Development of Learning Media Flash Card Combinations in English Lessons Grade IV MI Al-Huda Karangnongko Sleman

Muhammad Fikruzzaman Makarim[1], Deana Indah Haimima[2], Iftinan R Azzah S[3]

Universitas Negeri Yogyakarta, Indonesia[1,2], Johns Hopkins University, United States of America[3]
E-mail: muhammadfikruzzaman.2024@student.uny.ac.id[1],
deanaindah.2024@student.uny.ac.id[2], iazzahs1@jh.edu[3]

Abstract

This study addresses two main questions: (1) how the development process of combination flash card media for English language learning in Grade IV at MI Al-Huda Karangnongko was carried out, and (2) how the appropriateness of the media was evaluated based on expert validation, teacher feedback, and student responses. The research applied a Research and Development (R&D) approach, adapting the Borg and Gall model into eight stages: identifying problems through interviews and observations, conducting needs analysis and literature review, designing the initial prototype, validating with experts, revising the media, conducting limited trials, refining the product, and implementing a large-scale trial. The flash card media was based on Unit I, *"What Are You Doing?"* from the Grade IV English module published by the Ministry of Education and Culture. The final product consisted of 50 cards (25 vocabulary and 25 picture cards), sized 8 x 12 cm, designed using CorelDraw X7 with attention to visual design and cognitive suitability for elementary students. Validation results showed high feasibility: subject matter experts (93.33%), media experts (92.73%), and instructional experts (93.33%) rated the media as "highly appropriate." Teachers also gave a positive response (90%), emphasizing the media's clarity, ease of use, and relevance. A field trial with 26 students showed strong enthusiasm and engagement, scoring 234 out of 260 (90%). In conclusion, the developed flash card media is technically and pedagogically effective, promoting motivation, focus, and understanding in English learning. It offers an innovative alternative aligned with the Merdeka Curriculum's emphasis on active, enjoyable, and contextual learning.
Keywords: english; flash cards; learning media

Introduction

The paradigm of English language learning has shifted since the change from the 1984 curriculum to the 1994 curriculum. The shift began with a change in learning orientation in the 1984 curriculum. In the 1984 curriculum, learning focused on grammatical assignments. Then the curriculum changed to the 1994 curriculum and changed to the 2006 curriculum which required learning to be oriented towards four language developments, namely: Based on Permendiknas No. 22/2006 about the standard and Permendiknas No. 23/2006 about the graduate standard which shows that English becomes a local content lesson (Regulation of the Minister of National Education of

Republic of Indonesia No. 23 of 2006 about Graduate Competency Standards for Primary and Secondary Education Units, 2006). In 2013, the curriculum in Indonesia changed to the 2013 curriculum, which eliminated English lessons, and in 2014, Permendikbud No. 67 of 2013 on primary school curriculum pages 9-10 did not mention English at all (Guidelines for Curriculum Implementation in the Learning Recovery Framework, 2022). According to the Decree of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia No. 56/M/2022 on curriculum implementation guidelines in the framework of learning recovery, English is an optional subject that can be organized based on the readiness of the education unit. The law is a reference in implementing the K13 curriculum, Emergency Curriculum, and Merdeka Curriculum.

The addition of English lessons can be implemented at SD/MI if the school considers English relevant and in line with the needs of the school's vision and mission. Schools must be able to provide the necessary facilities to implement these lessons and provide teachers who can support the running of English lessons at the school (Ichda Faridatunnisa, 2020). English is a global language because it is used as the main language in many countries. Not only that, English is also an international language that is very important to learn (Indriyani & Usriyah, 2022; Noer & Dkk, 2024 .2022). Primary school. According to Brown, English is also called a second language because English is a target language, which is a language that is deliberately learned with a specific purpose (Brown, 2018). (Brown, 2018), Therefore, English is inseparable in our lives (Zahrotulmuna Sya et al.) is also a second language, because English is a target language, which is a language that is deliberately learned with a specific purpose Elementary school is also an ideal period to foster a positive view of foreign language learning, so that it can increase children's motivation to learn English at the next level of education (Umar et al., 2023).In learning English, elementary school children are sufficiently equipped with a variety of new vocabulary in a fun way to introduce it (Fitriyani & Nulanda, 2017).

