Development of Moodle-Based Arabic Vocabulary Learning Media for Seventh-Grade Students at MTsN 2 Malang City

Anjani Prameswari Safiratuljannah[1*], Moch. Wahib Dariyadi[2], Moh. Fauzan[3]
[1*,2,3]Arabic Language Education Study Program, Faculty of Letters, Universitas Negeri Malang, East Java, Indonesia

Article Info
Article history:
Received Aug 13, 2026
Accepted Sep 24, 2026
Published Online Oct 24, 2026

Keywords:
Arabic;
Mufradat;
Moodle;
Instructional Media;
ADDIE

ABSTRACT
Vocabulary mastery is an essential aspect of Arabic language learning because it supports listening, speaking, reading, and writing skills. Therefore, learning media are needed to present vocabulary in a structured manner and provide exercises that support the learning process. This study aimed to develop Moodle-based Arabic vocabulary learning media for seventh-grade students at MTsN 2 Malang City and to describe the feasibility of the product based on expert and user assessments. This study employed a Research and Development (R&D) method using the ADDIE model, which comprises five stages: analysis, design, development, implementation, and evaluation. Data were collected through validation by media and material experts, as well as assessment questionnaires completed by one Arabic language teacher and 30 seventh-grade students. The instruments used a five-point rating scale, while quantitative data were analyzed descriptively using percentages, and qualitative data were used to support product evaluation. The results showed that the media received a validation score of 87.9% from the media expert and 92.7% from the material expert. The student assessment reached 88.0%, while the teacher assessment reached 82.8%. The learning aspect in the teacher assessment obtained a score of 77%, whereas the content quality aspect obtained a score of 85%. Based on the assessment criteria used, these results indicate that the product falls within the feasible category for use as supplementary media for vocabulary learning. The contribution of this study lies in the development of Moodle-based learning media tailored to the seventh-grade Arabic vocabulary materials at MTsN 2 Malang City, covering the topics *Al-Unwan* (Addresses), *Al-Bait* (The House), and *Min Yaumiyati Usroti* (From My Family's Daily Life). This study did not examine the effectiveness of the media in improving students' learning outcomes; therefore, further testing is needed.
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Corresponding Author:
Anjani Prameswari Safiratuljannah,
Arabic Language Education Study Program,
Faculty of Letters,
Universitas Negeri Malang, East Java, Indonesia
Jl. Semarang No. 5, Sumbersari, Kec. Lowokwaru, Kota Malang, Jawa Timur, Indonesia
Email:*prameswarisafiratuljannah@gmail.com*

How to cite: Safiratuljannah, A. P., Dariyadi, M. W., & Fauzan, M. (2026). Development of Moodle-Based Arabic Vocabulary Learning Media for Seventh-Grade Students at MTsN 2 Malang City. *Jurnal Riset Dan Inovasi Pembelajaran*, *6*(3), 1651 – 1664 . https://doi.org/10.51574/jrip.v6i3.5925

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1. Introduction

Vocabulary mastery (*mufradat*) is an essential component of Arabic language learning because it supports students' ability to understand and use the language in both spoken and written forms. Vocabulary plays an important role in listening, speaking, reading, and writing skills. Therefore, vocabulary instruction should provide students with opportunities to recognize word forms and meanings, hear their pronunciation, and use them in appropriate contexts (Mahyudin et al., 2022; Suwardi et al., 2023). Therefore, vocabulary learning cannot rely solely on recognition and memorization. It also requires the systematic presentation of learning materials and structured practice activities to provide students with opportunities to learn and use vocabulary repeatedly.

These needs have become a concern in Arabic language learning at MTsN 2 Malang City, Indonesia. Based on observations and interviews conducted by the researcher during the Teaching Assistance program, textbooks were the primary learning resource. In addition, some students were found to have obtained scores below the Minimum Mastery Criteria (*Kriteria Ketuntasan Minimal*/KKM) in the Final Year Assessment (*Penilaian Akhir Tahun*/PAT), and the teacher indicated the need for supplementary media that could present learning materials in a more varied manner. These findings do not directly establish that limited learning media caused students' low learning outcomes. However, they indicate the need to develop supplementary media that complement the use of textbooks and provide more diverse vocabulary learning activities.

