

**DEVELOPMENT OF WEB-BASED WORD CARD MEDIA  
WORDWALL FOR PRACTICING BEGINNING READING SKILLS  
CLASS I SDN NO. 105321 QUIZ BARACADEMIC YEAR 2023/2024**

**Dwi Lestari<sup>1\*</sup>, Mastari Ramadhani<sup>2</sup>, Nizmi Putri<sup>3</sup>**

<sup>1-3</sup>Elementary School Teacher Education Faculty of Education Sciences,  
Universitas Nahdlatul Ulama Sumatera Utara  
E-mail: <sup>1)</sup> [dwilestari.1452@gmail.com](mailto:dwilestari.1452@gmail.com)

***Abstract***

*This research was conducted based on observations carried out by researchers at SDN 105321 Batang Kuis. During the observation, the researchers discovered a problem, namely the students' low reading ability. Based on the results of interviews conducted with homeroom teachers regarding students' reading abilities, it was found that students' reading abilities were still low, with many students unable to recognize letters. This is attributed to the limited media available for use in learning and the fact that many students did not go through early childhood education before continuing their elementary school education. This research aims to develop word card media for initial reading material for grade I elementary school students. The study employs the Research and Development (R&D) method. The results of the research show that the word card media is declared suitable for use as a learning medium, with an assessment percentage from media experts of 99.9% and an assessment percentage from material experts of 90.6%. These percentages indicate a very good category from the feasibility test assessment by both media and material experts. Furthermore, the results of the research conducted on 27 students received an assessment carried out by the homeroom teacher as an observer during the field trial process. This assessment yielded a percentage of 95%, which falls into the very good category. The word card media was deemed suitable for use as a learning medium and was able to improve students' reading abilities.*

***Keywords:*** *Research and Development, Word Card Media, Beginning Reading*

## **1. INTRODUCTION**

Learning is an active interaction between the teacher, who provides the teaching material, and the students, who are the recipients (Hasan et al., 2021). In schools, there are many subjects that must be taught to students, one of which is Indonesian language. In the Indonesian language subject, reading is an activity carried out to obtain information from reading materials. Reading is a tool for literate individuals to gain further knowledge and experiences stored in written form (Wulanjani & Anggraeni, 2019). Therefore, reading can be used for various purposes (Pratiwi & Setyaningtyas, 2020).

In the 2013 curriculum and the Merdeka Belajar program, the role of the teacher is no longer to teach but to facilitate learning. The teacher is not the sole source of knowledge but acts as a guide. In the practice of Merdeka Belajar, Indonesian language teaching at the elementary education level currently uses a text-based approach, including both written and oral texts. Therefore, reading skills are crucial from an early age (Suwija et al., 2022).

Language ability issues in students can be addressed from an early age through various methods, including expressing thoughts through simple and accurate language, effective communication, and fostering interest in the Indonesian language. This makes Indonesian language central to students' intellectual, social, and emotional development and supports success in learning all aspects, including reading.

Reading is a fundamental aspect of learning. Through reading activities, students acquire information that they did not previously know. From reading, students engage in processes of searching, exploring, and understanding the information contained in texts.

Reading skills should be taught as early as possible to develop language proficiency. This teaching effort involves various activities aimed at achieving these skills. The skills in question are closely related to the basic processes of the mind: the more skilled one becomes in language, the more intelligent the pathways in their thoughts (Rinawati, 2020). Having reading skills is beneficial for acquiring various pieces of information and knowledge. The purpose of reading is to introduce writing through symbols to gain information and understanding, enjoy pleasant content, provide responsive evaluations of others' works, and fill leisure time (Afrianti & Wirman, 2020). Without understanding the necessary information, students' knowledge will not form effectively during the learning process. Therefore, reading can be said to be a fundamental skill that students must master, especially at the beginning age.

Early reading is a stage in the learning process for students in the early grades of elementary school. Students learn to develop the ability to master reading techniques and comprehend reading content effectively. To develop reading skills, three requirements are needed: the ability to sound out symbols, vocabulary mastery for meaning, and incorporating meaning into language proficiency.

The importance of early reading skills as a foundation for language development cannot be overstated. If this ability is hindered and not addressed, students will have difficulty understanding their environment and being understood by their social environment. This can result in frustration and isolation, worsening the inability to develop good vocabulary and early reading skills. Therefore, solutions are needed to improve early reading abilities, including the use of learning media.

During lessons, teachers are expected to be sensitive to students' learning needs, particularly in early reading. Moreover, teachers should be aware of students' environments, cultures, and social contexts. When teachers are attuned to students' learning needs, they can identify the activities required. Teachers should strive to be creative to deliver lessons effectively. Many teachers are required to be innovative in teaching, especially in creating engaging media to convey learning messages to students (Setiawan et al., 2020).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) reported that in 2020, during the COVID-19 pandemic, the number of children struggling with basic reading skills increased. Previously, there were 460 million children with reading difficulties, which rose to 584 million in 2020 (Qulloh, 2021).