Based on an interview with the English teacher and classroom observation in class IV A at MI Al-Huda Karangnongko, the school has implemented an independent curriculum. However, many students appear to be inattentive during English lessons. The teacher stated that students often show low enthusiasm unless the activity involves games or visual media. This resulted in the students' average scores being low. Based on the test results, the students' average score was 68.84. 61.54% of students scored above the

minimum passing score. 38.46% of students scored below the average. Ice-breaking activities were occasionally used, but only to provide temporary engagement. Once the material explanation resumed, students became less responsive. Teachers mainly rely on LKS and standard curriculum books from the Ministry of Education and Culture. Some of the challenges found were students' difficulties in writing English words and pronouncing new vocabulary. This was evident during the lesson, where some students struggled to complete even simple writing tasks. The findings suggest that the lack of interesting and interactive media significantly affects students' participation and learning outcomes in English lessons. There are some obstacles to implementing English learning, and students still have difficulties in writing. There are also some students who still have difficulty pronouncing vocabulary. There are at least four factors that affect elementary school children in learning English, including: (1) the influence of mother tongue, (2) social and family background, (3) the role of teachers in learning activities, (4) learning methods, teaching materials, and learning media (Herlina & Nidya Chandra Muji Utami, 2019).

One of the means that supports the running of English language learning is the existence of learning media. Learning media comes from two syllables, namely the word media and the word learning. Media comes from Latin medius, which means 'middle' or 'intermediary'. In Arabic (Pagarra et al., 2022). Learning media is anything that can channel messages, stimulate students' thoughts, feelings, and abilities, so that it can encourage the creation of a learning process in students (Hikmah, 2019; Isnaeni & Hildayah, 2020; Kiki Safitri, 2020). Learning media are any form of tools, materials, equipment, activities, or people used in the teaching and learning process to create conditions that allow students to acquire knowledge, skills, and attitudes, so that learning objectives can be achieved better and more perfectly (Batubara, 2021; Saputri, 2020). Learning media used in the classroom in teaching and learning activities is one of the important components to make it easier for teachers to convey understanding to their students (Drugs, 1977; Fitania & Puspitarani, 2019; Gusti et al., 2020; Wirawan, 2020).. (Puspitarini & Hanif, 2019; Yusuf, 2023).Learning media used appropriately in the learning process will be a more effective and efficient tool in achieving learning objectives. Media can also be a bridge or key to transferring the teacher's concept of certain material to student understanding

The main function of learning media is as a teaching aid that also influences the conditions and learning environment arranged and created by the teacher (Suparlan, 2020). The use of media has many benefits. These benefits as explained by Jennah include (1) being able to broaden students' horizons, (2) students gain diverse experiences during the learning process, (3) provide concrete and direct learning experiences to students, (4) overcome the limitations of something, (5) provide accurate and up-to-date information, (6) increase the attractiveness of material display, (7) stimulate students to think critically, use imagination, behave, and develop further, (8) increase the efficiency of the learning process, (9) solve educational problems (Ghufron et al, 2024). The easiest way to use in teaching English is by teaching vocabulary. According to (Komachali & Khodareza, 2012), English learning for elementary school children is sufficiently equipped with a variety of new vocabulary in a fun way of introducing it. According to Wahyuningsih & Afandi (2020), to have good English skills, you must have a lot of vocabulary. Vocabulary is an important component in language learning, especially foreign languages, because without mastering vocabulary we will not be able to communicate optimally in listening, speaking, reading, and writing (Arsana & Maharani, 2021). Research (Hamer & Rohimajaya, 2018) highlights the low mastery of student vocabulary in English learning and offers the use of flash cards as a solution. The novelty of this study lies in the applied and contextualized approach in the use of flash cards to increase students' motivation and engagement.