The use of digital technology is one alternative for addressing these needs. In Arabic language learning, a learning management system (LMS) can be used to organize learning materials and activities in a structured manner. Aliyah & Hidayanti, (2022) discussed the use of Moodle-based e-learning in Arabic language learning, while Andarwati et al., (2023) developed Moodle-based e-learning for Arabic language learning at the Islamic Senior High School (Madrasah Aliyah) level. In the context of higher education, Sya'bani & Anwar, (2023) developed a Moodle-based Learning Management System (LMS) for fahmul masmu (listening comprehension) in an Arabic Language Education Study Program. These studies demonstrate that Moodle has been used to support Arabic language learning across different educational contexts and target user groups.

Research on mufradat learning has also been conducted using various forms of media. Mahyudin et al., (2022) discussed the use of e-learning in Arabic vocabulary instruction at the Islamic Junior High School (Madrasah Tsanawiyah) level. Kholis & Nadhif, (2023) examined the use of Quizlet to support Arabic vocabulary mastery among university students, while Suwardi et al., (2023) investigated the use of vocabulary cards in thematic learning at the Islamic Elementary School (*Madrasah Ibtidaiyah*) level. These studies indicate that vocabulary learning can be supported by media tailored to the characteristics of learning materials and target learners. However, these studies differ in terms of media format, educational level, development focus, and evaluation methods. Therefore, findings from one type of media cannot be directly generalized to other media without considering the differences in context and research procedures.

Based on learning needs and a review of previous studies, Moodle was selected for this study not merely because it is open-source, but because it can serve as a learning management environment that organizes learning materials and activities within a single system. In vocabulary (mufradat) learning, this environment can be used to present vocabulary in a structured manner, provide audio to support pronunciation, incorporate instructional videos, and integrate exercises, quizzes, and supplementary materials. These components are expected

to complement classroom instruction by providing learning resources and activities accessible through the Learning Management System (LMS). Nevertheless, the suitability of the media in relation to learning objectives and user needs must still be assessed through expert validation and user evaluations.

The research gap addressed in this study does not lie in the absence of previous uses of Moodle or the lack of audio, video, exercises, or quizzes. These features are already well established in the development of digital learning media. Rather, the research gap focuses on the need for Moodle-based Arabic vocabulary learning media specifically designed for seventh-grade students at MTsN 2 Malang City, based on the scope of the second-semester learning materials, and integrating vocabulary presentation with learning activities within a single learning environment. The developed product covers three chapters: *Al-Unwan* (Addresses), *Al-Bait* (The House), and *Min Yaumiyati Usroti* (From My Family's Daily Life), each containing approximately 20 words. The materials were supplemented with digital modules, audio, videos, exercises, quizzes, and enrichment activities. Accordingly, the contribution of this study lies in the development and organization of learning materials and activities tailored to specific educational contexts and target users, rather than in the creation of new Moodle features.

Based on the foregoing discussion, this study aimed to develop Moodle-based Arabic vocabulary (mufradat) learning media for seventh-grade students at MTsN 2 Malang City and to assess the product's feasibility through validation by media and material experts, as well as preliminary evaluations by a teacher and students. The development process followed the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation. This study is expected to make a practical contribution by providing supplementary vocabulary learning media tailored to the users' context, as well as a developmental contribution by describing the process of designing, validating, and conducting an initial evaluation of digital media for Arabic language learning. The scope of this study is limited to product feasibility and initial user acceptance. Therefore, the effectiveness of the media in improving vocabulary mastery cannot yet be determined and requires further investigation.

2. Method

Research Design

This study employed a research and development (R&D) method with a descriptive approach, utilizing both quantitative and qualitative data. This study aimed to develop Moodle-based Arabic vocabulary (*mufradat*) learning media using a learning management system (LMS) for seventh-grade students at MTsN 2 Malang City and to determine the product's feasibility based on expert and user assessments.

The ADDIE model was used in this study, which consists of five stages: analysis, design, development, implementation, and evaluation (Sugiono, 2023; Tegeh, 2014). The ADDIE model was selected because it provides a systematic development process, ranging from needs identification and product design and development to implementation with users and evaluation for product improvement (Cahyadi, 2019). The ADDIE model has also been applied in previous studies on the development of Moodle-based Arabic language learning media (Andarwati et al., 2023).

Moodle was selected because of its ability to integrate learning materials and activities within a single digital environment. Previous studies have demonstrated the use of Moodle in Arabic language learning and the development of LMS-based learning systems (Andarwati et al., 2023; (Sya'bani & Anwar, 2023). In this study, Moodle was used to organize vocabulary (mufradat) materials, digital modules, audio, videos, exercises, quizzes, and enrichment activities according to the learning needs of seventh-grade students.