Based on observations by the researcher at SDN 105321 Batang Kuis, there is a low level of reading ability, such as accuracy in pronouncing words, pronunciation, intonation, fluency, and clarity. This is due to the teacher still using conventional teaching methods, with early reading often relying only on magazines, children's worksheets, and

ineffective media. Additionally, the available media for early reading instruction is still inadequate.

The development of learning media needs to connect with everyday life and incorporate thematic content in learning activities to achieve optimal success in skills. If this issue is left unaddressed, it will impact the quality of education. Efforts to improve the quality and success of teaching and learning are influenced by the educators' ability to select and use teaching media effectively. Two critical elements in the learning process are teaching methods and media. Appropriate use of learning media can make learning meaningful and enjoyable. Teachers are required to develop media that can stimulate students' interest in learning (Nirwana et al., 2021).

Learning media are tools used to convey teaching messages from the source to the recipient. According to Rita Ramayulis (2018), there are several types of learning media that can be used in the learning process: print media, display media, audio media, motion pictures, multimedia, web-based or internet media, and visual media.

Thus, learning media play an essential role in the learning process, acting as a stimulus for students to be actively engaged during teaching and learning. Given the active nature of children in searching and learning, play is part of the learning method. Play should be carried out with joy so that all activities are easily accepted by children (Nurmalia et al., 2022). One type of learning media that can be used to train children in reading is word cards.

Word cards are square-shaped cards containing letters from A to Z, with each card featuring one letter (Fitria, 2018). Word card media is an effective game method for developing letter recognition skills (Tiningsih et al., 2020), as children aged 4-6 are still in the pre-operational stage and learn through concrete objects. This resource helps children recognize letters and their shapes, differentiate letters, and attempt to form words. The game with word cards has several advantages: it can be creatively varied, is easy to implement, and allows children to arrange words according to their ideas. Word cards must be designed to enhance early reading skills, with engaging and active participation from children. Teachers need to develop teaching methods that motivate children in various learning activities. One media used to improve early reading skills at SDN 105321 Batang Kuis is word cards. Word card media is a type of graphic or two-dimensional media, meaning it has length and width. The cards used in this study are teaching aids to facilitate or clarify the delivery of learning material. Cards as teaching aids help students understand concepts, making learning more enjoyable and effective. The design of the word cards should be attractive with appropriate size and color variations.

Using word cards, students will be motivated to remember letters and pronounce their sounds. The advantage of word cards is their ability to stimulate students to recognize reading material. Rahayu et al. (2022) noted that the use of word cards can enhance students' vocabulary mastery, as seen from improved language skills.

In research by Rumidjan, Sumanto, and A. Badawi from the PGSD Program, Department of KSDP FIP, Malang State University, titled "Development of Word Card Media to Train Early Reading Skills in Grade 1 Students," the results of trials in a small group showed satisfaction (100%), ease (100%), safety (100%), and language aspects (96.87%). In a large group, ease (94%), satisfaction (94%), safety (100%), and language

aspects (97.18%) were noted. This concludes that word cards are suitable for teaching early reading in Indonesian language classes.

In conclusion, the use of word cards can enhance teacher and student activity. Based on the issues outlined and the importance of learning media, especially word cards, it is hoped that during lessons, students will be more interested and active in learning, thereby improving their early reading skills. The researcher aims to develop learning media with the title "Development of Word Card Media to Train Early Reading Skills in Grade 1 Students at SDN 105321 Batang Kuis for the 2023/2024 Academic Year."

Based on the background outlined above, it is important to understand the steps for developing word card media to enhance reading skills in Indonesian language lessons, specifically for early reading material in Grade 1 students at SD Negeri 105321 Batang Kuis. This includes assessing the feasibility of using word card media to improve the reading abilities of these students.

## **2. LITERATURE REVIEW**

### **2.1. Learning Media**

According to Mashuri (2019), learning media are tools used to convey educational material, stimulate interest, and capture students' attention. (Haryadi & Al Kansaa, 2021; Ningrum & Widodo, 2018) also describe learning media as tools that can be either traditional or modern (Batubara, 2020).

### **2.2. Word Card Media**

Fitria (2018) defines word cards as square-shaped cards with letters from A to Z, each card displaying one letter. Ismiyati (2018) states that word cards are an effective learning tool for quick memorization and recall, helping students remember and memorize more effectively. This tool aims to enhance cognitive abilities for word recall, improving language skills from an early age.

### **2.3. Wordwall**

Wordwall is a web-based game application used as a learning media. It offers various game types, including quizzes, matching, anagrams, word scrambles, word searches, and categorization. This media is particularly suitable for current educational contexts, where some schools still implement online learning or have restricted class times, making traditional classroom activities less effective.

