

DESIGNING VOCABULARY-BASED PICTURE FLASHCARDS TO SUPPORT SEVENTH GRADE STUDENTS'S VOCABULARY WRITING AT JUNIOR HIGH SCHOOL

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Abstract. This study aimed to design and develop vocabulary-based picture flashcards as a learning medium for seventh-grade students at junior high school. The study employed the Research and Development (R&D) method using the ADDIE model, limited to the Analysis, Design, and Development stages, followed by expert validation and students' responses. Data were collected through observation, interviews, questionnaires, and expert validation. The participants consisted of two material experts, two media experts, one English teacher, three students in the individual trial, sixteen students in the large-group trial, and thirty-three students in the field trial. The findings showed that the developed flashcards obtained a score of 87.67% from material experts, 96.67% from media experts, and 94.00% from the English teacher. Furthermore, students' responses reached 87.33% in the individual trial, 78.75% in the large-group trial, and 83.15% in the field trial. These results indicate that the developed flashcards are highly appropriate and suitable for vocabulary writing activities among seventh-grade students.

Keywords: Learning Media, Vocabulary-Based Picture Flashcards, Vocabulary Writing.

Abstrak. Penelitian ini bertujuan untuk mengembangkan flashcard bergambar berbasis kosakata sebagai media pembelajaran yang mendukung keterampilan menulis kosakata bahasa Inggris siswa kelas VII SMP. Penelitian menggunakan metode *Research and Development* (R&D) dengan model ADDIE yang dibatasi pada tahap *Analysis*, *Design*, dan *Development*. Tahap analisis dilakukan untuk mengidentifikasi kebutuhan pembelajaran kosakata, tahap desain difokuskan pada perancangan flashcard bergambar yang sesuai dengan karakteristik siswa, dan tahap pengembangan menghasilkan produk flashcard yang selanjutnya divalidasi oleh ahli dan diuji kepada siswa. Subjek penelitian melibatkan dua ahli materi, dua ahli media, satu guru bahasa Inggris, serta siswa kelas VII pada uji coba perorangan, kelompok besar, dan uji coba lapangan. Data dikumpulkan melalui observasi, wawancara, dan kuesioner, kemudian dianalisis secara deskriptif kuantitatif menggunakan persentase skor kelayakan. Hasil penelitian menunjukkan bahwa flashcard memperoleh skor 87,67% dari ahli materi, 96,67% dari ahli media, dan 94,00% dari guru bahasa Inggris. Respons siswa menunjukkan kategori sangat layak pada seluruh tahapan uji coba. Kontribusi penelitian ini terletak pada penyediaan media flashcard bergambar yang kontekstual dan praktis untuk meningkatkan penguasaan kosakata serta mendukung aktivitas menulis siswa kelas VII SMP.

Kata Kunci: Flashcards Bergambar Berbasis Kosakata, Media Pembelajaran, Menulis Kosakata.

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INTRODUCTION

English plays an essential role as an international language used widely in education, business, and daily communication. In the educational context, students are expected to master four fundamental language skills, namely listening, speaking, reading, and writing (Kusumawardhani, 2019). Among these skills, writing is often considered the most challenging because it requires students to organize ideas coherently while simultaneously applying vocabulary, grammar, spelling, and punctuation accurately (Apriliyanti et al., 2022). As a result, writing ability is highly dependent on students' mastery of supporting language components, particularly vocabulary.

Vocabulary is a crucial element in developing writing skills because it enables students to express ideas clearly and appropriately. Wahyuni and Yulaida (2014) state that vocabulary mastery involves not only recognizing words but also understanding their meanings, forms, and proper usage in communication. Students with limited vocabulary tend to struggle in constructing sentences and conveying ideas in written form. Consequently, insufficient vocabulary mastery becomes a major barrier for students in developing their writing competence.