This study was conducted through all five ADDIE model stages, including

implementation and formative evaluation. The implementation stage involved 30 seventh-grade students and one Arabic language teacher at MTsN 2 Malang City to obtain preliminary assessments of the product. Evaluation was conducted using the results of expert validation and user assessments to improve the media. This study did not include effectiveness testing through measurements of learning outcomes before and after the use of the media. Therefore, the findings are limited to product feasibility based on expert and user assessments, rather than evidence of improved mufradat mastery.

Development Procedure

The development procedure followed the five stages of the ADDIE model: analysis, design, development, implementation, and evaluation. Each stage was carried out sequentially and interconnected to produce learning media that met users' needs.

Analysis

The analysis stage was conducted to identify the conditions of Arabic language learning, students' characteristics, the teaching materials used, the available learning media, and the problems encountered by teachers and students in learning mufradat. The analysis was conducted through field studies and a literature review.

A field study was conducted to obtain information about the learning conditions and the need for mufradat learning media. The analysis revealed that textbooks remained one of the primary learning resources, resulting in relatively limited supplementary learning resources for students. In addition, some students had not achieved the Minimum Mastery Criteria (Kriteria Ketuntasan Minimal/KKM) in the Final Year Assessment (Penilaian Akhir Tahun/PAT), while some students demonstrated low learning interest. The Arabic language teacher also expressed the need for supplementary media that could present learning materials in a more varied manner.

A literature review was conducted to identify the characteristics of mufradat materials, the principles of material presentation, and digital learning features relevant to the product requirements. The results of this analysis served as the basis for determining the characteristics of the learning media to be developed.

Design

The design stage was conducted based on the results of the needs analysis. At this stage, the structure of the learning materials, media interface, navigation, and types of learning activities to be integrated into the Moodle Learning Management System (LMS) were designed.

The materials focused on Arabic vocabulary (mufradat) learning for seventh-grade students in the second semester and were organized based on the textbook used for classroom instruction. The materials were developed in three chapters, each containing approximately 20 vocabulary items. Each section was supplemented with supporting material and exercises.

In addition to the core materials, the product design included digital modules, audio, instructional videos, exercises, quizzes, and enrichment activities for the students. This design was intended to ensure that Moodle functioned not merely as a repository for learning materials but also as an environment that integrates various learning activities.

Development

The development stage involved translating the design into a Moodle-based learning management system (LMS) for Arabic vocabulary (mufradat) learning. The learning materials were developed in the form of digital modules, while videos were provided as supplementary learning resources. The materials and media were then integrated into the Moodle learning environment alongside exercises, quizzes, and enrichment activities.

The developed product was subsequently evaluated by a media expert and a material expert. The media expert was Dr. Mohammad Ahsanuddin, S.Pd., M.Pd., a lecturer in the Arabic Language Education Study Program at Universitas Negeri Malang with experience in instructional media. The material expert was Moh. Fery Fauzi, S.Pd., M.Pd.I., a lecturer in the Arabic Language Education Study Program at Universitas Negeri Malang with expertise in

Arabic language teaching. The expert assessments were conducted to determine the product's feasibility and obtain feedback to serve as the basis for revisions.

The product revisions were made based on the validators' recommendations. One of the major revisions concerned the accuracy of material presentation, particularly the use of diacritical marks (harakat) and sentence structure in several sections. Accordingly, the product was revised before being implemented by the users.

Implementation

The implementation stage was conducted after the product was evaluated by media and material experts and revised based on their feedback. This stage aimed to obtain information on users' initial assessments of the Moodle-based Arabic vocabulary (mufradat) learning media.

The implementation was conducted directly at MTsN 2 Malang City, involving 30 seventh-grade students and one teacher. The students assessed the media, learning, and visual aspects of the products. Meanwhile, the teacher assessed the media and learning aspects, as well as the students' cognitive levels. Data were collected using assessment questionnaires tailored to each user group.

The student and teacher assessment results were used to describe the initial user acceptance of the product and identify aspects that required further improvement. This stage was not intended to measure improvements in mufradat mastery, as the study did not employ a pre-or post-test design to assess learning outcomes before and after implementation.

Evaluation

The evaluation stage was conducted formatively by utilizing the findings obtained throughout the development process. The evaluation covered the product's alignment with learning needs, the results of media and material expert validation, and the initial assessments provided by the teacher and students. The evaluation results were used to identify aspects that met the feasibility criteria and those that required further improvement.

