Development and Evaluation of Flashcards as A Learning Media for Arabic Vocabularies in Islamic Elementary Education

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ABSTRACT

Background: Arabic vocabulary instruction in Islamic elementary schools (*Madrasah Ibtidaiyah*) is often hindered by low student motivation and a reliance on rote memorization, which is particularly ineffective for concrete themes like diseases (*al-amrāḍ*). This highlights a critical need for developmentally appropriate visual media.

Aims: This research aims to: (1) design thematic flashcard media on *al-amrāḍ* for third-grade students, (2) evaluate the media's validity through expert judgment, and (3) assess its practicality and impact on student engagement.

Methods: Employing a Research and Development (R&D) framework, this study utilized the ADDIE model (Analyze, Design, Develop, Implement, Evaluate). The process began with a needs analysis through observation and interviews, followed by the design and validation of flashcards by experts in Arabic language education, media, and linguistics. A limited trial with 22 third-grade students at MI Miftahul Akhlaqiyah, Semarang, was conducted to evaluate practicality and student perceptions through observation and response questionnaires.

Results: The flashcards achieved high validity scores from experts: 88% (content), 83% (linguistics), and 75% (media). Student responses were exceptionally positive, with an overall practicality rating of 95%, particularly appreciating the visual appeal, ease of use, and increased motivation. The findings indicate that the flashcards effectively facilitate vocabulary acquisition by creating clear visual-lexical connections.

Implications: The *al-amrāḍ* flashcards are a valid and practical learning medium that effectively addresses pedagogical gaps in elementary Arabic instruction. This research underscores the importance of integrating visual design with linguistic accuracy for young learners. Practically, the flashcards offer an engaging, interactive alternative to traditional methods. Theoretically, it contributes to the discourse on multimedia design for early language acquisition within religious education contexts.

Keywords: **Al-Amrāḍ flashcards***; Arabic vocabularies; instructional media; Islamic elementary school*

1. INTRODUCTION

Vocabulary mastery plays a crucial role in Arabic language learning (Aminah et al., 2025; Hidayah et al., 2025; Inayah et al., 2023; Nuuriyah et al., 2025), particularly at the elementary level, as it serves as the foundation for developing listening, speaking, reading, and writing skills (Arini & Miatin, 2025). In Islamic Elementary Schools, Arabic language instruction focuses on introducing basic vocabulary that is highly relevant to students' daily activities to support their basic communication skills. However, many MI students still face difficulties in remembering and understanding Arabic vocabulary due to a lack of access to engaging and age-appropriate learning media (Albab, 2024).

In the early stages, students generally learn better using images or real objects, because their developing thinking requires clear, interesting, and easy-to-understand teaching materials (Hasanah et al., 2023). In practice, Arabic vocabulary teaching in various madrasas is still dominated by lecture and memorization methods, which often result in low student motivation and rapid forgetting of new words (Nury & Madjid, 2024). Therefore, the use of visual learning media such as flashcards is an effective choice to help vocabulary mastery by combining images, text, and repetition in a fun learning process (Labanu et al., 2026). Various studies have shown that the use of flashcards can increase students' interest, focus, and long-term memory of vocabulary, especially for beginner learners who require significant visual support (Xodabande et al., 2022).

One example of a visual learning tool often used to boost students' enthusiasm for learning is flashcards (Fadhila & Fadilaturrahmah, 2025). Previous research has shown that flashcards can aid vocabulary learning through repetition, the use of visual associations, and the choice of attractive colors, making it easier for students to remember new words (Fitriyani & Nulanda, 2017). At the elementary school level, flashcards are considered appropriate because they align with children's cognitive development, which still greatly requires concrete visual representations to understand new concepts (Fadhilah & Kusuma, 2025).

However, the use of flashcards to acquire Arabic vocabulary in the context of Islamic elementary schools (*Madrasah Ibtidaiyah*) in Indonesia has not been widely researched, particularly regarding how this media is systematically designed to accommodate Arabic script, complete *harakat*, age-appropriate images, and the learning characteristics of students in Madrasah Ibtidaiyah. Many existing studies focus more on flashcards in general or in non-Arabic contexts, so there is a lack of research on the development and evaluation of pedagogically and linguistically appropriate flashcards for Arabic vocabulary learning at the Madrasah Ibtidaiyah level.

In elementary school, Arabic language learning, especially speaking skills, focuses on understanding and memorizing basic vocabulary and expressions that form the basis for communication (Gymnastiar & Burhanuddin, 2024). The goal is to improve students' ability to recognize, understand, and use simple vocabulary according to context (Fadhilah, Koderi, A. Sodiq, 2025). Learning outcomes at this stage depend heavily on how well students understand and remember the meaning of each word. According to Salsabila and Pranata (2025), vocabulary acquisition is a key prerequisite for students

to be able to speak a foreign or second language (Salsabila & Pranata, 2025). In Indonesia, Arabic language learning in elementary madrasas still faces challenges, namely the lack of learning media that facilitate students' understanding of vocabulary (Ulya & Marsiah, 2024). Therefore, media is needed that can provide strong visual stimulation, making vocabulary understanding faster and more enjoyable for students in the early stages of learning a language (Zahra et al., 2024).

1.1 Research Gap and Novelty

Previous research generally indicates that flashcards are an effective tool for vocabulary acquisition. However, most of this research was conducted in the context of English language teaching and involved students at secondary and tertiary levels, particularly through the use of digital media. (Li & Tong, 2019; Sari et al., 2023; Xodabande et al., 2022; Zakian et al., 2022). A literature review of the use of electronic flashcards like Quizlet shows that while these digital tools can improve vocabulary acquisition, research attention is still limited to the general function of flashcards and learning outcomes. The research has not yet explored in-depth challenges in media design and their relationship to the characteristics of the target language and learner profiles (Lubis et al., 2022).

In the context of Arabic language learning, several studies have evaluated the use of flashcards to increase interest and vocabulary mastery. However, these studies primarily focus on improving learning scores or motivation, without thoroughly explaining the media design process or considering linguistic factors unique to Arabic (Munir et al., 2023; Zahrah & Wajdi, 2024). Other research has shown that the use of visual-based flashcards can support Arabic vocabulary comprehension in older learners through a quasi-experimental approach. However, this research has not conducted an in-depth analysis of media design variables, such as Arabic letter size, the presence of harakat, and the relevance of illustrations. These factors are crucial for elementary school students who are in the early stages of cognitive development and Arabic literacy (Dzulfirda & Cholis, 2025; Nury & Madjid, 2024).

