning strategies that fit the needs and potential of their students to enhance science literacy. These strategies center on giving students a hands-on experience and application of science, rather than just requiring them to be motivated. Science literacy helps to mold people's attitudes, actions, and character so they can take care of and be accountable for the universe, society, and themselves (Miharja, 2016).

Building on past information, culture, and experience to create new knowledge and a better understanding is all part of the intricate process of becoming literate. According to this definition, a person must possess a particular set of abilities and skills that allow them to function in both the classroom and outside of it. For this reason, science literacy instruction in elementary schools is crucial.

Studying ecosystem content in student textbooks (theme 5) is beneficial from a science literacy perspective because it allows students to analyze how living things interact with their surroundings and how human activity affects them, as well as how to protect the environment. In actuality, even though Natural Science (IPA) classes have been taught since elementary school, they have failed to provide pupils with environmental understanding and attitudes. Students' lack of concern and attitude toward the environment is undoubtedly concerning, as attitudes and behaviors toward the environment ought to have been ingrained through education in schools. The elements that determine the quality of learning include learning resources, one of which is textbooks. Science books used in schools today tend to be as heavy and impressive as reading books for adults. Science books are also often not equipped with pictures, or if pictures are shown, sometimes the pictures are less interesting so they are unable to attract students' interest. Science books that tend to be heavy and too verbal make students experience many difficulties in understanding the material so their learning motivation decreases and affects learning outcomes. The quality of education is also largely determined by the quality of learning.

Textbooks, or more precisely, teaching materials, are educational resources that help students meet their learning goals. In the teaching and learning process, textbooks are a crucial component of the learning activities for both teachers and students. Textbooks are regarded as the foundation and provide all the information required for both teaching and learning. Textbooks are educational resources that are always evolving to meet the needs and advances of local communities. Textbooks received by students

must be able to respond to any changes and anticipate any developments that occur in the future. Therefore, according to Suharsimi Arikunto, textbooks are a core element in teaching and learning activities. Because it is the textbook that is sought to be mastered by students, teachers in particular, or curriculum developers, in general, must think about the extent to which the material or topics listed follow the needs of future students and line with their interests (Fathurrohman & Sutikno, 2011).

Textbooks are a manifestation of the curriculum and competencies that students must achieve, as well as a forum for developing student competence in applying their knowledge. Textbooks or textbooks play an important role in building students' science literacy competencies; therefore, good textbooks must be integrated with science literacy competencies in a balanced manner. Mastery of science literacy is very important for students. Students haven't yet fully mastered science literacy, though. This is because science learning has not shown the nature of science as a whole so it is difficult to link scientific knowledge with the phenomena that occur. Based on observations and conversations with educators working there, there are several significant issues that educators frequently deal with when carrying out instructional activities. These issues include figuring out which educational resources are best to use to assist students reach competency (Hamalik, 2003). This is because, in the curriculum or syllabus, teaching materials are only outlined in the form of "subject matter". Therefore, it is the teacher's job to elaborate on the subject matter so that it becomes complete teaching material (Mudlofir, 2012).

Nurul Fitri Handini's research on Class V students' textbooks focuses on scientific literacy, highlighting its importance in the 21st century for human welfare and technological capabilities. The study highlights the need for textbook analysis to enhance scientific literacy (Handini, 2021). Ramadhan Putra Pratama et al. conducted a feasibility analysis of Class 5 Elementary/Mi textbooks on the theme "Events in Life" in Purwanto District. The study used instruments from Chiappetta, Sethna, and Filman in Padayachee. The results showed that the science aspect had the highest percentage of the three aspects, and not all were found in student books. The study also found that the content in the textbook was suitable for use, with a 100% feasibility percentage on material completeness, material depth, accuracy, concepts, and examples (Noviyanti et al., 2021). The study by Afroh Noviyanti et al. examines the character values in thematic textbooks for Class V elementary schools on theme 8 "Our Friends' Environment" from the perspective of character implementation. The research, conducted using a library research method, reveals that the thematic books for class V students contain religious, honest, tolerance, disciplined, hardworking, creative, democratic, national spirit, love of country, friendly/communication, peace-loving, social care, environmental care, and responsibility character values. This highlights the importance of character education in addressing social problems and enhancing students' character development (Putra, 2021).