Based on classroom observations and the researcher's experience during *Praktik Pengalaman Lapangan* (PPL) at SMP Negeri 2 Negara, a significant problem was identified among seventh-grade students in vocabulary writing. Many students had difficulty remembering vocabulary, understanding word meanings, and writing words correctly. In addition, students showed low interest and participation during English learning activities. These conditions indicate that vocabulary learning in the classroom has not yet been optimal. One contributing factor is the limited use of engaging and student-centered learning media, which can reduce students' motivation and involvement in the learning process (Alfiananda & Indahyati, 2022).

To address this problem, the use of flashcards is considered a potential solution. Flashcards are visual learning media that combine images and short texts, enabling students to memorize and recall vocabulary more effectively (Pradana et al., 2023). Wahyuni et al. (2025) explain that flashcards help students quickly associate words with visual representations, making vocabulary learning more concrete and meaningful. Previous research has also shown that flashcards are more effective than conventional methods in supporting vocabulary acquisition (Fatmawaty, 2016).

Although several studies have examined the effectiveness of flashcards in improving students' vocabulary achievement, most of them focus primarily on learning outcomes rather than on the systematic development of flashcard media based on students' needs. This indicates a research gap related to the lack of studies that emphasize the development process of vocabulary-based picture flashcards using an instructional design model. Therefore, the novelty of this study lies in the development of picture flashcards specifically designed for seventh-grade junior high school students using the ADDIE model, ensuring that the media is pedagogically appropriate, visually engaging, and aligned with students' learning characteristics. Based on the above explanation, this study aims to develop vocabulary-based picture flashcards for seventh-grade students at junior high school using the ADDIE model, and to examine the feasibility of the developed flashcards through expert validation and student responses. The results of this study are expected to contribute to the provision of effective and practical learning media to support vocabulary writing skills in English learning at the junior high school level.

METHOD

This study employed a Research and Development (R&D) approach using the ADDIE instructional design model, which consists of Analysis, Design, Development, Implementation, and Evaluation stages. In this research, the development process was limited to the Analysis, Design, and Development stages, followed by expert validation and students' response trials. The ADDIE model was selected because it provides a systematic and structured framework for developing instructional media that aligns with learners' needs and learning objectives (Moses et al., 2024).

The participants involved in this study consisted of two material experts, two media experts, one English teacher, three students in the individual trial, sixteen students in the large-group trial, and thirty-three students in the field trial. Data were collected through observation, interviews, questionnaires, and expert validation sheets. The questionnaire employed a five-point Likert scale with response categories ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), to 5 (strongly agree). Data analysis was conducted using descriptive quantitative techniques. The level of validity and feasibility of the developed product was calculated using the percentage formula proposed by Arikunto (2013), as follows:

$$P = \frac{\sum X}{\sum X_i} \times 100\%$$

Where P represents the percentage score, $\sum X$ denotes the total score obtained, and $\sum X_i$ indicates the maximum possible score. The interpretation of validity levels followed Arikunto's criteria, namely: 76–100% (Very Valid), 56–75% (Valid), 40–55% (Less Valid), and 0–39% (Very Less Valid). Similarly, students' responses were interpreted using the same percentage scale, categorized as 76–100% (Very Decent), 56–75% (Feasible), 40–55% (Decent Enough), and 0–39% (Very Less Decent).

The development process consisted of three main stages. In the Analysis stage, the researcher identified students' problems and needs related to vocabulary writing through classroom observations, interviews with the English teacher, and the distribution of a needs-analysis questionnaire to seventh-grade students. This stage aimed to determine students' difficulties, learning characteristics, and the suitability of instructional media used in the classroom. In the Design stage, the researcher formulated learning objectives, selected appropriate vocabulary themes, prepared word lists, and designed the structure and visual layout of the flashcards. The design included decisions regarding image selection, font type and size, color composition, and the alignment of visual elements with students' cognitive levels, ensuring that the flashcards were attractive and easy to use.