The validators' feedback was used to improve the learning materials and media components, particularly those related to the use of diacritical marks (harakat) and sentence structure. Teacher and student assessments were used to obtain an overview of the initial user acceptance of the product and identify learning-related aspects that required further consideration.

The evaluation in this study focused on product refinement and feasibility. It did not include effectiveness testing through experimental design or measurements of improvement in learning outcomes. Therefore, the conclusions of this study are limited to the feasibility of the product based on expert and user evaluation.

Research Subjects

The research subjects consisted of two expert validators, one Arabic language teacher, and 30 seventh-grade students from MTsN 2 Malang City. The expert validators comprised media and material experts. The media expert was selected based on their expertise and experience in instructional media, while the material expert was selected based on their expertise in Arabic language education and teaching.

The Arabic language teacher was involved as a practitioner to assess the suitability of the media for learning needs. Meanwhile, 30 seventh-grade students were involved as the target users to provide information on the product's readability and initial acceptance.

The implementation subjects were selected from a single class targeted by the development process. Accordingly, the findings describe the initial feasibility of the product within this specific user context and are not intended to be generalized to all Islamic junior high school (*madrasah tsanawiyah*) students in Indonesia.

Research Instruments

The research instruments consisted of a media expert assessment form, a material expert assessment form, a teacher assessment form, and a student-response questionnaire. The

instruments used a five-point Likert scale: 5 = very valid, 4 = valid, 3 = moderately valid, 2 = less valid, and 1 = invalid. This scale was used to obtain quantitative assessments of product quality and feasibility.

The media expert assessment instrument consisted of 15 indicators covering the alignment of the media with learning objectives, learning resources, relevance, design, color composition, font size, attractiveness, ease of use, media performance, and the media's support for mufradat learning.

The material expert assessment instrument consisted of 15 indicators covering the alignment of the materials with the required competencies, relevance of examples, content depth, accuracy and appropriateness of mufradat, illustrations, spelling, terminology, sentence structure, language comprehensibility, assessment, attractiveness, and material flexibility.

The teacher assessment instrument consisted of 20 indicators covering learning objectives, presentation, image quality, audio and video, layout, ease of use, media performance, student engagement, mufradat mastery, curriculum alignment, material presentation, exercises, vocabulary appropriateness, and support for students' cognitive development. The student response questionnaire covered three aspects: media, learning, and visual design.

The instruments were used as product-assessment forms. This study did not test the construct validity or statistical reliability of the instrument items, such as Cronbach's alpha or factor analysis. Therefore, the term feasibility in the research findings refers to the assessment of the product based on the instruments used rather than the psychometric validity of the instruments themselves.

Data Collection Techniques

Data were collected in stages, according to the ADDIE procedure. During the analysis stage, data were obtained through field studies and a literature review to identify learning conditions, learning resources used, problems encountered in mufradat learning, and the need for supplementary learning media.

During the development stage, the developed product was assessed by media and material experts using assessment forms. The collected data consisted of assessment scores, comments, and suggestions for improvement. This feedback was used as the basis for product revisions before implementation.

During the implementation stage, the product was implemented with 30 seventh-grade students and one Arabic language teacher at MTsN 2 Malang City, Indonesia. Data were collected through student and teacher assessment questionnaires according to the aspects evaluated in each instrument.

Quantitative data from the expert assessment forms and user questionnaires were used to calculate the product feasibility percentages. Meanwhile, qualitative data in the form of comments and suggestions were analyzed descriptively to identify aspects requiring improvement. The results from both types of data served as the basis for formative evaluation and product refinement.

Data Analysis Techniques

Quantitative data were descriptively analyzed using percentage analysis. The product feasibility percentage was calculated using the following equation:

$$P = \frac{x}{x_1} \times 100\%$$

Where:
P = feasibility percentage
x = total score obtained
x_1 = maximum possible score.

The calculated percentages were interpreted using the feasibility criteria presented in

Table 1.

Table 1. Criteria for Interpreting Product Feasibility

Percentage	Category
80–100%	Valid/Feasible
60–79%	Moderately Valid/Feasible
45–59%	Less Valid/Not Feasible
<45%	Invalid/Not Feasible

These criteria were used to determine the product's feasibility based on the assessment scores provided by experts and users. The results were interpreted overall and for each reported assessment aspect. Therefore, the overall average category did not replace the interpretation of the individual aspects.

Qualitative data in the form of comments and suggestions from the validators, teachers, and students were analyzed descriptively. The analysis involved identifying the feedback, grouping it according to product aspects, and determining which components required improvement. The findings were used to complement the interpretation of quantitative data and to provide a basis for the formative evaluation of the developed product.