### **2.4. Early Reading Ability**

According to Ismiyati (2018), reading ability is one of the four core language skills and a component of written communication, where sounds are represented by written symbols or Latin letters. Salmiati (2018) explains that reading in elementary school is divided into two stages: early reading in the first three years (grades 1, 2, and 3) known as "reading for beginners," and advanced reading for comprehension in the upper grades (grades 4, 5, and 6). Early reading is crucial as students learn to acquire reading techniques and understand text content effectively.

## **2.5. Framework**

Based on observations conducted on Monday, November 20, 2023, in Grade 1 at SDN 105321 Batang Kuis, it was found that the students' early reading skills were still low. This deficiency can have negative impacts on the students. Teachers need to develop teaching methods that motivate students and foster their language development. At SDN 105321 Batang Kuis, there is a lack of stimulation in introducing letters. Teachers must design effective reading instruction to enhance early reading skills, creating a meaningful and enjoyable learning experience. One such media to improve early reading skills is word cards. It is hoped that word cards will assist and ease the teaching process by capturing students' attention, increasing their interest and motivation, making them more active and interactive, improving understanding, and making the learning process enjoyable and effective.

## **2.6. Hypothesis**

The hypothesis proposed is that there is an impact of developing word card media on the early reading skills of Grade 1 students in elementary school.

## **3. RESEARCH METHODS**

### **3.1. Development Model**

This research is categorized as Research and Development (R&D). The R&D method focuses on creating innovations in existing products or new products to make them more appealing and aligned with educational objectives (Muqdamien et al., 2021).

The product developed in this study is word card media. This product will first undergo feasibility testing. Initially, the word card media will be validated to assess its validity and practicality. The design of the development research for learning media refers to the 4-D model (Define, Design, Develop, and Disseminate) proposed by Samudera et al. (2019). However, this study is limited to the Define, Design, and Develop phases.

### **3.2. Development Procedure**

The research procedure adapts the 4D development model. According to (Sugiyono, 2019), the model used in this study is Thiagarajan's 4D model, which includes four stages: define, design, develop, disseminate. This research will follow the 4D development flow for the Word Card Learning Media.

#### **1. Define Stage**

The definition stage is crucial for identifying and defining the needs within the learning process and gathering relevant information about the product to be developed. This stage is divided into several steps:

##### **a. Front-end Analysis**

This initial analysis identifies the fundamental problems in developing the word card media. It involves uncovering facts and potential solutions, making it easier to determine the starting points for developing the word card media that best meets the needs.

##### **b. Learner Analysis**

Conducting a learner analysis is essential at the beginning of the planning phase. This involves observing the characteristics of students, considering their traits, abilities, and experiences, both as a group and individually. The analysis covers academic abilities, age, and motivation toward the subject matter.

c. Task Analysis

Task analysis aims to identify the key tasks students will perform. This involves analyzing the modules related to the material to be developed with the word card media.

d. Concept Analysis

The goal of concept analysis is to determine the content of the material within the word card media. This involves creating a concept map of the learning content, which will be used to achieve specific competencies by systematically identifying and organizing the main parts of the learning material.

e. Specifying Instructional Objectives

This step involves designing teaching materials, such as illustrated word cards, based on the basic competencies established in the material analysis. The learning objectives include:

- After studying the text on vowel letters, consonants, and words, students will be able to correctly identify these letters.
- After learning about vowel letters, consonants, and words, students will be able to read these letters clearly.
- After studying vowel letters, consonants, and words, students will be able to determine these letters accurately.
- After learning about vowel letters, consonants, and words, students will be able to pronounce these letters clearly.

2. Design Stage

After identifying the problems in the Definition Stage, the next step is the Design Stage, which focuses on creating a word card media for educational use. This stage includes:

a. Criterion-Test Construction

This involves developing test instruments based on the learning objectives that serve as benchmarks for assessing student performance in terms of product, process, and psychomotor skills during and after the learning activities.

b. Media Selection

Media selection is conducted to identify educational media that are relevant to the characteristics of the material and meet the students' needs. Media is chosen based on the learner analysis, concept analysis, task analysis, target user characteristics, and dissemination plan, considering the varying attributes of different media. This helps students achieve the core competencies and basic competencies expected.

c. Format Selection

Format selection is done early in the process to ensure that the chosen format aligns with the learning material. It involves selecting the presentation format appropriate for

the educational media being used. This includes designing the content of the word card media, choosing the approach, and selecting learning resources. The design of the word card media includes layout, images, and text.

d. Initial Design

The initial design refers to the draft of the word card media created by the researcher, which is then reviewed by the supervisor. Feedback from the supervisor is used to refine the word card media before production. Revisions are made based on the supervisor's suggestions, leading to a final draft of the word card media that will be subject to validation.