From the results of interviews, fourth-grade students of MI Al-Huda Karangnongko tend to prefer pictorial and interactive learning media. Pictorial learning media can attract students' attention, and interactive learning media can make students active and happy to participate in learning (Langi et al., 2022). One alternative learning medium that is pictorial and interactive is *flashcards. Flash card* media is small, so it is easier to carry everywhere. *Flash card* media combination is an effective learning tool containing images, text, or symbols that are used to help remind or direct students to something related to the images, text, or symbols on the card, and stimulate students' thoughts and interests so that the learning process occurs (Cancela et al., 2012; Febiani Musyadad, 2012, 2012; Febiani Musyadad et al., 2020; Wahyuningsih & Izzah, 2023). Elementary children experience cognitive development in the preoperational transition period to the concrete operation stage, so it is hoped that the combination of *flash cards*

can help students to think concretely (Adnan et al., 2020; Mufida Istati, 2016). The advantages of using flash cards, according to Hariyanto & Candra Dewi (2009), are as follows: a) Teaching children to read early; b) Developing children's right brain memory; c) Training the ability to concentrate; and d) Adding vocabulary quickly.

According to (Wen et al., 2020), flash cards are a very common tool used in foreign language learning, especially in learning and memorizing vocabulary. Based on research (Alam et al., 2024; Ying et al., 2021), flash cards are effectively used for English language learning. This is reinforced by research (Siti Sakdah & Anas, 2023), which shows the effect of using flash cards, which gets a value of 69% good category from the value before getting treatment using flash card media, which is 39.8% not good. According to Harisanty et al. (2020), teachers find flashcards helpful in English lessons, and students find it easier to understand the material presented.

Researchers developed flash card media, which were developed into combination flash cards because flash cards generally contain vocabulary and images on one card. However, researchers developed it into several cards containing vocabulary and several cards containing images. This is done so that the flash card game becomes more varied. Based on the background description above, the researcher wishes to develop a combination of flash card learning media in English class IV on the material What are you doing?

Research Methods

This research uses research and development (R&D). This research method is used to produce certain products and test the effectiveness of these products. According to Borg and Gall, Educational research and development is a process used to develop and validate educational products (Ibrahim et al., 2018). Research and development is used to develop a product.

This research took place at MI Al-Huda Karangnongko, which is located on Jl. Karangnongko, Sanggrahan, Maguwoharjo, Depok Sub-District, Sleman Regency, Yogyakarta Special Region 55282. The subjects of this study consisted of 25 students from class IV A and five students from class IV B. This study involved media experts, subject matter experts, and practitioners who were English teachers.

The Borg and Gall model was initially developed for industrial needs, so researchers adapted it to make it suitable for use in education. In the development of media flash card combinations, researchers only use eight steps in conducting development according to Brog and Gall (Sugiyono, 2013). The following are the steps of developing a combination flash card media in English class IV A: 1. Potential and Problems, 2. Collecting Information, 3. Product Design, 4. Design Validation, 5. Design Improvement, 6. Limited student response, 7. Product Revision, 8. Student Response. Researchers only used eight steps because that was sufficient to develop a learning medium.

To get the right data from this research, the researcher used interviews, observation, and questionnaire methods. In the research instrument, researchers used a Likert scale to evaluate the products that had been developed.

Researchers analyzed qualitative data derived from interviews, suggestions, and input from material experts, media experts, and English teachers by describing the results of the data. While quantitative data derived from questionnaires using the formula:

$$P = \frac{F}{N} \ x \ 100\%$$

Description:

P: Percentage number

F: The frequency for which the percentage is sought

N: Sample size of respondents

Table 1
Media expert grid

No.	Aspect	Assessment Criteria	Question Item
1	Content	The material on the combination flash cards is in line with the learning objectives.	1
		The material on the combination flash cards is easy to understand.	2
		The material on the combination flash cards is appropriate for the abilities of fourth-grade students.	3
2	Educational aspect	Combination flash cards can increase students' motivation to learn English.	4
		Combination flash cards can stimulate students' interest in learning English.	5
		Combination flash cards can increase student activity.	6

No.	Aspect	Assessment Criteria	Question Item
		Combination flash cards are good for improving student understanding.	7
3	Technical quality	There are instructions on how to use the combination flash cards.	8
		The letters used are clearly legible.	9
		The color combinations in the images, text, and background on the combination flash cards are attractive.	10
		The use of attractive images is appropriate for fourth-grade students.	11