Furthermore, several previous studies tended to view flashcards as a neutral learning tool, thus paying less attention to the linguistic characteristics of Arabic, such as the complexity of writing, the function of harakat for beginner students, and the cognitive load experienced by children when faced with a writing system that is still unfamiliar to them. Research comparing digital flashcards with print-based ones, for example, emphasized differences in delivery methods and learning outcomes, while aspects of visual design, such as the appropriateness of illustrations, the size of Arabic letters, and the completeness of harakat, which play a role as teaching variables for *Madrasah Ibtidaiyah* students, tended to be ignored (Boroughani et al., 2023; Zarrati et al., 2024).

Furthermore, research on the use of Arabic vocabulary cards in elementary education generally focuses more on evaluating learning outcomes than on the media development process itself. Many studies utilize pre-prepared vocabulary cards or provide only limited explanations of vocabulary selection, visual representation, and systematic design, validation, and refinement methods for language accuracy before implementation in the classroom (Salsabilah et al., 2025; Taufik, et al., 2023). This indicates limitations in the methodology that explains how Arabic vocabulary cards are developed as a teaching tool, rather than simply as a medium for delivering material.

Furthermore, several studies have not fully incorporated the media design process, which includes analysis of student needs, design validation by Arabic linguistic experts, and empirical testing in the classroom, which are crucial steps in creating effective pedagogical products appropriate to the context of basic Islamic education. In many situations, studies have focused on the use of existing media or simple modifications without adequately documenting the rationale for the media design and its relationship

to vocabulary learning theory and student thinking development (Ramadhani & Arifin, 2024). Therefore, these studies have not provided an overview of how structured, thematic, and appropriate flashcard media for MI-aged children can be developed and tested directly in the classroom environment. This gap is an important reason for research on the development of vocabulary flashcards on the theme of disease names for third-grade students of MI *Miftahul Akhlaqiyah* Semarang.

Based on these gaps, this study considers flashcards not only as teaching aids but also as learning products, whose visual design, language accuracy, and suitability for classroom use must be tested empirically and integratively. The novelty of this study focuses on the development and analysis of Arabic vocabulary flashcards that carefully consider (1) the cognitive characteristics of Madrasah Ibtidaiyah students, (2) the linguistic needs of beginners in learning Arabic, especially in terms of the use of harakat comprehensively, and (3) the function of thematic vocabulary that supports contextual learning. By regularly documenting the process of designing, validating, and implementing media in the classroom, this study makes an empirical contribution to the development and evaluation of Arabic vocabulary learning media in the context of elementary Islamic education, an area that has been relatively underexplored in academic studies.

1.2 Research Question

This study explores the following research questions:
1. How can a set of pedagogically and linguistically sound flashcards for disease-related vocabulary in Arabic be systematically designed and validated specifically for young students in Islamic elementary schools?
2. How is the developed flashcard tool implemented in real classroom situations, and what practical lessons emerge from its use in Arabic vocabulary acquisition?
3. What are students' perspectives and engagement regarding the use of thematically designed flashcards in Arabic vocabulary learning?

2. METHODS
2.1 Research Design

This study applied a research and development (R&D) design aimed at creating a learning product in the form of Arabic vocabulary cards for third-grade students at *Madrasah Ibtidaiyah* (MI) *Miftahul Akhlaqiyah* Semarang. The development process used the ADDIE model, which consists of five structured steps: Analysis, Design, Development, Implementation, and Evaluation (Maydiantoro, 2021). The ADDIE model was chosen because it offers a structured and adaptable framework, ideal for creating learning media for elementary students. Unlike other research and development models that involve more complex and time-consuming steps, ADDIE places a sharper focus on needs analysis, iterative design, and continuous evaluation throughout the development process. These characteristics are particularly important in the context of elementary madrasahs, where learning tools must be tailored to students' thinking development, language readiness, and classroom situations.

Furthermore, the ADDIE model prioritizes formative evaluation at every step, allowing for planned improvements based on expert assessments and feedback from class participants before the final product is finalized. This iterative nature supports the creation of flashcard media that is not only theoretically accurate but also practical and contextually relevant for Arabic vocabulary learning. Therefore, the ADDIE model is considered most appropriate to guide the design, development, implementation, and evaluation of flashcards in this study.
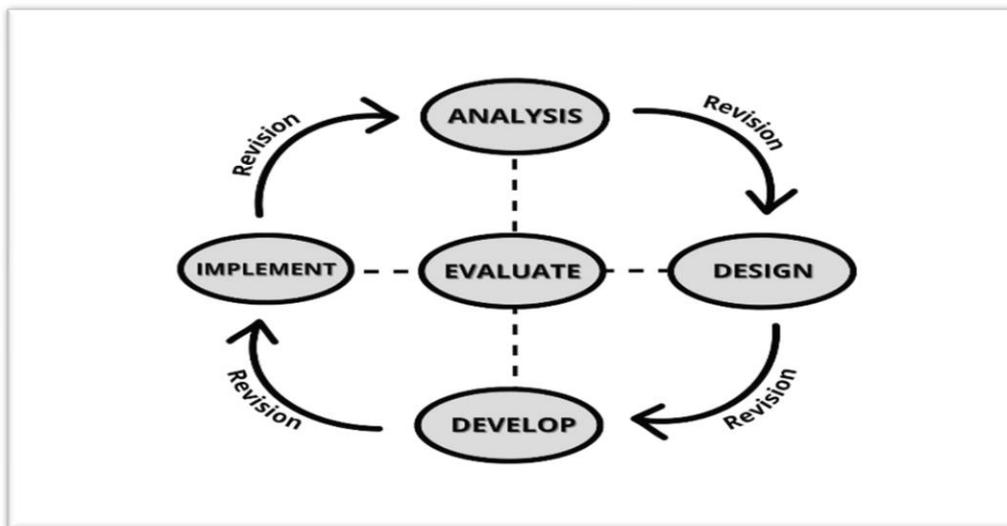
Figure 1. The Stages of the Development

Figure 1 shows the five steps of the ADDIE model used in this study. The development process began with analyzing the learning needs of third-grade Islamic elementary school students, followed by designing and developing flashcards that integrate illustrations and appropriate Arabic vocabulary. The media was then implemented in real-life classroom situations to test its functionality and effectiveness. Continuous evaluation was conducted at each stage to ensure that the resulting product met pedagogical, linguistic, and practical needs.