3. Develop Stage

The Development Stage aims to produce a revised version of the word card media based on expert feedback and trial tests with students. This stage consists of two key steps:

a. Expert Appraisal

This step involves validating the content of the word card media with experts before field testing. The media is evaluated by subject matter experts and media specialists to determine its suitability for use. The feedback from these experts is used to make necessary revisions to the initial draft. Once Draft I have been validated and revised, it results in Draft II. Draft II will then undergo a limited field test with students.

b. Development Testing

Following expert validation, a limited field test is conducted to assess the application of the word card media in the classroom. This includes measuring both cognitive learning outcomes and student performance. The results from this stage will provide a revised version of the word card media.

4. Disseminate Stage

In the implementation stage, the developed product is evaluated by educational practitioners, specifically teachers. This assessment is used to determine the usefulness of the media. The research and development process consists of eight systematically arranged steps. This research aims to develop instructional media for the Indonesian language subject. The procedural steps involve creating the media from the initial problem through to product testing, as described.

### **3.3. Product Testing**

a. Design Testing

The design of the product testing for the development of the word card learning media in this study is conducted in two stages: the small-group or limited testing involves 8 first-grade students from SDN 105321 Batang Kuis, and the field testing involves 27 first-grade students from SDN 105321 Batang Kuis.

b. Product Testing Subject

The product testing subjects, or limited testing, involve 8 first-grade students from SDN 105321 Batang Kuis. This testing aims to assess the practicality and effectiveness of the thematic word card learning media and to obtain revisions or improvements for the initial product.

### 3.4. Data Collection Technique

#### a. Interview Technique

Interviews are employed as a data collection technique when researchers aim to identify specific issues that need investigation. This study utilizes unstructured interviews. In unstructured interviews, there is no fixed or systematic guideline for data collection; instead, the researcher asks fundamental questions related to the issues observed at SDN 105321 Batang Kuis. These interviews are conducted with the first-grade teacher to gather insights on the relevant problems.

#### b. Questionnaire

Questionnaires are used to gather data for analysis. In this study, questionnaires include product validation questionnaires and student response questionnaires. These tools help collect quantitative data on the effectiveness and reception of the word card media among students and teachers.

#### c. Early Reading Skill Assessment Rubric

The early reading skill assessment rubric is used to collect data for analysis. This rubric is designed to evaluate students' early reading abilities, providing structured criteria to assess reading skills before and after using the word card media.

### 3.5. Data Collection Instrument

The instruments used by the researcher are observation, interviews, and questionnaires. Interviews are conducted with the first-grade teacher at SDN 105321 Batang Kuis. These interviews are intended to gather information and data regarding the availability and use of educational media.

### 3.6. Data Analysis Technique

The data analysis technique in this research involves descriptive statistical analysis. The scale used for the questionnaire data is the Likert scale, which measures attitudes, opinions, and perceptions of individuals or groups regarding social phenomena or events. Quantitative data conversion can be seen in the following table:

**Table 1. Likert Scale Interval**

SS	Sangat Setuju (Strongly Agree)	5
S	Setuju (Agree)	4
KS	Kurang Setuju (Disagree)	3
TS	Tidak Setuju (Strongly Disagree)	2
STS	Sangat Tidak Setuju (Extremely Disagree)	1

To obtain the score, first calculate the average (mean). Then, the obtained scores are summed using the following formula:

**Table 2. Scale Categorization**

<b>Calculation</b>	<b>Criteria</b>
86% - 100%	Very Good
76% - 85%	Good
50% - 75%	Fair
26% - 49%	Poor
0% - 25%	Very Poor

Explanation:

Percentage =  $\frac{\sum x}{\text{Total Score}} \times \text{SMI (Ideal Maximum Score)} \times 100$

Based on the table above, the developed media card product can be categorized as follows:

1. Very Good if the total score is between 86 and 100.
2. Good if the total score is between 76 and 85.
3. Fair if the total score is between 50 and 75.
4. Poor if the total score is between 26 and 49.
5. Very Poor if the total score is between 0 and 25.

In this study, feasibility is determined by a score range of 50 to 75, which falls under the category of "Fair." Therefore, if the results from media and material experts, after analysis, yield a total score within the range of 50 to 75 with a "Fair" category, then the development of the media card for early reading material in Grade I at SDN Blukbuk is considered "Fairly Suitable for Use."

## **4. RESULTS AND DISCUSSION**

### **4.1. Research Results**

The goal of this research is to develop educational media in the form of word cards for Indonesian language learning for Grade I-B students at SD Negeri 105321 Batang Kuis. To achieve this goal, development research was conducted using the 4-D development model. The steps taken to produce the educational tools in this study involve the 4-D development model, which includes Define, Design, Develop, and Dissemination.

#### **4.1.1. Define Stage**

The analysis aimed to gather information and identify issues within the school. The defining stage utilized classroom observation, interviews, and surveys for needs analysis, as well as documentation. The researcher conducted field observations in Grade I at SD Negeri 105321 Batang Kuis. In addition to observation, data were also collected through interviews with the Grade I teacher.