Source: (Kristanto, 2016)

Material expert grid

Table 2
Material expert grid

No.	Aspect	Assessment Criteria	Question Item
1	Compatibility	The material presented in the combination flash card media is in line with the learning outcomes	1
		The material presented in the combination flash card media is in line with the Pancasila student profile	2
		The material presented in the combination flash card media is in line with the learning objectives	3
		The material presented in the combination flash card media is in line with the students' environment	4
2	Persistence	The material contained in the combination flash card media can improve students' understanding.	5
		The material on the combination flash card media is easy for fourth-grade students to understand.	6
		The material contained in the combination flash card media is in line with the content being discussed.	7
		The combination flash card media is in line with the cognitive development of fourth-grade elementary/Islamic elementary school students.	8
3	Sufficiency	The material on combination flash cards can help students master learning objectives.	9
		Combination flash cards can assist teachers in teaching.	10
		Combination flash cards can improve the cognitive abilities of fourth-grade elementary school/MI students.	11
		The material covered on combination flash cards is in line with learning outcomes.	12

Source: (Sukiman, 2012)

The data obtained from experts, teacher responses, and student responses are calculated to test the feasibility of the combination flash card media. The following are the product eligibility criteria:

Table 3
Feasibility Categories

Percentage	Feasibility Category
0 - 20 %	Very unfeasible
21 - 40 %	Not worth it
41 - 60 %	Decent enough
61 - 80 %	worth
81 - 100 %	Very feasible

Source: (Saski & Sudarwanto, 2021)

Result

The initial activity carried out before developing learning media is analyzing the potential and problems. This was done through interviews with English teachers and classroom observations. The problem found was that the teacher did not use learning media during the learning process. Teachers only use LKS and English textbooks issued by KEMENDIKBUD. The potential found is that researchers can develop a learning medium that can be used in the learning process. It is expected to improve student learning outcomes, especially in English lessons.

According to the interview data, MI Al-Huda Karangnongko has implemented an independent curriculum. The application of the independent curriculum at MI Al-Huda Karangnongko starts in grades I and IV. In class IV, English learning uses an independent curriculum.

Data collection is done by analyzing the needs to determine the learning media to be developed. The needs analysis was taken from interview and observation data when learning English in class IV at MI Al-Huda Karangnongko. Information collection is also done by looking for references to support the development of learning media in the form of a combination of *flash cards*.

In this study, researchers developed learning media in the form of *flash cards* into combination *flash cards*. The combination *flash cards* were developed based on the English language material of class IV Unit I, with the *content of What are you doing?*

Combination flash cards measuring 8 cm X 12 cm are designed using the CorelDRAW X7 application. The combination of flash cards totaled 30 cards, consisting of 15 picture cards and 15 cards with English vocabulary. The following are the steps used by researchers in making the design of combination flash cards; 1) Determine the vocabulary that will be included in the combination flash cards, 2) Make *rectangles* according to the card size, which is 8 CM X 12 CM, 3) Design the back of the combination flash cards to make the cards more attractive, 4) Entering the vocabulary that will be used, 5) Insert pictures that match the vocabulary into the combination flash card design, 6) Printing the combination *flash card* design that has been made.

The combination flash cards consist of 30 cards, comprising 15 picture cards and 15 vocabulary cards. The vocabulary cards also include the spelling and pronunciation of he words. Originally, there were only 10 vocabulary words, but following input from media experts, this was increased to 15. The pictures on the combination flash cards were created in accordance with the characteristics of fourth grade students.