2.2 Research Subjects

This research was conducted at MI *Miftahul Akhlaqiyah* Semarang in the 2025/2026 academic year, starting from September 29 to November 12, 2025. The subjects studied were 22 third-grade students, with an Arabic teacher as the main informant in the information-gathering activities. The selection of locations and targets was carried out with a specific purpose based on the results of initial observations, which showed that students' vocabulary mastery was still quite low. In the learning process, teaching in class was more focused on the teacher and used a lot of textbooks, while visual media for learning was rarely applied and had not been utilized optimally to help vocabulary understanding. This situation indicates the need to develop flash card media that are more relevant, interesting, and appropriate to the learning characteristics of third-grade MI students.

2.3 Research Procedures

Table 1 Research Stages and Schedule

No.	Research Stage	Main Activities	Time Frame
1	Preliminary Study	Observation and interviews with Arabic language teachers to identify learning needs at Maharah Kalam.	29 Sept-4 Okt 2025
2	Analyze	Analyze the curriculum, learning objectives, and student characteristics for the topic of al-Amraadh.	6-11 Okt 2025
3	Design	Designing the layout of the Flash Card *Mufrodat* media, preparing validation materials and instruments.	13-15 Okt 2025

4	Develop	Produce and revise media based on expert validation (content, language, and design).	16-20 Okt 2025
5	Implementation	Class trial with grade 3 students, data collection through observation and questionnaires.	22-31 Okt 2025
6	Evaluation	Data analysis, interpretation of findings, and refinement of the final product.	1-12 Nov 2025

Table 1 shows the steps and implementation time of the research conducted from September 29 to November 12, 2025, at MI *Miftahul Akhlaqiyah* Semarang, using the ADDIE approach (Analysis, Design, Development, Implementation, Evaluation). The research began with a preliminary study phase to determine learning needs, analyze the curriculum and student characteristics, then design, develop, and revise the learning tool, namely the Flash Card *Mufrodat* media, based on validation from experts. The next step was the implementation of the media in the classroom with grade 3 students through observation and data collection, which ended with an evaluation that included data analysis and interpretation of the results to improve the product and understand the effectiveness of the media in increasing students' motivation and ability to speak Arabic *mufrodat*. The schedule and details of the research activities listed in this table reflect the systematic and good planning in the research, to ensure optimal results in the development of Arabic learning media.

2.4 Research Instruments

The data in this study were collected through observation, interviews, questionnaires, and expert validation to obtain a comprehensive understanding of the feasibility and application of Arabic vocabulary cards. Classroom observations were conducted to examine the Arabic language learning process in grade III of MI *Miftahul Akhlaqiyah* Semarang, specifically focusing on the use of visual learning media and the challenges faced by students in understanding vocabulary. Semi-structured interviews with Arabic language teachers were conducted to gather information regarding the need for learning media, expected benefits, and common difficulties encountered in teaching disease-related vocabulary.

Students' perceptions of the developed vocabulary cards were collected using a questionnaire designed to measure their responses in terms of appeal, ease of use, and usefulness in understanding and memorizing Arabic vocabulary. The questionnaire used a Likert scale, consisting of five response options, ranging from 1 (very poor) to 5 (very good). This scale was used to capture students' level of agreement with each statement in a clear and child-friendly manner.

Next, expert assessments were conducted to assess the quality and suitability of the flashcards. Validation sheets were completed by media, materials, and Arabic language experts to evaluate various aspects, including vocabulary suitability, accuracy of Arabic script and use of vowels, clarity of illustrations, and the overall visual design of the flashcards. The validation instrument also used a Likert scale, with scores ranging from 1 (very poor) to 5 (excellent), allowing for a structured and quantitative evaluation of each aspect.

These instruments support each other by presenting qualitative and quantitative data, thus ensuring that the flashcard media created meets pedagogical standards, is accurate in terms of language, clear in visualization, and in accordance with the learning characteristics of grade III MI students.

Table 2 Likert Scale (Sugiyono, 2023)

Criteria	Score
Very Good (SB)	5
Good (B)	4
Fair (C)	3
Less (K)	2
Very Poor (SK)	1

2.5 Data Analysis

Data analysis in this study was conducted by separating qualitative and quantitative data analysis, according to the characteristics of the data collected. Qualitative data were collected through classroom observations and information gathered from interviews with teachers. These data were analyzed using descriptive qualitative analysis methods, which included organizing, summarizing, and interpreting data to identify recurring patterns related to the application of flashcards in Arabic vocabulary learning. Observational data were used to explain how flashcards were used in class and students' interactions with them, while interview data were analyzed to understand teachers' perspectives on the benefits, advantages, and challenges faced in using the flashcards. The results of this analysis were presented in a narrative format to provide a contextual understanding of the learning process.

Quantitative data were obtained through validation sheets prepared by experts and through questionnaires completed by students. Validation data obtained from material experts, media experts, and Arabic language experts were analyzed using descriptive statistical analysis methods. Each item was assessed using a Likert scale, then the total score obtained was divided by the maximum possible score, and the result was multiplied by 100 to calculate the percentage of feasibility of the flashcard media. The percentage obtained was then analyzed according to predetermined feasibility standards to determine whether the product was included in the category of very worthy, worthy, quite worthy, or less worthy.

$$\text{Percentage} = \frac{\text{total score}}{\text{maximum score}} \times 100\% = \frac{0}{0} \times 100\% = 0\%$$

Table 3 Interpretation Criteria Score

Score Interval %	Criteria
86%-100%	Very Worthy
71%-85%	Worthy
56%-70%	Quite Worthy
≤ 55%	Less Worthy

In addition, information obtained from the student questionnaire was analyzed through descriptive statistics by calculating the average score and percentage for each assessed aspect, which included attractiveness, ease of use, and perceived benefits in learning vocabulary. These findings were used to describe students' reactions and levels of participation in the use of the flashcards that had been created. By combining descriptive qualitative analysis and quantitative descriptive statistics, this study presents a comprehensive assessment of the flashcard media, both through expert assessments and students' direct learning experiences in the classroom.