The analysis was conducted to gather information about the implementation of reading instruction in Grade I at SD Negeri 105321 Batang Kuis. The interviews aimed to understand students' interest during reading activities. The interviews were conducted

on December 9, 2023. The information gathered for the needs analysis is summarized below:

- a. Preparation Before Starting Classroom Activities: The teacher stated that the most important aspect is preparing the material to be taught.
- b. Implementation of Beginning Reading Instruction: The teacher mentioned that the approach involves writing letters on the board and then pronouncing them, which is followed by the students.
- c. Use of Word Card Media in Beginning Reading Instruction: The teacher indicated that optimal media, such as word cards, had not yet been used.
- d. Student Interest During Reading Activities: The teacher observed that students were not very attentive during reading lessons.

#### 4.1.2. Design Stage

After completing the defining stage through observations, interviews, and surveys, the next step is to design the learning media. The initial step in designing the media is to determine the subject matter for beginning reading in Indonesian language lessons. The following steps are involved in the design process:

- a. Determining the Purpose/Concept of the Media

The purpose here refers to the learning objectives for each indicator. These objectives outline what is expected to be achieved by students after learning with the media. The goal of using word card media is for students to enhance their reading skills.

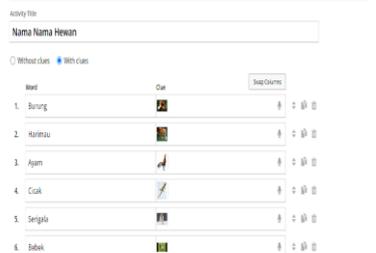
- b. Selection of Materials

This stage involves selecting the materials to be used for creating the word cards. These materials include cardboard, origami, scissors, and other supplies.

- c. Media Design/Creation

The media design and creation process involve several stages. First, prepare materials such as cardboard, origami paper, scissors, pencils, and images of the alphabet from A to Z. In the second stage, cut the paper to a size of 16.5 x 9.5 cm and design the cards with letters from A to Z, incorporating both letters and origami images. The third stage involves preparing the paper and printer for printing the images. Next, cut and tidy up the word card media in the fourth stage. Once the materials are finished and printed, store them neatly in the fifth stage. Finally, begin using the word card media during the product field trial in the sixth stage.

**Table 3. Media Design**

Format	Picture
Initial Design of Web-Based Wordwall Flashcards	

Final Design of Web-  
Based Wordwall  
Flashcards



#### 4.1.3. Development Stage

In this research, the development phase involves a series of processes to create educational media by conducting validation with experts (validators) who are competent in their fields and can provide suggestions or feedback to improve the media. Based on the assessment, suggestions, and feedback from the validators, the researcher revises the educational media to produce a version ready for testing with the research subjects, which are the first-grade students of SDN 105321 Batang Kuis.

##### a. Media Expert Validation

Once the product is completed, it undergoes validation testing. This validation is carried out using a questionnaire that includes evaluation aspects and provides space for comments, suggestions, and feedback for improvement.

The validation of the product is conducted by an expert from Universitas Nahdlatul Ulama Sumatera Utara, who was selected for their expertise in product evaluation. This expert's feedback is crucial for the research and development process. The validation took place on May 7, 2024. The criteria for evaluation are derived from multiple sources and tailored to the aspects of the media being developed, as well as the needs analysis conducted in the field.

The results are quantitative data in the form of scores, which are used to determine the media's feasibility, and qualitative data in the form of suggestions, which are used to refine the developed product. Both types of data will be analyzed descriptively.

**Table 4. Results of Validation Testing by Media Expert**

No	Indicator	Raw Score	Ideal Score
1	Concept coherence	5	5
2	Clarity of instructions	4	5
3	Attractive presentation	5	5
4	Usability for individual or group	4	5
5	Color composition	5	5
6	Quiz content variation	5	5
7	Character or letter appropriateness	5	5
8	Layout element presentation	5	5
9	Website uses appropriate characters or letters	5	5
10	Provides learning motivation	5	5
11	Ease of accessing the website	5	5

12	Effectiveness of use	5	5
13	Quiz attractiveness	5	5
14	Practicality of evaluation instrument	5	5
15	Menu and quiz features (buttons) are easy to understand	5	5
16	Attractive media appearance	5	5
	Total	78	100 %
	Average		4,87
	Percentage		97,5%
	Category		Very Good

To determine the feasibility of the developed learning media product after revisions, the researcher conducted a second round of validation with a media expert as a reinforcement. This was done to assess the feasibility of the media product before it was tested for feasibility with students in the field. The scores obtained from the media expert can be seen in Table 4 above.

b. Validation by Subject Matter Expert

The subject matter expert validation involves assessing the content of the learning material within the media product. The validator for this research was a lecturer from Nahdlatul Ulama University of North Sumatra, and the validation was conducted on May 7, 2024.