The following is the initial design of the Combination Flash card:

Figure 1
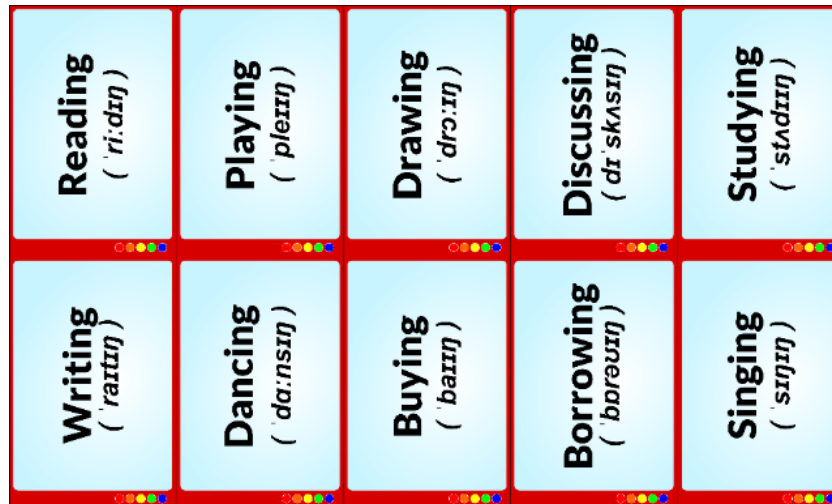Front card design
Source: Personal Document

Figure 2
Card front design
Source: Personal Document

This design consists of English vocabulary cards that list verbs such as reading, writing, playing, dancing, and so on. Each card not only displays vocabulary, but also includes pronunciation and meaning in Indonesian. The purpose of presenting this comprehensive information is to help students understand the meaning of words while learning the correct pronunciation. The cards are designed with a consistent and easy-to-read format, enabling students to more easily recognize patterns and meanings in vocabulary. The background color and font type are also adjusted to attract students' attention and facilitate the learning process. By integrating visual and verbal elements into one medium, these flashcards support learning through both visual and auditory approaches simultaneously. This design is also tailored to the characteristics of fourth-grade elementary school students, who enjoy attractive images and concrete learning methods.

The images depicting the initial design of the picture cards show illustrations of each activity corresponding to the vocabulary being taught. The illustrations are created in an attractive cartoon style, with bright colors, and depict everyday activities of children such as playing, reading, singing, and writing. The main purpose of presenting these images is to help students associate vocabulary with concrete meanings through visualization. The image designs are selected based on their relevance to students' daily lives, making them easy to understand and more contextual. These images are an important part of the flash card combination media because they stimulate students' imagination and memory of the words being learned. Thus, the use of picture cards in the

learning process not only serves as a visual aid but also as a bridge between abstract concepts and students' real-life experiences.

Design validation was conducted with three experts, namely: material experts, media experts, and learning experts. Design validation is done to get suggestions and input on the combination flash card learning media. It is hoped that the combination flash card design validation can determine its feasibility before conducting trials. The validators came from lecturers at Sunan Kalijaga State Islamic University Yogyakarta.

Material expert

Table 4
Material Expert Validation Data

No.	Assessment Criteria	Score	Max Score
1	Compatibility	17	20
2	Persistence	20	20
3	Sufficiency	19	20
Total		56	60

Source: Personal Document

Based on the data from the material validation results in table 2, the number of scores obtained is 56 out of 60. On the suitability criteria, it gets a score of 17 out of 20. On the criteria for constancy, it gets a score of 20 out of 20. On the adequacy criteria, it gets a score of 56 out of 60.

Media expert

Table 5
Media expert validation data

No.	Assessment Criteria	Score	Max Score
1	Content	15	15
2	Educational aspect	16	20
3	Technical quality	20	20
Total		51	55

Source: Personal Document

Based on the data from the media validation results in table 3, the number of scores obtained is 51 out of 55. On the criteria in terms of material content, it gets a score of 15 out of 15. On the criteria for the educational aspect, it gets a score of 16 out of 20. The educational aspect received a lower score because the media did not fully

demonstrate a strong connection between learning content and the development of values, skills, and overall active student engagement. On the technical quality criteria, it gets a score of 20 out of 20.