Regarding the selection of teaching materials, in general, the problems in question include how to determine the type of material, depth of coverage, order of presentation, and treatment of learning materials. This problem is considered important by researchers because textbooks are an important element of learning that must be prepared so that the implementation of learning can be following the aims and objectives. The assessment of thematic textbooks from the aspect of scientific literacy is also important to study because the lessons studied are related to science. From the explanations above, this research aims to measure the feasibility of the Class V Student Textbook on the Ecosystem and Environment Theme of Our Friends at Lebong Regency Elementary School. This analysis is carried out to ensure that the textbooks used in schools are truly appropriate which will then have implications for learning outcomes and more importantly the formation of students' positive character.

2. METHODS

2.1. Research Design

The research used in this study is descriptive-quantitative because researchers want to test the eligibility of a textbook in fact and interpret the "Eligibility Analysis of Grade 5 Student Textbooks on the Theme of Ecosystems and the Environment of Our Friends in Lebong Regency Elementary School. Descriptive-quantitative document analysis can assess the feasibility of the Class V Student Textbook on the Ecosystem and Environment theme for Our Friends at Lebong Regency Elementary School. This

involves reviewing the textbook's content, structure, and alignment with curriculum standards. Quantitative data can be gathered through surveys and student performance data. This approach can identify strengths and areas for improvement, guiding decisions on its continued use or modification to enhance students' understanding of ecosystem and environmental concepts. The quantitative research method is this one. Positivist-based quantitative methods are used to select research on certain populations or samples, collect data with research instruments, and perform quantitative or statistical data analysis (Sugiyono, 2018).

The research was conducted in primary schools in Lebong district. The selection of the location of the research was based on the specific class teachers of grade V primary schools, through the distribution of questionnaires and documentation.

2.2. Population and Sample

The population in this study was all fifth-grade teachers in Lebong Regency elementary schools. The number of teachers is approximately 180, spread across Lebong Regency elementary schools. So, in this study, 180 educators comprise the subjects in the study population. This research sampling technique uses cluster random sampling, or random sampling based on area or region. The sample will be determined based on regional groups of members of the research population. In this technique, the research subjects will be grouped according to the area or place of domicile of the population members. According to Sugiyono Cluster Sampling (Area Sampling), regional sampling techniques are used to determine the sample when the object to be studied or the data source is very broad (Sugiyono, 2007). In Lebong District, there are 93 elementary schools with a total of 180 fifth-grade teachers as a population. Therefore, the sampling is determined by random selection (random), which is taken per sub-district as a sample. This sampling technique is called regional sampling.

Researchers want to know the eligibility level of elementary school textbooks in Lebong district. Researchers determined samples from areas spread across the Lebong Regency. Both at the sub-district, village, and hamlet levels. Based on Sugiyono's statement about determining the sample from the region, the researchers determined the sample of this study based on the sub-districts in Lebong Regency by taking each grade V educator 1 or 2 teachers in each representative school in the sub-district. In the case of selecting 1-2 teachers from 30 schools, the process includes identifying the population, choosing the appropriate teacher, choosing the appropriate teacher, using a random number generator, selecting the appropriate teacher based on the chosen number, and verifying and confirming the results with the school or relevant authorities. This process ensures the chosen teachers meet the required standards. There are 13 sub-districts in Lebong Regency. The following is a detailed sample that researchers can use:

Table 1. Research Sample

NO	SCHOOL	ADDRESS	SUBDISTRICT	NUMBER OF CLASS V TEACHERS
1.	SDN 56 Lebong	Talang bunut	Kec. Amen	1
	SDN 07 Lebong	Garut		1
2.	SDN 05 Lebong	Air Putih	Kec. Pinang Belapis	1
	SDN 08 Lebong	Tambang Saweak		2
3.	SDN 01 Lebong	Iokasari	Kec. Lebong Utara	1
	SDN 09 Lebong	Desa Tunggang		1
4.	SDN 13 Lebong	Lemeu	Kec. Uram Jaya	1
	SDN 55 Lebong	Bentangur		2
5.	SDN 73 Lebong	Bungin	Kec. Bingin Kuning	1
	SDN 48 Lebong	Kr. Dapo Atas		2
6.	SDN 59 Lebong	Tabek Kauk	Kec. Lebong Sakti	1
	SDN 80 Lebong	LimaPit		1
7.	SDN 28 Lebong	Talang Donok I	Kec. Topos	1
	SDN 88 Lebong	Talang Donok		2
8.	SDN 27 Lebong	Rimbo Pengadang	Kec. Rimbo	2
	SDN 35 Lebong	Talang Ratu	Pengadang	2
9.	SDN 79 Lebong	Semelako	Kec. Lebong Tengah	1
	SDN 21 Lebong	Suka Damai		1
10.	SDN 18 Lebong	Tabek Blau I	Kec. Lebong Atas	1
	SDN 54 Lebong	Daneu		1
11.	SDN 60 Lebong	Gunung Alam	Kec. Pelabai	1
	SDN 16 Lebong	Tanjung Agung		1
12.	SDN 47 Lebong	Mangkurajo	Kec. Lebong Selatan	1
	SDN 46 Lebong	Turan Tiging		1
TOTAL	24 Elementary Schools	-	-	30 Teachers

2.3. Data Resources

In this quantitative research, the data sources, which are written materials, consist of primary data sources and secondary data sources, namely:

The result of a questionnaire that the researcher distributed is the main data from the study. This data is the result of researchers' efforts in data collection. Data collection is carried out using both facts and figures. Data obtained from facts about a research object obtained at the researcher's location. Secondary data from scientific research is taken from various sources such as books, articles, journals, and others. Secondary data used includes textbooks for class IV students on the theme of "*Ekosistem dan Lingkungan Sahabat Kita*".

2.4. Data Collection Technique

Questionnaire

The Likert scale was used in this research to answer the problem formulation. A person's or group's attitudes, opinions, and perceptions of social phenomena can be measured using a Likert scale. The variables to be measured are converted into indicator variables using a Likert Scale. Instrument items in the form of questions or statements are then prepared using these indicators as benchmarks. The study validates the questionnaire by comparing it to educational and linguistic standards, ensuring validity. The construct validity is assessed by comparing the questions with a 0.7 coefficient, indicating good construct validity. The internal reliability is assessed using Cronbach's alpha, with a 0.85 reliability score. The results show that the questionnaire is highly valid and reliable. Next is a depiction of choosing answers on a Likert scale test:

Table 2. Description of choosing answers to the Likert scale test

No	Answers	Positive Statement Score	Negative Statement Score
1.	Strongly not eligible	1	5
2.	Not eligible	2	4
3.	Quite eligible	3	3
4.	Eligible	4	2
5.	Strongly eligible	5	1

2.5. Data analysis technique

After the questionnaire was distributed to respondents, the data was collected. After the data was entered into a table, it was processed and analyzed to determine the "Eligibility of a Class V Student Textbook on the Ecosystem and Environment Theme of *"Ekosistem dan Lingkungan Sahabat Kita"*". The researcher analyzed the results using the statistics method, namely the product-moment correlation technique.