To understand students' reactions to the use of flashcards with the theme of *al-amrāḍ* in Arabic language learning in grade III of MI *Miftahul Akhlaqiyah* Semarang, this study refers to the value interpretation guidelines created by Kartini and Putra (2020). These guidelines aim to provide a reference in determining the appropriateness category based on the percentage of scores obtained from 22 students who conducted independent assessments. With these guidelines, each percentage value can be grouped into certain categories, such as "very good," "good," "fairly good," "less good," or "very bad." The use of this interpretation table makes it easier for researchers to provide a fair and measurable assessment of the quality of the flashcard media that has been designed, and helps in assessing the extent to which students accept the learning media.

Table 4 Score Interpretation Criteria (Kartini & Putra, 2020)

Score Interval %	Criteria
80%-100%	Verry Good
60%-79,99%	Good
40%-59,99%	Good Enough
20%-39,99%	Not Good
0%-19,99%	Very Unfavourable

3. FINDINGS AND DISCUSSION

3.1 Findings

This section presents the findings and discussion of the study to address the research questions that have guided this article: (1) How can a set of pedagogically and linguistically sound flashcards for disease-related vocabulary in Arabic be systematically designed and validated specifically for young students in Islamic elementary schools? (2) How is the developed flashcard tool implemented in real classroom situations, and what practical lessons emerge from its use in Arabic vocabulary acquisition? (3) What are students' perspectives and engagement regarding the use of thematically designed flashcards in Arabic vocabulary learning? The following discussion elaborates on each of these questions based on the data obtained from expert validation, classroom observation, and student response questionnaires.

Arabic Vocabulary Flash Card Media Development Process

This study uses the ADDIE model to create and implement flashcard media with the theme of الأمراض (names of diseases) for class III A students at MI *Miftahul Akhlaqiyah* Semarang. The ADDIE model was chosen because it provides structured steps, starting from needs analysis to final evaluation, so that the resulting media is in accordance with the characteristics of students, learning objectives, and conditions of the madrasah.

During the analysis phase, researchers conducted classroom observations, interviews with Arabic language teachers, and reviewed the Arabic language curriculum at MI. The analysis showed that vocabulary learning in class III A was still dominated by teachers and generally used memorization methods without the aid of visual media. Students had difficulty understanding and remembering new vocabulary, especially abstract vocabulary such as disease names. Teachers also stated that most students found it easier to understand the material using simple visual images or flashcards. Based on these research findings, flashcards were chosen as a solution because they combine visual and verbal elements and make vocabulary learning more concrete and enjoyable.

The next step is design, which involves creating a structure and appearance for the flashcards that meet learning needs. At this stage, researchers selected a list of vocabulary to be used, such as صداع (dizziness), زكام (flu), سعال (cough), حُمَّى (fever), and several other vocabulary items relevant to students' daily experiences. Each card is designed with three main parts: disease illustrations, complete Arabic text with vocals, easy to understand. Furthermore, researchers created a user guide for the media and various simple, game-based learning activities, such as matching games, word guessing, and pronunciation exercises. All visual designs were created using Canva to make the appearance more attractive, consistent, and suitable for the visual characteristics of elementary school-aged children.

Figure 2. Flash Card Media Image

Figure 2 shows a set of flashcards containing images of Arabic vocabulary with the theme of names of diseases. Each card displays a clear, colorful image along with relevant Arabic vocabulary, such as الرَّمَدُ (eye pain), صُدَاعٌ (dizziness), زُكَامٌ (cold), سُعَالٌ (cough), وَجَعُ السِّنِّ (toothache), حُمَّى (fever), and جُرْحٌ (wound). These flashcards were created to support students in building strong associations between images and Arabic vocabulary, so they can more easily recognize and remember the vocabulary. The visual design supports the learning nature of MI students by fully involving the harakat, resulting in more accurate pronunciation. By using interactive methods such as matching games and reading exercises, students are actively engaged in vocabulary learning, rather than simply passively memorizing. These activities improve comprehension, pronunciation accuracy, and vocabulary retention, while making the learning process more enjoyable. Flashcards can be designed, combined, and reused throughout the learning process, providing an organized and engaging learning

experience.

Figure 3. Display of Instructions for Use, Student Worksheet (LKPD), and Vocabulary Sections

Figure 3 shows a Student Worksheet (LKPD) used in conjunction with flashcards about a list of disease names. At the beginning of the LKPD, there is a learning objective aimed at improving Arabic vocabulary mastery through vocabulary composition and recognition activities. Furthermore, the Student Worksheet LKPD is equipped with a user guide explaining the implementation steps, game rules, and simple assessment criteria to monitor student engagement during the activity. In this activity, students are asked to observe the vocabulary card pieces, read the words correctly, and match the cards to the images or columns provided in the Student Worksheet LKPD. This process trains students' ability to recognize Arabic script that has harakat, strengthens the relationship between words and meanings, and builds independent work skills when the Student Worksheet LKPD is completed individually. The clear and attractive layout of the Student Worksheet LKPD supports students' easier follow-through with instructions, making the activity interactive and enhancing vocabulary comprehension.

Figure 4. Display of the Completed Student Worksheet (LKPD)

Figure 4 shows the final results of the student worksheet, where students completed the activities according to the instructions on the worksheet designed to improve their Arabic memorization skills. The final results of the student worksheet demonstrate that students were able to follow the steps of the assignment, understand the context of the material, and complete the exercises in an orderly manner in accordance with the predetermined learning objectives. Before being used in the classroom, the student worksheet underwent a validation phase by experts who evaluated the suitability of the content, language accuracy, visual design, and practical aspects. The suggestions provided were used to improve the student worksheet to be more effective in improving students' Arabic reading skills.