The subject matter expert's validation included a questionnaire focusing on the criteria for evaluating the content or material and offering comments, suggestions, and feedback for improvement. The results obtained consisted of quantitative data, represented by scores that determine the media's feasibility, and qualitative data, represented by suggestions used to enhance the developed product. The criteria for the material validation were sourced from various references and adjusted according to the characteristics of the students in the field.

**Table 5. Validation Results by Subject Matter Expert**

No	Assessment Aspect	Raw Score	Ideal Score
1	Concept coherence	4	5
2	Presentation of questions aligns with KD and indicators	4	5
3	Usability for individual or group learning	5	5
4	Practical and efficient as an evaluation tool	5	5
5	Student involvement	4	5
6	Completeness of questions according to the material	5	5
7	Accuracy of concepts	4	5
8	Accuracy of images	4	5
9	Accuracy of terms	4	5
10	Communicativeness	5	5

**TRANSFORMATIONAL LANGUAGE, LITERATURE, AND TECHNOLOGY OVERVIEW IN  
LEARNING  
(TRANSTOOL)  
VOLUME 3 NO. 2 (2024)**

11	Encourages curiosity	5	5
12	Suitability of questions with students' abilities	5	5
13	Motivates learning	5	5
14	Effectiveness of use	5	5
15	Practicality of the evaluation instrument	4	5
Total		68	100 %
Average		4,53	
Percentage		90,6 %	
Category		Very Good	

c. Rubric for Assessing Students' Reading Ability

The product trial stage involved a limited trial of the developed word card media with students. This trial was conducted at SDN 105321 and demonstrated that using the word card media significantly improved students' reading abilities, achieving a score of 98% in the "Excellent" category. Below is the list of student scores during the product trial:

**Table 6. Rubric for Assessing Students' Reading Ability**

No	Name	Able to Recognize Letters					Able to Pronounce Letters Correctly					Able to Read Words					Total Score
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
		1	Alfatih Pranata					v					v				
2	Al Insan Karim					v					v					v	15
3	Alisya Ardila					v					v					v	15
4	Alya Putri Gusnia					v					v					v	15
5	Amelia Saputri				v					v					v		12
6	Ananda Amelia Khanza					v					v				v		14
7	Arka Aditya Mawardi					v					v					v	15
8	Arumi Nasya					v					v					v	15
9	Chika Az-Zahra					v				v					v		13
10	Gelis Tyani					v					v					v	15
11	Ghafar At Thala					v					v					v	15
12	Hayya Al Husna					v					v					v	15
13	Jefriansyah				v					v					v		12
14	Khanza Silmikaffah					v					v					v	15
15	Lionel Messi Harun Lubis				v					v				v			11
16	Musthofa husein Imam Rus Nst					v					v					v	15
17	Nafila Qodru Nada				v					v					v		12

18	Novita Anggraini	v	v	v	15
19	Rafa Prayoga Saragih	v	v	v	13
20	Rafifah Asila	v	v	v	15
21	Rembulan Arohma	v	v	v	12
22	Reyhan Syahputra	v	v	v	15
23	Rifky Fadillah	v	v	v	15
24	Rifqi Aditya	v	v	v	11
25	Salsabila Lubis	v	v	v	15
26	Siti Nurhalijah	v	v	v	15
27	Siddiq	v	v	v	15

**Table 7. Student Reading Ability Scores**

No	Student's Names	Score
1	Alfatih Pranata	100
2	Al Insan Karim	100
3	Alisya Ardila	100
4	Alya Putri Gusnia	100
5	Amelia Saputri	80
6	Ananda Amelia Khanza	93,3
7	Arka Aditya Mawardi	100
8	Arumi Nasya	100
9	Chika Az-Zahra	86,6
10	Gelis Tyani	100
11	Ghafar At Thala	100
12	Hayya Al Husna	100
13	Jefriansyah	80
14	Khanza Silmikaffah	100
15	Lionel Messi Harun Lubis	73,3
16	Musthofa husein Imam Rus Nst	100
17	Nafila Qodru Nada	80
18	Novita Anggraini	100
19	Rafa Prayoga Saragih	86,6
20	Rafifah Asila	100
21	Rembulan Arohma	80
22	Reyhan Syahputra	100
23	Rifky Fadillah	100
24	Rifqi Aditya	73,3
25	Salsabila Lubis	100
26	Siti Nurhalijah	100
27	Siddiq	100

The product trial was conducted in Class 1 at SDN 105321 Batang Kuis with a total of 27 students. It was noted that the minimum passing score (KKM) for the Indonesian language subject is 75. Before using the word card media, 8 students reached the KKM, while 12 students did not. After using the word card media, the number of students who achieved the KKM increased. A total of 24 students reached the KKM, and 3 students scored below the KKM. Based on the data in Table 4.5, it can be concluded that the use of word card media has improved the students' reading abilities.