Learning expert

Table 6
Learning Expert Validation Data

No.	Assessment Criteria	Score	Max Score
1	Identity	9	10
2	Formulation of CP & PPP	12	15
3	Material Selection	10	10
4	Selection of learning methods	10	10
5	Learning activity planning	42	45
6	Selection of learning resources	10	10
7	Developing Assessments	5	5
Total		98	105
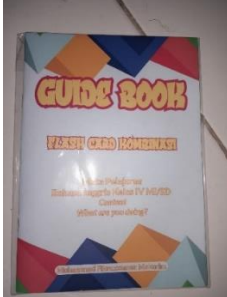
Source: Personal Document

Based on the results of validation by learning experts in table 4, the teaching module received a score of 98 out of 105. The learning expert validation questionnaire consists of 21 items. On the identity criteria get a score of 9 out of 10. On the CP and PPP formulation criteria get a score of 12 out of 15. On the material selection criteria get a score of 10 out of 10. On the criteria for selecting learning methods get a score of 10 out of 10. On the criteria for planning learning activities, get a score of 42 out of 45. On the criteria for selecting learning resources, get a score of 10 out of 10. On the criteria for compiling assessments, get a score of 5 out of 5.

The results of the revisions

After the product was validated by expert researchers and received several suggestions, the following revisions were made to the combination flash cards:

Table 7
Revision Data

No.	Revised points	Before Revision	After Revision
1	Increase in the number of cards	There are 30 cards in the combination *flash cards*	There are 50 cards in the combination *flash cards*
2	"*Eating"* image replacement		
3	"*Going"* image replacement		
4	Combination *flash card* container replacement		
5	Changing the procedure for using combination *flash cards*		
6	Teaching module design change		

No.	Revised points	Before Revision	After Revision
7	"*Dancing*" image replacement		
8	*Pronunciation* deletion		

Source: Personal Document

Researchers also sought data on student responses by taking samples using simple random sampling. A limited trial was conducted by introducing students to a combination of flash cards. After that, students used a combination of flash cards to learn English directly. Student responses were taken from 5 students of class IV B MI Al-Huda Karangnongko. Based on the students' responses, all students answered yes, and no students answered no. The combination of flash card learning media has received a very good score. The combination of *flash card* learning media has gotten a very good score. Of the five respondents, all answered yes, which showed a positive response to the combination of *flash card* learning media. Furthermore, researchers are looking for student responses on a larger scale.

Following a review of limited student responses at the product revision stage, no changes were made to the combination *flash card* product. In the limited student response, the combination *of flash card* learning media has received a very good response from class IV B students, totaling 5 students.

The next stage is to look for student responses. Researchers conducted a large-scale trial of use in class IV A MI Al-Huda Karangnongko. At this stage, the researchers took data on student responses to the combination *flash cards*. At this stage, the researcher also took student *posttest* data by working on the LKPD that was distributed. After

obtaining data on student responses and student *posttests*, researchers collected data on the English teacher's response to the combination of *flash card* learning media.

There were 26 respondents in filling out the student responses. In item 1 all students answered yes, item 2 there were 3 students answered no and 23 students answered yes, item 3 there were 3 students answered no and 23 students answered yes, in item 4 there were 2 students answered no and 24 students answered yes, in item 5 all students answered yes, in item 6 there were 2 students answered no and 24 students answered yes, item 7 there were 5 students answered no and 21 students answered yes, item 8 there were 3 students answered no and 23 students answered yes, in item 9 there were 4 students answered no and 21 students answered yes, in item 10 there were 4 students answered no and 21 students answered yes. Overall, there were 26 no answers and 260 yes answers.

Table 8
Teacher Response Data

No.	Assessment Criteria	Score	Max Score	Category
1	Compatibility	18	20	Very good
2	Persistence	16	20	Good
3	Sufficiency	20	20	Very good
4	Educational aspect	17	20	Very good
5	Technical quality	19	20	Very good
Total		90	100	Very good

Source: Personal Document

Based on table 6, the teacher's response received a score of 90 out of 100 with a percentage of 90% which is included in the very good category. This proves that the combination *flash cards* get a very good response from the fourth grade English teacher MI Al-Huda Karangnongko. Based on the data that has been obtained, *flash card* combinations are very feasible to use in grade IV English learning.

Discussion

Flash cards are cards with pictures and words on them, introduced by Glenn Doman, a brain surgeon from Philadelphia, Pennsylvania (Pradana & Gerhni, 2019). The flash cards were developed by researchers and named combination flash cards. The

combined flash card learning media was developed based on the English lesson modules from the Ministry of Education and Culture in 2018. The material in the combined flash cards is based on content I entitled 'What are you doing?'. According to the flash card classification developed by Muh. Rijaul Akbar (2022), combination flash cards are classified as flash cards in the form of a portfolio developed using machines and technology and used together.