In this phase, the researchers also created a set of tools to evaluate the suitability of the vocabulary flashcard media before its use in classroom teaching. These tools consisted of validation forms for media experts, material experts, and language experts, as well as a student feedback survey. The expert validation was used to evaluate several important aspects, such as the suitability of the vocabulary content to the theme of disease names, the accuracy of Arabic letters and harakat, and the quality of the visual design and illustrations on the flashcards. Furthermore, the student feedback survey used a Likert scale to assess the media's appeal, the extent to which students found it easy to understand the vocabulary, and the impact of flashcards on their learning motivation. With this set of tools, flashcard media can be thoroughly assessed before being implemented in the learning process.

The development phase focuses on the process of creating media based on a predetermined design. Researchers created all sets of flashcards and then consulted three experts: a material expert, a language expert, and a media expert to validate them. Validation included the accuracy of the vocabulary, the accuracy of Arabic letters and vowels, the clarity of the images, and the appropriate size of the cards for students. The experts provided several suggestions, such as adding color consistency to each card, correcting some vowels, and adding small category icons to make it easier for teachers to select cards. After all revisions were completed, the flashcards were deemed suitable for use in classroom trials.

Table 5 Media Expert Validation Results

No.	Assessment Aspect	Score
1	Visual Design and Aesthetics	12
2	Readability and Clarity of Information	12
3	Practicality and Ease of Use	16
4	Relevance to Vocabulary Learning	24

5	Aesthetics and Technical Quality of Printing	18
6	Media Innovation	12
7	Evaluative and Functional	19
	Total	113
	Percentage	75%

Table 5 shows the evaluation results of media experts on the vocabulary flashcards themed "al-amrāḍ" (names of diseases) used in teaching Arabic to third-grade students at MI *Miftahul Akhlaqiyah* Semarang. The total score was 113, with a feasibility percentage of 75%. Based on the evaluation criteria in Table 3, these flashcards are categorized as "Worthy" for use in the learning process. These results indicate that the media meet feasibility standards in several aspects, particularly in terms of relevance to vocabulary learning and the technical quality of the print, which received a fairly high score.

However, several aspects, such as visual design, letter legibility, and media innovation, still need improvement to make them more engaging and easier for students to use. Overall, the flashcards were deemed quite effective and could be used in learning activities with some minor improvements. The validators also provided suggestions for improving the aesthetics of the display and recommended coating or lamination to improve the media's durability during repeated use. These findings provide an important basis for product refinement before wider implementation in learning.

The material validation was carried out by Mrs. Lia Ni'matul Maula, S. Pd., an Arabic teacher at MI *Miftahul Akhlaqiyah* Semarang, to evaluate whether the flashcard vocabulary material was appropriate for the learning objectives and abilities of third-grade students. This validation process included checking the suitability of vocabulary selection, the relevance of the topic of disease names, and the accuracy of writing Arabic with harakat. The results of the content validation of the flashcard vocabulary media will be explained in the following section.

Table 6 Material Expert Validation Results

No.	Assessment Aspect	Score
1	Content of Material	21
2	The Truth of Arabic (*Nahwu-Sharaf*)	14
3	Context Appropriateness	9
4	Illustration	13
5	Simplicity and Readability	9
6	Suitability for MI Students	9
7	Usefulness	13
	Total	88
	Percentage	88%

Based on the information collected in Table 6, the average evaluation from the validators regarding the material in the flash card learning media for the mastery of Arabic vocabulary by grade 3 students at MI *Miftahul Akhlaqiyah* Semarang is categorized as "very appropriate" with a validity level of 88%. The validators suggested that researchers be more careful in writing the vowels for each word to ensure that they comply with the standard rules of correct Arabic grammar. With these results, the flash card media is declared appropriate for use in the learning process, although it still requires some improvement, especially in the aspect of the accuracy of the vowel writing to improve the quality of the product before further implementation.

Validation of language use was conducted by Arabic language teachers in grade III of MI *Miftahul Akhlaqiyah* Semarang. The purpose of this process was to assess the linguistic elements of the *mufrodat* flashcard media, which included the suitability of the language structure based on the rules of *nahwu-sharaf*, the accuracy of writing Arabic letters and harakat signs, ease of vocabulary selection, and the suitability of terms to the abilities of grade III students. This linguistic examination is very important so that each *mufrodat* card is not only attractive and easy to understand, but also appropriate and suitable for use as a learning tool. The results of the linguistic validation by the Arabic language teachers will be presented in the following section.

Table 7 Results of Language Expert Validation

No.	Assessment Aspect	Score
1	Language	8
2	Spelling	8
3	Vocabulary	13
	Total	29
	Percentage	83%

Based on the evaluation conducted in Table 7, the overall score from language experts for the flashcard learning tool related to Arabic vocabulary mastery among third-grade students at MI *Miftahul Akhlaqiyah* Semarang was 83%. With this score, the flashcard learning tool is classified as "very suitable" from a linguistic perspective. Therefore, this tool is considered suitable for use in Arabic language teaching, as it meets good linguistic standards, covering aspects of language, spelling, and vocabulary.

Implementation of Flashcard Media for Vocabulary in Grade 3 Students of MI *Miftahul Akhlaqiyah* Semarang

In the implementation phase, the researcher introduced a learning aid in the form of flashcard vocabulary focused on the theme of disease in Arabic language teaching in grade 3 of MI *Miftahul Akhlaqiyah* Semarang. A total of 22 students participated in the individual media use trial. The learning began with an explanation from the teacher regarding the purpose of the activity and how to utilize the flashcards, worksheets (LKPD), and a prepared vocabulary list. After that, each student received a set of picture cards showing illustrations of diseases and vocabulary in Arabic, and they were asked to match the images with the appropriate vocabulary terms based on the instructions in the Student Worksheet (LKPD). During the activity, the teacher supervised student activities, provided guidance if necessary, and observed how students recognized and remembered new vocabulary through the visual stimulus of the flashcards. This implementation phase not only helped students understand the meaning of the vocabulary but also provided an initial overview of the media's effectiveness when applied in direct learning.