Methodological Limitations

This study has several limitations. First, the expert assessment involved one media expert and one material expert; therefore, the validation results reflected a limited range of expert perspectives. Second, product implementation involved one teacher and 30 seventh-grade students at a single Islamic junior high school (madrasah tsanawiyah), meaning that the findings cannot be generalized to a broader population. Third, this study focused on product development, validation, limited implementation, and initial feasibility assessment. It did not examine the product's effectiveness in improving mufradat learning outcomes through an experimental design or pre-and post-test measurements. Therefore, further research is needed to evaluate the product's practicality and effectiveness with a larger number of users and across a wider range of learning contexts and settings.

3. Research Findings

This study resulted in Moodle-based Arabic vocabulary (mufradat) learning media delivered through a learning management system (LMS) for seventh-grade students at MTsN 2 Malang City. The product was developed using the ADDIE model, which comprises five stages: analysis, design, development, implementation, and evaluation. The findings are presented based on the implementation of each development stage, expert validation results, and initial assessments provided by the teacher and students.

Analysis Stage

The analysis stage was conducted through field studies and a literature review to identify Arabic language learning needs, particularly in mufradat (vocabulary) instruction. The observations indicated that textbooks were the primary learning resource. In addition, some students obtained scores below the Minimum Mastery Criteria (Kriteria Ketuntasan Minimal/KKM) in the Final Year Assessment (Penilaian Akhir Tahun/PAT), while the teacher expressed the need for supplementary learning media that could present the materials in a more varied manner.

A literature review was conducted to identify the characteristics of mufradat materials, the principles of Arabic language material presentation, and technological features relevant to learning needs. The results of this analysis served as the basis for developing media that not only provides vocabulary materials but also integrates usage examples, exercises, and audio and video learning resources.

Design Stage

The design stage involved developing the structure of the learning materials, interface

layout, navigation, and learning components within the Moodle Learning Management System (LMS). The materials were developed based on the Grade VII Arabic language textbook used at the madrasah and adapted to the second-semester curriculum.

The product was designed around three chapters: Al-Unwan (Addresses), Al-Bait (The House), and Min Yaumiyati Usroti (From My Family's Daily Life). Each chapter contained approximately 20 vocabulary items, accompanied by supporting materials and practice activities. The product components included digital modules, audio, instructional videos, exercises, quizzes, and enrichment materials. This design aimed to integrate the presentation of learning materials and learning activities within a single digital learning environment.

Development Stage

During the development stage, the designed learning materials and media were implemented in the Moodle Learning Management System (LMS). Digital modules were created using Canva, and instructional videos were produced using video editing software and subsequently integrated into the LMS. The resulting product was then validated by one media expert and one material expert from the Universitas Negeri Malang.

Media Expert Validation Results

Media validation was conducted to assess the product quality in terms of design, attractiveness, and learning. The results of the media expert validation are presented in Table 2 below.

Table 2. Media Expert Validation Results

Assessment Aspect	Percentage	Category
Media Design	90,0%	Valid/Feasible
Media Attractiveness	90,0%	Valid/Feasible
Learning Aspect	82,0%	Valid/Feasible
Overall	87,9%	Valid/Feasible

As shown in Table 2, the media expert validation yielded an overall score of 87.9%, which falls into the valid/feasible category. The media design and attractiveness aspects each received 90.0%, while the learning aspect received 82.0% score. These results indicate that the media meets the feasibility criteria based on the media expert assessment. Nevertheless, the learning aspect received a relatively lower score than the other two aspects and therefore remains an area requiring attention for further product refinement.

Material Expert Validation Results

The material expert validation was conducted to assess the content quality, learning aspects, and motivation in the developed mufradat materials. The validation results are presented in Table 3.

Table 3. Material Expert Validation Results

Assessment Aspect	Percentage	Category
Content Quality	85,0%	Valid/Layak
Learning Aspect	100,0%	Valid/Layak
Motivation	93,3%	Valid/Layak
Overall	92,7%	Valid/Layak

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Table 3 shows that the material expert validation yielded an overall score of 92.7%, which falls into the valid/feasible category. The learning aspect received the highest score (100.0 %), followed by the motivation aspect (93.3 %). Meanwhile, content quality received a score of 85.0%. Although all aspects fell into the valid/feasible category, the differences in percentages indicate that content quality still requires attention in further material refinement.