This calculation is carried out using a grouping technique, namely Strongly eligible, Eligible, Quite Eligible, Not Eligible, and Strongly Not eligible. The answers to the instrument items are classified into five choices; each indicator measured is given a score of 1–5, namely 5 (strongly eligible), 4 (eligible), 3 (quite eligible), 2 (not eligible), and 1 (strongly not eligible). The next step is to assess the suitability of a textbook for class V students on the theme of *"Ekosistem dan Lingkungan Sahabat Kita"* at Lebong Regency Elementary School. After the data is obtained, look at the weight of each response and calculate the average score using the following formula:

$$x = \frac{\sum x}{y} \dots (3)$$

Description: x : mean
y: number of appraisers
 $\sum x$: total score

Then the formula for the percentage of results can be calculated using the following formula:

$$\text{Results} = \frac{\text{total score obtained}}{\text{maximum score}} \times 100$$

Furthermore, there are eligibility categories based on Arikunto's criteria as follows:

Table 3. Textbook eligibility criteria

No	Percentage categories	Eligibility category
1	< 21 %	Strongly not eligible
2	21 – 40 %	Not eligible
3	41-60 %	Quite eligible
4	61-80 %	Eligible
5	81 – 100 %	Strongly eligible

3. FINDINGS AND DISCUSSION

3.1. Findings

The results of the questionnaire survey showed that the respondents were 30 teachers. From the results of the survey, a range of values was obtained, namely that the minimum value was 50 and the maximum value was 85. The mean value was 62.1000, the median value was 59.5000, the modus value was 57, and the standard result was 8.71127. The calculation results are obtained through SPSS 16. For statistical results, you can look at the table below:

Table 4. Mode, Mean, and Median

Statistics		
FEASIBILITY OF THE TEXTBOOK FOR CLASS V STUDENTS		
N	Valid	30
	Missing	0
Mean		62.1000
Median		59.5000
Mode		57.00 ^a
Std. Deviation		8.71127
Variance		75.886
Std. Error of Skewness		.427
Std. Error of Kurtosis		.833
Range		35.00
Minimum		50.00
Maximum		85.00
Sum		1863.00

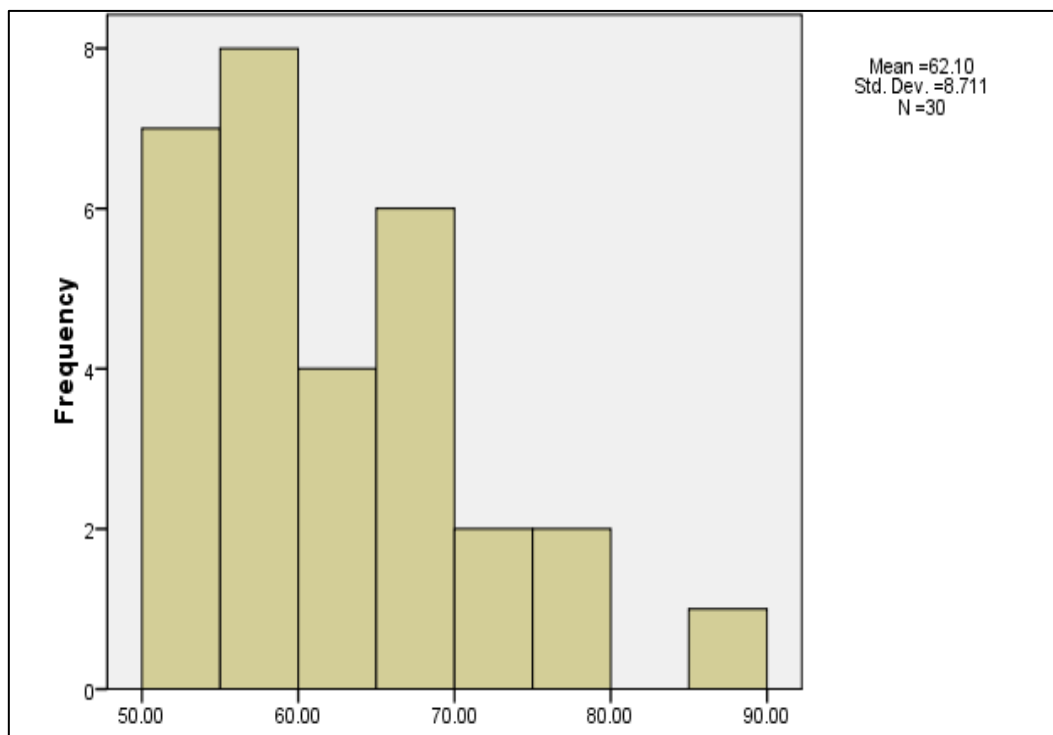


Figure 1. Histogram depicting the frequency level of the percentage of appropriateness of textbooks