Figure 5. Students Match Vocabulary with Pictures

Figure 5 shows the activities of third-grade students at MI *Miftahul Akhlaqiyah* Semarang as they independently completed vocabulary comprehension exercises on disease names (الأمراض) using flashcards. All 22 students were actively involved in this activity. Each student was seen matching picture cards with Arabic cards they were holding, then placing them on a worksheet that had columns of illustrations of diseases such as fever, cough, flu, and stomach-ache, among others. The atmosphere in the classroom was dynamic; students were focused and enthusiastic as they read, selected, and attached cards according to the pictures. This activity not only honed students' ability to recognize Arabic disease vocabulary but also helped them understand the relationship between pictures and words more concretely. By working individually, students had the opportunity to demonstrate their abilities, while the teacher observed and provided guidance if necessary. Overall, this activity reflects high student participation, a positive learning environment, and the effectiveness of using flashcards in supporting vocabulary mastery for MI students.

Student Responses to Flashcard Media Developed in the Arabic Language Learning

After the learning session, students completed a questionnaire to evaluate their participation in using the flashcards, their ease of understanding vocabulary, and the impact on improving their mastery of Arabic vocabulary. This questionnaire provided insight into how students responded to visual elements, the clarity of Arabic text, and the ease of connecting images to the words being studied. The information obtained from the questionnaire served as a reference for assessing the extent to which the developed flashcards captured students' interest, aided vocabulary recall, and supported the achievement of learning objectives.

Table 8 Results of the Validity Questionnaire Items

Questions Number	Score of $R_{Account}$ (R_{table} DF=20; n=22; 0.423)	Validity
1	0.472502	Valid
2	0.880562	Valid
3	0.952036	Valid
4	0.962258	Valid
5	0.480444	Valid
6	0.930199	Valid
7	0.166105	Invalid
8	0.843815	Valid
9	0.77737	Valid

10	0.936204	Valid
11	0.96333	Valid
12	0.962258	Valid
13	0.962258	Valid
14	0.96689	Valid
15	0.936204	Valid

Table 8 presents the results of the validity evaluation of the questionnaire items used to assess the feasibility of flashcard media in vocabulary learning related to the theme of *al-amrāḍ* (names of diseases) for third-grade students of MI *Miftahul Akhlaqiyah* Semarang. The evaluation was conducted on 15 statements with 22 students as respondents. The validity value was obtained through the calculation of r count, which was then compared with r table at a significance level of 0.05 with DF = 20, resulting in a minimum validity limit value of 0.423. From the table, it can be seen that the majority of statement items have values above r table, which means they are declared valid. There is only one item, number 7, which has a value below 0.423, so it is considered invalid and was not used in the study. Thus, the other 14 items can be considered eligible as instruments to collect data regarding student responses to the flashcard media that has been developed. Consistency testing in this study was carried out by applying the Cronbach's Alpha formula to assess the reliability of each variable, as seen in Table 9.

Table 9 Results of the Reliability Questionnaire Items

$$r_{11} = \left(\frac{n}{n-1}\right)\left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2}\right) \quad r_{11} = \left(\frac{15}{15-1}\right)\left(1 - \frac{7.80303}{83.9675}\right) \quad r_{11} = 0.97186$$

Table 9 shows the results of the reliability test of the questionnaire measuring instrument applied in the research on the development of flashcard media for vocabulary with the theme *al-amrāḍ* (list of diseases) among third-grade students of MI *Miftahul Akhlaqiyah* Semarang. The reliability calculation was carried out using the Cronbach's Alpha formula, using 15 statement items and involving 22 students as respondents. From the calculation results, the r11 reliability value was obtained at 0.97186. Based on the reliability criteria stating that a measurement instrument is considered reliable if the Alpha value is greater than 0.60 or more than 0.70, the result obtained, namely 0.97186, is clearly far above the minimum threshold. Therefore, it can be concluded that this questionnaire is highly reliable. This indicates that the selected statement items show consistency, stability, and are suitable for measuring student responses regarding the use of flashcard media in vocabulary learning. Thus, the measuring instrument in this study was relied upon to collect information regarding student responses, both in terms of the suitability of the material, use of language, visuals, and design, ease of use, and learning motivation after using flashcard media.

The table below shows students' reactions to the implementation of flashcard media with the theme of *al-amrāḍ* (names of diseases) in teaching Arabic in grade III of MI *Miftahul Akhlaqiyah* Semarang. The survey instrument used was a Likert scale with five categories, namely Strongly Agree (SA), Agree (A), Neutral (N), Disagree (DA), and Strongly Disagree (SDA). Each student provided an assessment of several statements related to the suitability of the material, visual appearance, clarity of letters and harakat, ease of use, and learning motivation after using the flashcard media. Through this survey, researchers gained insight into the level of student acceptance of the media that had been developed, as well as to identify advantages and aspects that need to be

improved in further development. By distributing this survey, it is hoped that more objective information can be obtained regarding the effectiveness of the media and students' actual responses during the learning process.

Table 10 Students' Perceptions of Flashcard Media Development in Arabic Vocabulary Mastery

No.	Statement	Response Category					Total
		SA (5)	A (4)	N (3)	DA (2)	SDA (1)	
1	This flashcard is in accordance with the Arabic language material being studied in class.	18	3	1	-	-	22
2	The pictures on the flashcards helped me understand the meaning of the vocabulary about diseases.	20	1	1	-	-	22
3	The vocabulary on the flashcards is easy for me to read and pronounce.	17	4	-	-	1	22
4	This flashcard helps me memorize the names of diseases in Arabic.	19	2	-	-	1	22
5	The pictures and text in the flashcards are easy to understand.	20	1	1	-	-	22
6	Flashcards help me learn the meaning of vocabulary like " صداع", "زكام", "سعال", and others.	17	3	1	-	1	22
7	The Arabic writing on the flashcards is clear and not confusing.	19	3	-	-	-	22
8	The vowels in the vocabulary are written in full so that I can read them easily.	20	-	1	1	-	22
9	The vocabulary given is according to my ability in grade III.	18	3	1	-	-	22
10	I feel like I understand vocabulary faster by using flashcards.	21	-	-	1	-	22
11	These flashcards help me learn Arabic more enjoyably.	19	2	-	1	-	22
12	The color and appearance of the flashcards caught my attention.	19	2	-	-	1	22
13	Flashcards are easy to use when studying with friends.	19	2	-	-	1	22
14	I feel happy when I learn vocabulary using this flashcard.	20	1	-	1	-	22
15	Flashcard media makes learning Arabic not boring.	21	-	-	-	1	22

Based on data from Table 10 of student response sheets regarding the use of flashcards for mastering disease-themed vocabulary in grade III of MI *Miftahul Akhlaqiyah* Semarang, it was found that all 22 students participated in completing the

questionnaire personally. Of the 15 statements provided, the majority of students responded positively. This is evident from the large number of responses in the Strongly Agree (SA) and Agree (A) categories for almost all statements.