In addition to providing quantitative assessments, the validator offered feedback regarding the use of diacritical marks (harakat) and sentence structures in several sections of the material. This feedback served as the basis for evaluating and improving the linguistic

accuracy of the developed product.

Implementation Stage

Implementation was conducted through a readability test and an initial product assessment at MTsN 2 Malang. The activity involved 30 seventh-grade students and one teacher of Arabic language. Assessments were carried out using questionnaires to obtain user feedback on the media and learning aspects, as well as the product's suitability for the students' characteristics.

Student Assessment Results

The student assessment covered media, learning, and visual design aspects. The assessment results are presented in Table 4.

Table 4. Student Assessment Results

Assessment Aspect	Percentage	Category
Media Aspect	89,3%	Valid/Feasible
Learning Aspect	87,0%	Valid/Feasible
Media Visual Aspect	88,0%	Valid/Feasible
Average	88,0%	Valid/Feasible

Based on Table 4, the student assessment yielded an average score of 88.0%, which fell into the valid/feasible category. The media, learning, and media visual aspects received scores of 89.3%, 87.0%, and 88.0 %, respectively. These results indicate that students responded positively to the media based on the aspects measured by the questionnaire. However, these assessments reflect students' initial acceptance of the product and cannot be used as evidence of improved learning outcomes or sustained engagement.

Teacher Assessment Results

Teacher assessment was conducted to obtain a practitioner's perspective on the quality of the media, its support for learning, and its suitability for students' cognitive levels. The assessment results are listed in Table 5.

Table 5. Teacher Assessment Results

Assessment Aspect	Percentage	Category
Media Aspect	84,0%	Valid/Feasible
Learning Aspect	77,0%	Moderately Valid/Feasible
Students' Cognitive Level	87,5%	Valid/Feasible
Average	82,8%	Valid/Feasible

Table 5 shows that the teacher assessment yielded an average score of 82.8%, which falls into the valid/feasible category. The media aspect received a score of 84.0%, the learning aspect 77.0%, and the students' cognitive level 87.5%. The learning aspect received the lowest percentage and was classified as moderately valid/feasible according to the criteria. This finding warrants attention during product evaluation, particularly when reviewing the alignment of learning activities with students' needs.

Evaluation Stage

The evaluation was conducted formatively by considering the results of needs analysis, product design, expert validation, and initial user assessments. The evaluation aimed to identify product components requiring further refinement to ensure alignment with the development objectives.

The validator's feedback regarding the use of diacritical marks (harakat) and sentence structures served as the basis for revising the learning materials. The assessment results also showed that the learning aspect received 82.0% in the media validation, while the same aspect received 77.0% in the teacher assessment. In the material validation, the content quality received 85.0%. These findings indicate that although the product met the overall valid/feasible criteria, pedagogical aspects and content quality still require attention in further development.

Overall, the media expert validation score of 87.9%, material expert validation score of

92.7%, student assessment score of 88.0%, and teacher assessment score of 82.8% indicate that the product meets the feasibility criteria based on the instruments used. This study did not include experimental testing of learning outcomes; therefore, the findings are limited to product feasibility and initial user acceptance.

4. Discussion

Feasibility of Moodle-Based Learning Media

The media expert validation score of 87.9% indicates that the Moodle-based Arabic vocabulary (mufradat) learning media meets the valid/feasible criteria based on the assessed aspects. The media design and attractiveness aspects, each scoring 90.0%, received high ratings from the validator. Meanwhile, the learning aspect scored 82.0%, which was lower than the scores for media design and attractiveness.

This difference is important because the quality of learning media cannot be assessed solely in terms of visual presentation and attractiveness. The media must also support the achievement of learning objectives through appropriate material presentation and learning activities. Moodle was used to integrate digital modules, audio, videos, exercises, quizzes, and enrichment materials. This integration is a characteristic of product design that enables learning materials and activities to be organized within a single learning environment.

These findings are consistent with studies on the use of Moodle in Arabic language learning, which indicate that an LMS has the potential to organize learning materials and activities in a structured way (Aliyah & Hidayanti, 2022; Andarwati et al., 2023; Al-Qora'n et al., 2025). Nevertheless, the results of this study do not demonstrate that the use of Moodle improves learning outcomes. The evidence obtained is limited to expert assessments of media feasibility and initial user-acceptance.