#### **4.1.4. Dissemination Stage**

The final stage of this development research is the implementation and testing phase, which follows the previous stages to assess the quality of the developed product. The analysis from the evaluation stage reveals the following:

Based on the assessments by media and material experts in the previous stage, several strengths of the word card media were identified: it is durable, not easily damaged, can be used for a long period, easy to understand, and visually appealing. However, some weaknesses were also noted: the media can only be used in small groups and is limited to early reading materials. The evaluation revealed that the developed product received a score of 95%, categorizing it as "very good." This indicates that the media is considered suitable and effective in helping students improve their reading skills, as reflected in the indicators evaluated through the questionnaire.

#### **4.2. Discussion**

The validation results by media experts, material experts, and the evaluation conducted through the class teacher indicate that the word card media developed falls into the "highly suitable or very good" category. According to the feasibility analysis, the media expert's score before revision was 76.25%. After revisions, the score increased to 97.5%, placing it in the "very good" category. The material expert's evaluation gave the product a score of 90.6%, also in the "very good" category. It can be stated that in the classification interval, as explained in the previous chapter, a percentage of 86-100% is considered "very good" or "highly suitable" because the key consideration is the suitability of the learning media for use.

The student evaluation was conducted through the class teacher, as the reading skills in Grade 1 are still low. Therefore, the questionnaire was directed to the Grade 1 teacher as the observer during the trial process. The class teacher's evaluation on the following indicators was as follows:

- 1) The varied colors of the cards motivate students to learn, receiving a score of 5.
- 2) The word card media is easy for students to understand, receiving a score of 5.
- 3) The media is presented simply, receiving a score of 5.
- 4) The media enhances students' knowledge, receiving a score of 5.
- 5) The word card media helps students learn to read and recognize letters, receiving a score of 5.
- 6) Students are interested in the lessons using the word card media, receiving a score of 5.

- 7) The learning process with the word card media is enjoyable, keeping students awake during the lesson, receiving a score of 5.
- 8) The word card media motivates students to actively participate in the learning process, receiving a score of 4.
- 9) The learning objectives in each lesson are clearly conveyed, receiving a score of 5.
- 10) The presentation of the word card media clarifies students' understanding of early reading material, receiving a score of 5.

Thus, the developed media is deemed suitable for use in the learning process. During the product trial, out of 20 students, 19 students scored at or above the minimum competency criteria (KKM), with only 1 student scoring below it. This indicates that using word card media can improve students' reading skills.

## **5. CONCLUSION**

Based on the results of the Research and Development (R&D) study conducted in Grade 1 at SDN 105321 Batang Kuis for the Indonesian language subject on early reading using word card media, it can be concluded that the development of word card media in this study used the 4-D model, which consists of four steps: Define, Design, Develop, and Dissemination. The developed media can assist students in early reading activities.

The validation results from the media expert before revision scored 76.25%, and after revision, it reached 97.5%, categorized as "Very Good." The validation conducted by the material expert resulted in a score of 90.6%, also categorized as "Very Good." The achievement of learning objectives after the trial of the word card media in Grade 1 at SDN 105321 Batang Kuis showed a percentage of 98% (falling into the very good category). Thus, the trial of the word card media in Grade 1 is deemed very good (highly suitable) for use in early reading activities.

The development of word card media for early reading in Grade 1 at SD Negeri 105321 Batang Kuis provides a more meaningful learning experience for students. One of the efforts to achieve this is through the use of learning media, specifically word card media, which fosters effective collaboration between teachers as educational facilitators and students as learners, with distinct roles, functions, and tasks but with the same objective. Additionally, word card media can make learning more enjoyable for students.

Based on the conclusions and findings from the research on the development of word card media for training early reading skills in Grade 1 students at SD Negeri 105321 Batang Kuis, it is evident that this media is more effective compared to traditional learning modules and textbooks without thematic variations. The developed word card media facilitates the learning process by incorporating materials, experimental evaluations, and other inquiry activities, which effectively engage students whether they are learning with a teacher or independently. Additionally, this media offers significant practical benefits, particularly for teachers, as it simplifies lesson delivery and enhances the overall effectiveness of the learning process. As a result, the word card media proves to be a valuable tool for teaching Indonesian and other subjects, as it fosters greater student engagement. Furthermore, the successful application of this media requires students to be prepared for independent learning, which ultimately leads to a more enjoyable learning experience.

Based on these findings, several recommendations are proposed: The developed learning media should be considered as an alternative resource for teachers to enrich their teaching materials. Additionally, using this media can increase students' interest in learning, particularly in reading within the Indonesian language curriculum. School principals and educational institutions are encouraged to utilize word card media to support and enhance learning development within schools. Lastly, future researchers are encouraged to conduct similar or improved studies on practical and effective word card media to meet the needs of high-quality educational resources.