Overall, the number of students who chose Strongly Agree (SA) ranged from 18 to 21 for most items, while the number of Agree (A) choices ranged from 1 to 4 students. Only a small number of students chose Neutral (N), with approximately 0–1 student. Disagree (DA) and Strongly Disagree (SDA) choices were very rare, with only 0–1 student each for certain items. Thus, it can be concluded that the majority of students felt that the use of flashcards significantly supported their understanding of Arabic vocabulary, particularly regarding the names of the diseases being taught. These results indicate that flashcards provide a fun, easy-to-understand learning experience and help students memorize vocabulary more effectively. These findings strengthen the argument that flashcards are a viable learning medium and have significant potential for improving students' vocabulary mastery.

Table 11 Student Response Results

| No. | Name | ASPECT | | | | | Total | Response Category |
		Material Suitability (3)	Visuals and Design (5)	Language (2)	Ease of Use (2)	Motivation to learn (3)		
1	Tk	12	23	9	10	14	68	A
2	Kh	15	25	10	10	15	75	A
3	Rs	15	25	10	10	15	75	A
4	Ez	15	25	10	10	15	75	A
5	Mlk	15	25	10	10	15	75	A
6	Ntn	15	25	10	10	15	75	A
7	Adr	14	15	9	10	15	73	A
8	Zfrn	8	15	2	3	5	33	D
9	Djg	15	25	10	10	15	75	A
10	Az	15	25	10	10	15	75	A
11	Al	15	25	10	10	15	75	A
12	Fz	15	25	10	10	15	75	A
13	Aty	15	25	10	10	15	75	A
14	Clst	15	25	10	10	15	75	A
15	Fmh	15	25	10	10	15	75	A
16	Hykl	15	25	10	10	15	75	A
17	Dn	15	25	10	10	15	75	A
18	Khk	15	25	10	10	15	75	A
19	And	14	23	8	9	13	63	A
20	Abrzm	14	23	8	10	15	70	A
21	Fth	12	22	10	10	15	69	A
22	Azh	12	24	10	9	15	70	A
Total:		**311**	**520**	**206**	**211**	**317**	**1.565**	
Results/Number of Students		**14,14**	**23,64**	**9,36**	**9,59**	**14,41**		

Table 11 presents the evaluation results of responses from 22 third-grade students of MI *Miftahul Akhlaqiyah* Semarang regarding the use of flashcard media with the

theme al-amrāḍ (name of disease) applied in individual learning. The assessment was carried out by considering five aspects, namely the suitability of the material, design and visuals, language, ease of use, and learning motivation. From the analysis results, the design and visual aspects recorded the highest average score of 23.64, which indicates that the appearance of the media, such as images, colors, and aesthetics of the flashcards were considered attractive and easy to understand by students.

The learning motivation aspect also received a high score with an average of 14.41, indicating that the flashcards successfully increased students' interest and enthusiasm in learning Arabic vocabulary. The ease-to-use aspect received an average score of 9.59, indicating that the majority of students felt this media was easy to use independently without experiencing significant difficulties. Furthermore, the language aspect received an average score of 9.36, indicating that students were able to read Arabic letters and harakat well. On the other hand, the material suitability aspect reached an average of 14.14; this indicates that the vocabulary offered is appropriate to the learning theme and the developmental level of third-grade students. Overall, the accumulated scores indicate that students responded very positively to flashcards. This medium was deemed effective in aiding vocabulary mastery, providing a more enjoyable learning experience, and aligning with the characteristics of MI (Islamic elementary school) instruction. These findings strengthen the argument that flashcards are suitable as a tool for Arabic language learning, particularly in the area of *al-amrāḍ*.

Table 12 Student Response Results

No.	Indicator Criteria	Total
1	Material Suitability	14,14
2	Visuals & Design	23,64
3	Language	9,36
4	Ease of Use	9,59
5	Motivation to learn	14,41
	Total	71,14
	Average	14,22
	Percentage	95%

Based on the analysis of the questionnaires completed by students in Table 12, the resulting vocabulary cards received a "very good" rating with a percentage of 95%. This assessment covered several aspects, namely material suitability, visual design, language clarity, ease of use, and student learning motivation. Of the 22 students who participated in the individual trials, all aspects received high scores, with the visual and design indicators scoring the highest. This indicates that the illustrations and appearance of the cards successfully attracted students' attention and helped them understand vocabulary related to the theme of al-Amrādh (names of diseases). These findings confirm that the vocabulary cards not only function to help students remember vocabulary but also increase interest, create a more comfortable learning atmosphere, and increase their confidence in understanding disease terms in Arabic. Thus, student responses confirm that the designed vocabulary cards are very effective for use in teaching vocabulary to third-grade students at MI *Miftahul Akhlaqiyah* Semarang.

Based on an analysis of the questionnaire completed by students, the vocabulary flashcard media that had been created received a rating of "very good" with a percentage of 95%. This assessment covered several elements, namely the suitability of the material, visual design, clarity of language, ease of use, and student learning motivation. Of the 22 students who participated in the individual trial, all aspects received high scores, with the visual and design indicators recording the highest scores.

Furthermore, interviews with several students using the initials TK, KH, RS, EZ, and MLK yielded additional information that supported the questionnaire results. Student TK revealed that using flashcards helped him learn vocabulary about disease names more quickly because they were clear and easy to remember. Student KH added that the learning process was more enjoyable compared to conventional methods, so he felt more motivated to memorize vocabulary. Meanwhile, RS explained that flashcards helped him understand the meaning of words because they supported the images and text. Student EZ revealed that he felt more confident practicing on his own because the media was not confusing and easy to use. Meanwhile, MLK emphasized that using flashcards made Arabic lessons less boring and even increased his enthusiasm for participating in each activity. Overall, the interview results indicate that flashcards provide a positive learning experience, support vocabulary comprehension, and increase student motivation and engagement in learning.