The lower percentage for the learning aspect compared with design and attractiveness should be treated as an evaluative indication rather than direct evidence of the causes of the product's weaknesses. The available data are insufficient to determine which specific aspects or learning activities contributed to this difference in assessment. Therefore, future development should re-examine the assessment items and learning activities being evaluated to ensure that revisions can be made in a more targeted manner.

Feasibility of Mufradat Materials and Content Accuracy

The material expert validation yielded an overall score of 92.7%, placing the materials in the valid/feasible category. The learning, motivation, and content quality aspects scored 100.0 %, 93.3%, and 85.0 %, respectively. These results indicate that the materials received very high ratings for the learning aspect, while content quality was the lowest-rated aspect in material validation.

In Arabic language learning, mufradat materials involve not only the recognition of word forms and meanings but also the accurate use of words in linguistic contexts. Therefore, the accuracy of diacritics (harakat), word forms, and sentence structures requires careful attention when developing learning materials. The validator's feedback on the use of harakat and sentence structures in several parts of the product highlights the importance of linguistic review in the development of Arabic language learning media. This is consistent with discussions emphasizing the importance of grammatical accuracy in Arabic language learning, including the development of language skills (Muliansyah & Baroroh, 2020);(Yusuf et al., 2019);(Alifia et al, 2024).

A content quality score of 85.0% does not mean that the materials are unsuitable overall. This score still falls within the valid/feasible category according to the criteria used in this study. However, compared with the learning and motivation aspects, the results indicate that content quality requires particular attention. The validator's feedback can be used to review the consistency of *harakat*, the accuracy of sentence structures, and the alignment of examples with

the vocabulary being taught.

Therefore, the material validation results should be interpreted holistically: the overall percentage indicates the product's feasibility based on the assessment instrument, whereas differences in scores across aspects help identify priorities for further improvement. Because this study involved only one material expert, these results cannot be regarded as a consensus among multiple expert reviewers.

Initial Student Acceptance and Teacher Assessment

The assessments completed by 30 students yielded an average score of 88.0%, while the assessment completed by one Arabic language teacher yielded a score of 82.8. Both results fell within the valid/feasible category according to the criteria. In the student assessment, the media aspect scored 89.3%, the visual media aspect 88.0%, and the learning aspect 87.0%. Meanwhile, teacher assessment showed scores of 84.0% for the media aspect, 87.5% for students' cognitive level, and 77.0% for the learning aspect.

Descriptively, these results indicate that the product received positive initial acceptance from both students and teachers. The student assessment scores were relatively similar across the three aspects, whereas the teacher assessment revealed a greater difference between the learning aspect and the other aspects. The learning aspect score of 77.0% falls within the moderately valid/feasible category, making it a priority for further evaluation.

The difference between student and teacher assessments cannot be directly interpreted as a difference in the media's effectiveness for the two groups. Students assessed the product based on their experience as users, whereas teachers evaluated it from the perspective of a learning practitioner. Furthermore, the assessment instruments and number of assessors differed between the two groups. Therefore, the comparison is more appropriately used to identify aspects of the product that require further examination than to conclude that a general difference in perceptions exists.

Initial user assessment is an important component of development evaluation because it provides information on product acceptance in the intended context of its use. However, user acceptance is distinct from learning effectiveness. Positive assessments of the presentation, materials, or ease of use did not demonstrate improved mufradat mastery. Conclusions regarding effectiveness require the measurement of learning outcomes using an appropriate research design.

Formative Evaluation and Implications for Further Development

The evaluation results highlight two issues that require attention in further product refinement. First, the material expert's feedback on harakat and sentence structures underscores the need for a careful linguistic review of Arabic learning materials. Second, the learning aspect received relatively lower scores in the media validation and teacher assessment, at 82.0% and 77.0%, respectively. Meanwhile, content quality received a score of 85.0% in the material validation.

These three findings can be used to determine the direction of further evaluations. The review of learning materials should focus on the accuracy of linguistic elements and consistency of vocabulary presentation. Regarding the learning aspect, the developer should review the alignment of learning activities and exercises with the learning objectives and the characteristics of seventh-grade students. However, because the available data consist of percentages for each aspect and feedback from the validators, this study cannot yet identify specific items or components as the cause of the lower assessment scores.

Formative evaluation in development research serves to improve products based on evidence obtained during the development process. In this study, the evaluation included expert validation and initial user assessment. These findings provide a basis for identifying revision priorities but do not replace empirical testing of changes in student learning outcomes.