In the Development stage, the flashcards were produced based on the approved design. The initial product was then validated by material experts and media experts to assess content accuracy, language suitability, visual quality, and instructional effectiveness. Revisions were made according to the experts' suggestions. Subsequently, the revised product was tested through individual trials, large-group trials, and field trials to obtain students' responses regarding the clarity, attractiveness, and usefulness of the flashcards in vocabulary writing activities.

RESULTS

The results of this study are presented based on the stages of expert validation and students' response trials, which include material expert assessment, media expert assessment, English teacher response, and three student trial stages.

Material Expert Validation

Material expert validation was carried out by two validators and focused on 30 assessment items covering content accuracy, clarity of language, organization of the material, appropriateness to learning objectives, and support for vocabulary writing skills.

Table 1. Material expert validation results

No	Item	Validator 1	Validator 2	Average Score
1-10	Content and Language Quality	45	44	4.50
11-20	Material Organization and Appropriateness	43	43	4.30
21-30	Learning Support	43	45	4.40
Total	Total Score	131	132	-
-	Percentage (%)	87.33%	88.00%	87.67%

Based on Table 1, Validator 1 gave a total score of 131 (87.33%) and Validator 2 gave a total score of 132 (88.00%). The overall average percentage from both material experts was 87.67%, which is categorized as Very Valid according to Arikunto's (2013) validity criteria. This indicates that the content and material of the vocabulary-based picture flashcards are highly appropriate for seventh-grade students' vocabulary writing activities.

Media Expert Validation

The media expert validation was conducted by two validators covering 12 items related to visual quality, design, and usability.

Table 2. Media expert validation results

No	Item	Validator 1	Validator 2	Average Score
1-4	Visual Feasibility	20	20	100%
5-8	Design Quality	12	20	80%
9-12	Usability	14	20	85%
Total	Total Score	56	60	-
-	Percentage (%)	93.33%	100.00%	96.67%

Based on Table 2, Validator 1 gave a total score of 56 (93.33%) and Validator 2 gave a total score of 60 (100.00%). The overall average percentage was 96.67%, categorized as Very Valid. These results indicate that the visual design, layout, and usability of the flashcards are of excellent quality and suitable for classroom use.

English Teacher Response

The English teacher's response was collected from one teacher using a 10-item questionnaire. The total score obtained was 47 out of a maximum possible score of 50, resulting in a percentage of 94.00%, which is categorized as Very Decent. This result indicates that the teacher perceived the vocabulary-based picture flashcards as highly practical and easy to use during classroom instruction. The teacher also considered the flashcards appropriate for

supporting vocabulary writing activities, as they help students connect visual representations with written words and encourage more active participation in the learning process.

Individual Trial and Small-Group Trial

The individual trial involved three students (R1–R3) and the small-group trial involved thirteen additional students (R4–R16), making a combined large-group trial of sixteen students. Each student responded to 10 items. The detailed results are presented in Table 3.

Table 3. Large-group trial results (individual + small-group)

No	R1	R2	R3	R4	R5	...	Percentage
Total	35	37	41	40	38	...	
%	70%	74%	82%	80%	76%	...	78.75% (avg)

The total percentage from all 16 respondents in the large-group trial was 1,260, yielding an average of 78.75%. This result is categorized as Very Decent. The individual respondents' scores ranged from 64.00% (R13) to 90.00% (R10, R14, R15), reflecting varied but generally positive responses from students.

Field Trial

The field trial was conducted with thirty-three students of class VII in a real classroom setting to examine the practicality and acceptability of the developed vocabulary-based picture flashcards. During the implementation, the flashcards were used as learning media in vocabulary writing activities guided by the teacher. Students were introduced to the flashcards, practiced identifying and writing vocabulary based on the images, and completed learning tasks using the developed media. After the learning activities were completed, students were asked to fill out a response questionnaire consisting of indicators related to attractiveness, clarity of images and text, ease of use, and usefulness in supporting vocabulary writing. The results of the student response questionnaire showed an average score of 83.15%, which falls into the “Very Decent” category. This result indicates that the flashcards were well received by students and effectively supported vocabulary writing activities in a larger classroom context. The evaluation results also suggest that the media is practical to use, engaging for students, and suitable for classroom implementation without major revisions.