This shows that the illustrations and appearance of the cards successfully attracted students' attention and helped them understand vocabulary related to the theme of al-Amrādh (names of diseases). These findings confirm that flashcards not only function to help students remember vocabulary, but also increase interest, create a more comfortable learning atmosphere, and increase their confidence in understanding disease terms in Arabic. Thus, the responses from students confirm that the designed flashcards are very effective for use in teaching vocabulary for grade III students of MI *Miftahul Akhlaqiyah* Semarang.

3.2 Discussion

The main findings of this study indicate that the development of flashcard media for Arabic vocabulary with the theme of *al-amrāḍ* can be designed by considering pedagogical and linguistic aspects that are appropriate to the characteristics of *Madrasah Ibtidaiyah* students, and can be practically applied in learning in grade III. The media created was not only well received by students, but also able to increase their learning participation, especially through clear visual support and the use of thematic vocabulary relevant to students' daily experiences. These findings indicate that the success of using flashcards depends not only on the form of the media but also on the suitability of the visual and linguistic design to the cognitive needs of students who are just learning Arabic.

The results of this study strengthen the findings of several previous studies, which show that visual media, especially word cards, can support the understanding and recall of foreign language vocabulary in elementary school-aged students (Agnesia et al., 2025; Puspitasari et al., 2024; Syamsiyah & Ma'rifatulloh, 2023). However, these similar results are not coincidental. In the context of teaching Arabic in Islamic elementary schools, the effectiveness of flashcards can be explained by the media's suitability to the cognitive characteristics of students who are at the concrete operational stage, requiring strong visual support to understand the form and meaning of new vocabulary. Visual repetition combined with appropriate illustrations allows students to make connections between words, images, and the context of use, as also revealed in other studies of flashcards for beginner learners (Hasibuan et al., 2024; Fathanah & Farisi, 2025). Furthermore, increased student learning motivation has been reported in various studies shows that flashcards act not only as a tool for memory, but also as a catalyst for more active and meaningful learning engagement, especially when used in learning contexts that are relevant to students' experiences (Arif, 2025; Safdar, 2021).

While consistent with previous research emphasizing the benefits of using flashcards in vocabulary learning, this study's contribution lies in its context and emphasis on

development. Unlike some previous studies that examined the use of flashcards in general or in foreign languages other than Arabic (Firda et al., 2025; Rahmi & Kholisin, 2024). This study specifically develops and tests Arabic vocabulary flashcards in the context of *Madrasah Ibtidaiyah* with the less commonly discussed theme of al-amrāḍ. Furthermore, this study not only emphasizes the results of media use but also considers flashcards as a learning tool designed to meet the language and visual needs of students just learning Arabic. Thus, this study provides a practical contribution in the form of a learning medium that has been tested in the context of a madrasah environment and broadens understanding of how the visual and thematic design of flashcards can be optimized to support Arabic vocabulary mastery at the elementary level.

From a practical perspective, the results of this study have significant implications for Arabic language teachers in Islamic elementary schools. Flashcards designed with both visual and linguistic elements in mind can serve not only as a tool for introducing vocabulary but also as a way to create more dynamic learning interactions, such as pronunciation practice, reinforcement of meaning in context, and visual-based formative assessment. This medium can also help teachers reduce reliance on mechanical memorization methods, which often hinder the process of learning Arabic vocabulary at the elementary level.

However, this study has several methodological limitations that should be considered. The testing of the media was limited and individual, so the impact of using flashcards in group learning or over a longer period of time cannot be assessed. Furthermore, this study did not compare the effectiveness of flashcards with other vocabulary learning media, so the conclusions obtained are still exploratory and cannot be considered causal. This study also did not directly measure students' vocabulary mastery through pre- and post-test designs, so the results emphasize the feasibility and acceptability of the media.

Therefore, future studies are recommended to test the use of flashcards in experimental or quasi-experimental designs, involving group learning, and to compare them with other vocabulary media frequently used in Islamic elementary schools. Developing flashcards in an interactive digital format could also be a focus of further research to explore the extent to which technology can enhance the effectiveness of Arabic vocabulary learning without neglecting the visual and linguistic needs of beginning learners.

4. CONCLUSION

This study aims to develop and assess the use of Arabic flashcard media with the theme al-amrāḍ for grade III students of Madrasah Ibtidaiyah, by paying attention to the characteristics of beginner learners who require real visual support in the process of learning Arabic. Research findings indicate that the designed flashcards met pedagogical and linguistic criteria, were easy to implement in the learning process, and received excellent feedback from students. The organized visual design, comprehensive implementation of the vowels, and relevant images contributed to increased student engagement, enthusiasm, and ease in understanding and remembering Arabic vocabulary.

Theoretically, this study demonstrates that thematic visual media developed by integrating linguistic aspects and students' cognitive characteristics can facilitate the understanding of abstract vocabulary for Arabic language learners at the elementary level. This finding expands research on the development of Arabic language learning media in Islamic elementary schools, which has been limited to assessing learning outcomes without examining media design in detail. Practically, the flashcards created can be used by Arabic language teachers as a tool to create more interactive vocabulary

learning that focuses less on memorization. For schools and madrasah administrators, this tool can serve as a reference in developing thematic learning materials tailored to the needs of elementary school students.

This study has limitations related to the number of subjects, which only included one class, and the lack of an experimental design to quantitatively measure vocabulary mastery improvements. Therefore, it is recommended that future research test the effectiveness of flashcards using an experimental or quasi-experimental design, expand the vocabulary topics and grade levels, and develop flashcards in an interactive digital format that includes audio and game elements.

Acknowledgements

Authors' Contributions

Qatrunnada Habibah Salma initiated the research idea and wrote the manuscript, and was responsible for data processing and analysis. Inayah Inayah played a key role in guiding the journal manuscript writing process, from drafting to final editing. Zuanita Adriyani provided direct support and guidance throughout the research process. Fina Saadah supported the methodology in developing and revising the research report.

AI Generative Statement

In writing this article, the authors made limited use of artificial intelligence (generative AI) technology to support grammatical correction and text editing. All ideas, research design, data analysis, and interpretation of the results are entirely the authors' own cognition and responsibility. The author guarantees that the use of AI has no impact on the scientific honesty and authenticity of this work.

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