3.1.1 How eligible is the textbook for class V students on the theme of Ecosystems and the Environment, Our Friends at Lebong Regency Elementary School?

The data for this research were obtained from the results of filling out a set of instruments in the form of questionnaires given to several respondents or class V teachers to assess the feasibility results of the textbook for class V students on the Ecosystem and Environment Theme of Our Friends, which was developed at SD Regency Lebong. Before respondents filled out the assessment instrument provided, the researcher first carried out a trial with a validator, namely Mr. Muksal Mina Putra, M.P.D. The results of the validation test by the validator expert, namely Mr. Muksal Mina Putra M.P.D., the results of the responses and assessments from the validator, and the data obtained were then analyzed

and revised according to the suggestions. Next, a trial was carried out on 15% of respondents to determine the feasibility of a textbook for class V students on the Ecosystem and Environment Our Friends Theme at Lebong Regency Elementary School, which had been developed by 15 respondents. Furthermore, to determine the suitability of the textbook for class V students, the Ecosystem and Environment Theme of Our Friends at Lebong Regency Elementary School, it can be seen from the instrument analysis of the suitability of the textbook for class V students. The following are several factors that will be analyzed for the suitability of the textbook for class V students, among others:

- Conformity factor of material description with core competencies (KI) and basic competencies (KD). This factor has three indicators: completeness of material, breadth of material, and depth of material.
- Material Accuracy Factor. This factor has five indicators, namely, indicators of concept accuracy, principle accuracy, procedural accuracy, example accuracy, and social accuracy.
- Factors Supporting Learning Materials. This factor has 10 indicators, including indicators of suitability to developments in science and technology, indicators of the up-to-dateness of reference features, reasoning, problem-solving, interrelationships between concepts, communication, application, the attractiveness of the material, encouragement to seek further information and enrichment material.

Table 5. Factors Supporting Learning Materials

	Indicators	Percentage	Categories
Conformity factor of material description with core competencies (KI) and basic competencies (KD).	Material Completeness	52,66%	Quite Eligible
	Breadth of Material	53,33%	Quite Eligible
	Depth of Material	61,55%	Eligible
Material Accuracy Factor	Concept Accuracy	56,66%	Quite Eligible
	Principle Accuracy	58%	Quite Eligible
	Procedure Accuracy	60%	Quite Eligible
	Example Accuracy	72%	Eligible
	Social Accuracy	66.66%	Eligible
Learning Support Material Factors	Compatibility with developments in science and technology	62.66%	Eligible
	Updated Features, Examples, and References	72%	Eligible
	Reasoning	73%	Eligible
	Problem-solving	63%	Eligible
	Interrelationships Between Concepts	61%	Eligible
	Communication	81%	Strongly eligible
	Application	63.11%	Eligible
	Material Attractiveness	54.33%	Quite Eligible
	Encouragement to Seek Further Information	60.33%	Eligible
	Enrichment Material	60%	Quite Eligible
Material Suitability Factors with Core Competencies (KI) and Basic Competencies (KD)	56.76%	Quite Eligible	
Material Accuracy Factor	62.91%	Eligible	
Learning Support Material Factors	64.3%	Eligible	
Factors for suitability of material descriptions with KI and KD, material accuracy factors, and learning support material factors	62.47%	Eligible	

From the results of the feasibility category for class V students' textbooks in Lebong Regency above, the percent results show that with a percentage result value of 82.85%, it is categorized as "very eligible." 13 percent results with a percentage value between 64% and 78.85% are categorized as "eligible," and 16 other percent results with a percentage value between 50.85% and 59.42% that are categorized as "quite eligible." The percent result values above show that more categories are quite eligible compared to the results of other categories, with a percent result value of 50.85%–59.42%, including the interval category "fairly eligible." From the overall percentage obtained, the average for the entire textbook suitability category is 62.47%, so it can be concluded that the suitability of the textbook for class V students on the Ecosystem and Environment Theme of Our Friends at Lebong Regency Elementary School is "appropriate."