Research Contributions, Novelty, and Limitations

The contribution of this study lies in the development of mufradat learning media specifically designed for seventh-grade students at MTsN 2 Malang City by integrating learning materials and activities into the Moodle LMS. The product covers three chapters of second-semester learning materials, with approximately 20 vocabulary items per chapter, and is supplemented with digital modules, audio, videos, exercises, quizzes, and enrichment activities to enhance learning.

The novelty of this study does not lie in the use of Moodle or its digital features, as these features are already available and have been used in various learning contexts. Rather, its contribution lies in organizing mufradat materials to address the specific context and needs of target users and integrating the learning materials and activities into a single product. Previous studies have examined the use of e-learning in Arabic vocabulary instruction (Mahyudin et al., 2022) and Moodle for Arabic language learning (Sya'bani & Anwar, 2023). Therefore, the contribution of this study should be understood as the development of a context-specific product rather than a claim that Moodle or multimedia integration represents an entirely new innovation in education.

Practically, the product may be considered a supplementary medium for *mufradat* learning in Grade VII. Methodologically, this study provides an account of the development process, expert validation, and initial user assessment using the ADDIE model. However, this study has several limitations. The validation process involved only one media expert and one material expert, while the user assessment involved one teacher and 30 students at a single *madrasah*. The study also did not include experimental testing to determine changes in *mufradat* mastery following the use of the media.

Therefore, future research should involve more experts and users from a wider range of madrasah contexts, examine in greater detail the learning aspects that received relatively low scores, and evaluate the practicality and effectiveness of the product using an appropriate learning outcome assessment design. These steps are necessary to strengthen the evidence regarding the product's quality and educational benefits.

5. Conclusion

This study developed Moodle-based Arabic vocabulary (*mufradat*) learning media for seventh-grade students at MTsN 2 Malang City using the ADDIE development model. The product integrates learning materials, audio, videos, exercises, quizzes, and enrichment activities across three themes: Al-Unwan, Al-Bait, and Min Yaumiyati Usroti. The validation results showed that the media received scores of 87.9% and 92.7% from the media and material experts, respectively. Meanwhile, the initial user assessments yielded scores of 88.0% from students and 82.8% from the Arabic-language teacher. Based on the criteria used in this study, these results indicate that the product is feasible for use as supplementary media for mufradat learning.

Although the overall assessment results indicate that the product is feasible, several aspects require further attention. The learning aspect scored 82.0% in the media validation and 77.0% in the teacher assessment, while the content quality aspect scored 85.0%. These findings indicate the need for further refinement of the learning design and content accuracy to enable the media to better support learning activities. The contribution of this study lies in developing Moodle-based media tailored to the mufradat learning content for Grade VII at MTsN 2 Malang City, rather than creating entirely new features for the application.

This study has several limitations, as it involved one media expert, one material expert, one teacher, and 30 students from a single madrasah. Furthermore, this study did not include experimental testing to determine the effectiveness of the media in improving mufradat mastery. Therefore, future research should involve more diverse participants and examine changes in

learning outcomes using appropriate evaluation designs.

6. Acknowledgments

The authors would like to express their sincere gratitude to the Institute for Research and Community Service (LP2M), Universitas Negeri Malang, for providing financial support for this research. The authors also gratefully acknowledge MTsN 2 Kota Malang for providing the research setting and facilities. Special appreciation is extended to the research supervisors, media and material experts who contributed to the validation process, Arabic language teachers, and seventh-grade students of MTsN 2 Kota Malang for their valuable contributions to the development of the learning media.

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Author Biographies

	**Anjani Prameswari Safiratuljannah** is a postgraduate student in the Arabic Language Education Study Program at the Faculty of Letters, Universitas Negeri Malang, East Java, Indonesia. Her research interests include education, research and development, Arabic language learning, instructional media and the use of technology in language learning. Email:prameswarisafiratuljannah@gmail.com anjani.prameswari.2402318@students.um.ac.id
	**Moch. Wahib Dariyadi** is a lecturer and researcher in the Department of Arabic Studies, Faculty of Letters, Universitas Negeri Malang, East Java, Indonesia. His research interests include Arabic language learning, instructional media, technology-enhanced language learning, and the development of digital media for Arabic-language education. Email: wahib.fs@um.ac.id
	**Moh. Fauzan** is a lecturer in the Arabic Language Education Study Program, Department of Arabic Studies, Faculty of Letters, Universitas Negeri Malang, East Java, Indonesia. His research interests include Arabic language education and learning, technology-enhanced grammar instruction, teaching material development and technology-based instructional media. Email: moh.fauzan.fs@um.ac.id