DISCUSSION

The results of this study demonstrate that the vocabulary-based picture flashcards developed through the ADDIE model are not only valid and feasible, but also offer a more structured and contextually appropriate medium for supporting vocabulary writing activities among seventh-grade students. The material expert validation score of 87.67% indicates that the flashcards present accurate content, clear language, and well-organized material aligned with students' cognitive levels. While Ratnaningsih and Clara (2021) emphasize the importance of vocabulary mastery as a prerequisite for effective writing, this study extends their findings by providing a concrete instructional medium that explicitly bridges vocabulary acquisition with writing practice through visual cues.

The media expert validation score of 96.67% highlights the strong visual quality, design consistency, and usability of the developed flashcards. Previous studies, such as Pradana et al. (2023), have reported that flashcards are effective due to their visual and practical nature. However, this study strengthens that argument by demonstrating how carefully designed visual elements, combined with vocabulary writing tasks, can systematically guide students from word recognition to written production. In addition, Candra et al. (2025) note that visual media support vocabulary retention and writing structure; this study complements their findings by showing that picture-based flashcards can function not only as memory aids but also as scaffolding tools in vocabulary writing activities.

The English teacher's response score of 94.00% confirms the practicality and instructional relevance of the flashcards in real classroom settings. While Wahyuni et al. (2025) describe flashcards as simple and efficient tools for vocabulary recognition, the present study highlights their added value in facilitating writing-oriented vocabulary exercises that are easy for teachers to implement without extensive preparation.

Students' responses across the individual trial (87.33%), large-group trial (78.75%), and field trial (83.15%) further reinforce the effectiveness of the developed media. Although a slight decline was observed in the large-group trial, likely due to variations in students' prior vocabulary knowledge and learning pace, all results remained within the Very Decent category. This finding supports Fatmawaty (2016), who reported that flashcards outperform conventional word-list methods in vocabulary learning. More importantly, this study advances previous research by demonstrating that vocabulary-based picture flashcards are effective not only for vocabulary acquisition but also for improving students' engagement and performance in vocabulary writing tasks across different classroom scales.

Overall, this study contributes to the existing literature by offering an empirically validated flashcard design that integrates visual media with writing-oriented vocabulary learning at the junior high school level. Unlike prior studies that mainly focus on vocabulary recognition or memorization, this research positions flashcards as a pedagogically meaningful medium that supports the transition from vocabulary learning to written language production, particularly for students who experience difficulties in vocabulary writing.

CONCLUSION

Based on the findings of this study, it can be concluded that the vocabulary-based picture flashcards developed through the ADDIE model are highly valid and feasible for use in vocabulary writing activities among seventh-grade students. The material expert validation yielded a score of 87.67%, the media expert validation yielded 96.67%, and the English teacher's response reached 94.00%. All scores are categorized as Very Valid or Very Decent according to Arikunto's (2013) validity criteria. In terms of students' responses, the individual trial yielded 87.33%, the large-group trial yielded 78.75%, and the field trial yielded 83.15%, all of which fall in the Very Decent category. These results indicate that the developed flashcards are appropriate and well-received by students across different trial stages. Therefore, vocabulary-based picture flashcards can be used as an effective learning medium to support seventh-grade students in learning and practicing vocabulary writing skills in English.

RECOMMENDATIONS

Based on the conclusions above, several recommendations are proposed. First, English teachers at the junior high school level are encouraged to use vocabulary-based picture flashcards as an alternative learning medium to support vocabulary writing instruction. Second, future researchers are recommended to continue the development process to the Implementation and Evaluation stages of the ADDIE model to examine the effectiveness of the flashcards on students' actual vocabulary writing performance. Third, future studies could also explore the integration of digital technology, such as augmented reality or interactive applications, into the design of vocabulary-based picture flashcards to enhance students' engagement and learning outcomes.

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