3.2. Discussion

Discussion of the results of the assessment of textbooks used in fifth-grade elementary schools on the theme of ecosystems and our friend's environment shows that books with an ecosystem theme have a feasibility component that is categorized as eligible. This is in line with previous research, namely, according to W. Harimasyah et al., a book can be said to be good or appropriate in terms of material if it pays attention to complete references, namely following the curriculum or syllabus prepared, relevant knowledge, and the language skills of the learner (Nugraha, 2016).

The results of the content suitability assessment, show that the book is categorized as having proper suitability. In Prastowo's opinion, feasibility is said to be eligible because most of the content is relevant to the KTSP SK and KD, the source material is varied and up-to-date, and in-depth so that it can also deepen students' knowledge, attitudes, and skills (Nugraha, 2016). A relevant, up-to-date book that combines current research and teaching strategies can be beneficial for educators and policymakers. It should address current challenges in education, such as technological adaptation, inclusivity, and fostering critical thinking. The book can guide curriculum developers in creating engaging learning materials, assist textbook authors in incorporating research, and inform educational policymakers on evidence-based practices for improving educational outcomes.

Other books with the theme Our Friendly Environment are categorized as inadequate because some of the material is not under the applicable curriculum, the material presented is less in-depth, the exercises are less functional, and the textbook at least has material presented from the immediate environment and is familiar with the participants' daily lives (contextual), but the book does not yet reflect the contextual aspects. The right subject matter and material are only useful and can be understood by students if they are explained in a language that students can understand. Therefore, according to Tarigan & Tarigan, the criteria for the language used are also stated in the criteria. The student's level of language proficiency determines the language used, which is the standard language. The purpose of this standard language is that the sentences are effective, avoid double meanings, and are simple, polite, and interesting. However, in assessing the appropriateness of the language, it can be seen from the average score and the score for each book in the sufficient category that both books need to be revised according to the student's language and its standards so that they are suitable for use. Books that have content appropriate to the student's level of ability and language that is easy to understand so that students have the desire to read them require an interesting presentation (Nugraha, 2016).

According to Tarigan & Tarigan, a good textbook can make students want to do what is instructed in the textbook and increase their interest in learning. This is related to the presentation. The presentation is seen from the beginning to the end of the book. If the introduction does not have interesting illustrations, students will be reluctant to read it. If the material presented is difficult, then students will be reluctant to read it. The value shows that the feasibility of the presentation has a good category, namely the fifth-grade elementary school book with the theme Ecosystems and the Environment, Our Friends.

So basically, this research is related to previous research, which shows that a book must be appropriate in terms of content, language, presentation, and graphics. Textbooks must also be

appropriate to the level of literacy so that they can be used as a learning resource that can support activities, , creativity and meeting student needs (Nugraha, 2016). A book, particularly a textbook, must be relevant in several aspects to be a successful learning resource. Content appropriateness guarantees that the information is consistent with the curriculum, accurate, relevant, and engaging. Language appropriateness takes into account the text's readability and comprehension, adapting to the target audience's literacy level while avoiding needless complexity or jargon. Presentation appropriateness focuses on the structure, organization, and clarity of information, allowing for simple navigation and interpretation. Graphics, if used, should be relevant, clear, and visually attractive to enhance comprehension and reinforce essential themes. Furthermore, textbooks should be innovative in their approach, combining a variety of teaching methods, interactive aspects, and real-world examples to improve learning outcomes. Finally, a genuinely excellent textbook fulfills students' different needs, facilitates learning activities, encourages creativity, and drives curiosity and discovery.