## REFERENCES

- Afrianti, Y., & Wirman, A. (2020). Penggunaan Media Busy Book Untuk Menstimulasi Kemampuan Membaca Anak. *Jurnal Pendidikan Tambusai*, 4(2), 1156–1163.
- Batubara, H. H. (2020). Media pembelajaran efektif. *Semarang: Fatawa Publishing*, 3.
- Fitria, Y. (2018). *Landasan Pembelajaran Sains Terintegrasi (Terpadu) untuk Level Dasar*.
- Haryadi, R., & Al Kansaa, H. N. (2021). Pengaruh media pembelajaran e-learning terhadap hasil belajar siswa. *At-Ta'lim: Jurnal Pendidikan*, 7(1), 68–73.
- Hasan, M., Milawati, M., Darodjat, D., Harahap, T. K., Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, M., & Indra, I. (2021). *Media pembelajaran*. Tahta media group.
- Ismiyati, I. (2018). Upaya Meningkatkan Kemampuan Membaca Permulaan Melalui Media Kartu Kata Bergambar Pada Anak Kelompok B Tk Dharma Wanita Sucen Gemawang Temanggung. *Jurnal Audi : Jurnal Ilmiah Kajian Ilmu Anak Dan Media Informasi PAUD*, 3(2 SE-), 91–100. <https://doi.org/10.33061/ad.v3i2.2732>
- Mashuri, S. (2019). *Media pembelajaran matematika*. Deepublish.
- Muqdamien, B., Umayah, U., Juhri, J., & Raraswaty, D. P. (2021). Definition Stage in the Four-D Model in Research & Development (R&D) Educational Teaching Aids Snakes and Ladders to Improve Science and Mathematics Knowledge of Children aged 5-6 Years. *Intersections*, 6(1), 23–33.
- Ningrum, F. U., & Widodo, S. (2018). Pengembangan Media Pembelajaran Scrapbook Pelajaran Tematik Tema 1 Materi Lambang Negara Garuda Pancasila Untuk Siswa Kelas 3 Di SD Muhammadiyah 22 Surabaya. *Jurnal Mahasiswa Teknologi Pendidikan*, 9(2), 1–10.
- Nirwana, N., Ana Dhiqfaini, S., & Khaeruddin, K. (2021). The Application of online learning assisted with quizizz educational games in learning physics. *Jurnal Pendidikan Fisika*, 9(3), 193–197.
- Pratiwi, E. T., & Setyaningtyas, E. W. (2020). Kemampuan berpikir kritis siswa melalui model pembelajaran problem based learning dan model pembelajaran project based learning. *Jurnal Basicedu*, 4(2), 379–388.
- Qulloh, F. I. (2021). Pengembangan literasi dalam peningkatan minat baca santri pada perpustakaan mini Pesantren Pelajar Al-Fath Rejomulyo Kediri. *Jurnal Pengabdian Kepada Masyarakat Nusantara*, 1(2), 71–78.
- Rahayu, R. S., Muttaqijn, M. I., & Magdalena, I. (2022). Pengaruh Penggunaan Media

- Kartu Bergambar Seri terhadap Kemampuan Bercerita pada Pembelajaran Bahasa Indonesia Kelas IV di SDN Cijulangadeg. *Jurnal Pendidikan Tambusai*, 6(2), 15138–15156.
- Rinawati, N. K. A. (2020). Meningkatkan Motivasi Belajar Dengan Bermain Kartu Pada Program Keaksaraan Dasar. *Jurnal Akrab*, 11(2), 52–61.
- Rita Ramayulis, D. (2018). Stop Stunting dengan Konseling Gizi. *Penebar Plus*.
- Salmiati. (2018). *Hakikat Perkembangan Bahasa Anak Usia Dini*. Deepublish.
- Samudera, W., Wildan, W., Hadisaputra, S., & Gunawan, G. (2019). Development of chemistry learning intruments based on reading questiong and answering strategy mixed with creative problem solving. *Journal of Physics: Conference Series*, 1364(1), 12002.
- Setiawan, N. C. E., Dasna, I. W., & Muchson, M. (2020). Pengembangan Digital Flipbook untuk Menfasilitasi Kebutuhan Belajar Multiple Representation pada Materi Sel Volta. *Hydrogen: Jurnal Kependidikan Kimia*, 8(2), 107–115.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Suwija, I. N., Ekasriadi, I. A. A., Yarsama, I. K., & Geria, A. A. G. A. (2022). The impact of positive character building ability in balinese songs and teachers' ability and character on the moral education in indonesia: moderating role of institutional support. *Eurasian Journal of Educational Research*, 99, 327–341.
- Tiningsih, E., Subandowo, M., & Rusmawati, R. D. (2020). Pengembangan Permainan Kartu Huruf Untuk Meningkatkan Kemampuan Mengenal Huruf Anak Kelompok A. *Jurnal Education And Development*, 8(2), 399.
- Wulanjani, A. N., & Anggraeni, C. W. (2019). Meningkatkan minat membaca melalui gerakan literasi membaca bagi siswa sekolah dasar. *Proceeding of Biology Education*, 3(1), 26–31.

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).