So, from the results of the explanation above, it can be concluded from the results of the questionnaire for class V teachers at Lebong Regency Elementary School that the feasibility of the textbook for class V students on the Ecosystem and Our Friendly Environment Theme is categorized as appropriate, which can be seen from several indicators that have been studied.

Based on the results of the research findings, the feasibility of the textbook for class V students with the theme of Ecosystem and the Environment, Our Friends at Lebong Regency Elementary School, which was measured using a Likert scale, shows that the first indicator contained in the factor of the suitability of material descriptions with KI and KD, namely: completeness of the material, obtained a result of nil (52.66%) with fairly eligible category intervals. The second indicator, breadth of material, obtained a value of 53.33% with an interval in the quite eligible category. The third indicator, depth of material, obtained a nil result of 61.55% with an interval in the eligibility category.

Furthermore, the first indicator contained in the material accuracy factor, namely concept accuracy, obtained a value of 56.66% with a quite eligible feasibility interval. The second indicator of principle accuracy obtained a value of 58% with a fairly eligible interval. The third indicator of procedural accuracy obtained a value of 60% with a fairly eligible interval. The fourth indicator of example accuracy obtained a value of 72% with an eligible interval. The fifth indicator of social accuracy obtained a value of 66.66% with an appropriate eligibility interval. Then, the first indicator contained in the Learning Support Material factor, namely the reliability of features, examples, and references, obtained a value of 72% with an eligible interval. The Reasoning Indicator obtained a value of 73% with an eligible Interval. The problem-solving indicator obtained a value of 63% with an eligible Interval. The indicator of the relationship between concepts obtained a value of 61% with an eligible interval. The communication indicator obtained a score of 81% with an eligible Interval. The implementation indicator obtained a value of 63.11% with an eligible Interval. The material attractiveness indicator obtained a value of 54.33% with a sufficient interval. The encouragement indicator to seek further information obtained a value of 60.33% with a quite eligible Interval. Meanwhile, the enrichment material indicator obtained a value of 60% with a fairly eligible interval.

Then, for the suitability factor of material description with KI and KD, the value was 56.76% with a fairly eligible interval. For the material accuracy factor, it obtained a value of 62.91% with an eligible interval. Meanwhile, the Learning Support Material factor obtained a score of 64.33% with an eligible interval. For the three factors, the suitability of the description material with KD and KI, the accuracy of the material, and the learning support material obtained a value of 62.47% with an appropriate interval.

So, from the results of the explanation above, it can be concluded from the results of the questionnaire for class V teachers at Lebong Regency Elementary School that the feasibility of a Class V student textbook on the Ecosystem and Environment Theme of Our Friends at Lebong Regency Elementary School is eligible.

4. CONCLUSION

The analysis of Grade 5 student textbooks on ecosystems and the environment at Lebong Regency Elementary School indicates they are appropriate for educational use. The textbooks align well with Core Competencies (KI) and Basic Competencies (KD), meeting curriculum guidelines and supporting student learning. Positive aspects include material description conformity with KI and KD at 56.76% and material accuracy at 62.92%, indicating effective alignment with educational standards. Additionally, learning support materials meet requirements, scoring 64.3%. However, these findings also reveal areas needing improvement, such as enhancing the comprehensiveness and precision of content. Despite the strengths, the average percentages suggest a need for better alignment with educational standards and more accurate content. This study has limitations, including a limited sample size and representativeness, subjectivity in assessment, a restricted scope of evaluation criteria, time constraints, and external factors. These limitations mean the findings may not be generalizable to a broader population and may overlook other critical pedagogical aspects. Future research should address these limitations by conducting larger-scale studies with diverse samples, incorporating objective assessment measures, expanding evaluation criteria, and considering longitudinal perspectives. For future research, several suggestions are proposed: (1) conduct longitudinal studies to assess the long-term impact of textbooks on student performance and knowledge retention; (2) perform curriculum alignment analysis to identify strengths and areas for improvement; (3) undertake content clarity and accessibility studies to enhance understanding and engagement; (4) optimize learning support materials to improve student learning experiences; (5) implement continuous evaluation frameworks to keep textbooks relevant; and (6) conduct comparative analyses with textbooks from other regions or educational systems. These suggestions aim to enhance the effectiveness of educational materials and improve teaching and learning experiences.

REFERENCES

- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., ... & Fernandez, M. (2009). How we design feasibility studies. *American journal of preventive medicine*, 36(5), 452-457.
- Bruner, J. S. (2006). *In search of pedagogy volume I: The selected works of Jerome Bruner, 1957-1978*. Routledge.
- Fathurrohman, P., & Sutikno, S. (2011). *Strategi Belajar Mengajar Melalui Penanaman Konsep Umum & Konsep Islami*. Institut Agama Islam Ma'arif NU Metro Lampung.
- Hamalik, O. (2003). *Perencanaan pengajaran berdasarkan pendekatan sistem*. Jakarta : Bumi Aksara, 2003.
- Handini, N. F. (2021). *ANALISIS BUKU SISWA KELAS V TEMA 9 BENDA-BENDA DI SEKITAR KITA BERDASARKAN LITERASI SAINS*. Universitas Pendidikan Indonesia.
- Miharja, F. J. (2016). Literasi Islam & literasi sains sebagai penjamin mutu kualitas manusia Indonesia di era globalisasi. In *FKIP Univ. Muhammadiyah Malang*.
- Mudlofir, A. (2012). *Aplikasi Pengembangan Kurikulum Tingkat Satuan Pendidikan dan Bahan Ajar Dalam Pendidikan Agama Islam*. Jakarta : PT Raja Grafindo Persada.
- Noviyanti, A., Fitriana, V., & ... (2021). Analisis Buku Ajar Tematik Kelas V Sekolah Dasar pada Tema 8 (Lingkungan Sahabat Kita) Ditinjau dari Implementasi Karakter. *SEMAI: Seminar ...*, 8, 182-223. <https://proceeding.iainpekalongan.ac.id/index.php/semair/article/view/416>
- Nugraha, A. W. (2016). Analisis Kelayakan Buku Ajar Siswa Sd Kelas V Tema Ekosistem Dan Lingkungan Sahabat Kita Ditinjau Dari Aspek Science Literacy. *Jurnal Pendidikan Dan ...*, 1(2), 1-8.
- Piaget, J. (2013). *The construction of reality in the child*. Routledge.
- Putra, R. (2021). Analisis Kelayakan Buku Ajar Kelas 5 SD/MI Tema 7 Peristiwa dalam Kehidupan [UNS]. In *Surakarta - Fak. KIP - 2021*. https://books.google.co.id/books?id=D9_YDwAAQBAJ&pg=PA369&lpg=PA369&dq=Prawiroharto,+Sarwono.+2010.+Buku+Acuan+Nasional+Pelayanan+Kesehatan++Maternal+dan+Neonatal.+

Jakarta+:+PT+Bina+Pustaka+Sarwono+Prawirohardjo.&source=bl&ots=riWNmMFyEq&sig=ACfU3U0HyN3I

Vygotsky, L., & Cole, M. (2018). Lev Vygotsky: Learning and social constructivism. *Learning Theories for Early Years Practice*. UK: SAGE Publications Inc, 68-73.

Sugiyono. (2007). Dokupdf_com_ebook_statistik_untuk_peneli. In *Statika Untuk Penelitian* (Vol. 12, pp. 1-415).

Sugiyono. (2018). *Metode Penelitian Manajemen, Pendekatan: kualitatif, kuantitatif, kombinasi (mixed methods), penelitian tindakan (action research), penelitian evaluasi* (6th ed.). ALFABETA.