The researcher developed a learning medium in the form of flash cards, in combination with flash cards. The combination flash cards are 8 cm x 12 cm in size, as stated by Wahyuni (2020), and were designed using CorelDRAW X7. There are 30 combination flash cards consisting of 15 picture cards and 15 cards with English vocabulary. The following are the steps used by the researcher in designing the combination flash cards: 1) Determine the vocabulary that will be included in the combination flash cards, 2) Make *rectangles* according to the card size, which is 8 CM X 12 CM, 3) Design the back of the combination flash cards to make the cards more attractive, 4) Entering the vocabulary that will be used, 5) Insert pictures that match the vocabulary into the combination flash card design, 6) Printing the combination *flash card* design that has been made.

After the product is finished, researchers conduct validation by experts. The combination of flash card learning media was tested through validation by several experts and teacher responses. The following are the results of expert validation and teacher response to the combination of *flash card* learning media:

Table 9
Recap data

No.	Validator	Score	Maximum score	Percentage	Category
1	Material expert	56	60	93,33 %	Very feasible
2	Media expert	51	55	92,73 %	Very feasible
3	Learning expert	98	105	93,33 %	Very feasible

Source: Personal Document

Based on Table 5, the assessment by material experts gets a score of 56 out of 60, with a percentage of 93.33% which falls into the category of very feasible. The assessment of material experts uses the theory developed by Sukiman (2012) in their book. On the assessment by media experts, it gets a score of 51 out of 55 with a percentage of 92.73% which is included in the category very feasible. The assessment of media

experts uses the theory developed by Walker & Hess in their book (Kristanto, 2016). In the assessment, learning experts received a score of 98 out of 105, with a percentage of 93.33% which is included in the category very feasible. Based on Table 5, each validator gets a very feasible category. This shows that the combination *of flash card* media is very feasible to use in learning English class IV.

Based on the media expert's input, there are improvements to the addition of the number of cards in the combination flash cards, which initially had 30 cards to 50 cards, changing the pictures of "eating" and "going", changing the procedure for using combination flash cards from the original form of a piece of paper to be changed to a book, changing the teaching module which was originally separate from the procedure for use to be integrated with the procedure for use. Based on the input of material experts, there are several changes, among others, the replacement of the "dancing" picture, the addition of numbers to each combination flash card, the elimination of Pronunciation spelling, and improvements to the teaching module. Based on input and suggestions from learning experts, there are several improvements in the teaching module, including the addition of CP in English which was originally only written in Indonesian CP was also written in English, Adding details to the opening of the learning steps at the opening stage with orientation, apperception, and motivation, The assessment sheet was changed after the assessment from previously at the end of the teaching module. All input and suggestions have been improved by researchers in order to produce better combination flash card learning media.

The students' response to the combination of flash cards was excellent. This was proven by the results of the fourth-grade students at MI Al-Huda Karangnongko, who numbered 26 students and obtained a score of 234 out of 260, with a percentage of 90%, which is classified as excellent.

Conclusion

The combination flash cards were developed using the Borg and Gall theory described in Sugyono's book. Development research, according to Borg and Gall, has 10 steps, but researchers only use eight steps. The following are the steps used by researchers in developing combination flash cards: a) Potential and problems, b) Gather information,

c) Product design, d) Design validation, e) Design improvement, f) Limited student response, g) Product revision, h) Student response.

This media was developed based on the fourth-grade English material on the topic "What Are You Doing?", which is included in the official teaching module from the Ministry of Education and Culture in 2018. The media consists of 30 cards, including 15 picture cards and 15 vocabulary cards in English, each accompanied by spelling and meaning. The card design is sized at 8 x 12 cm, created using CorelDRAW X7 to ensure an appealing and visually engaging design suitable for elementary school children. The images selected are tailored to everyday activities easily recognizable by students, such as eating, playing, reading, and dancing. Each picture card is paired with a vocabulary card, enabling the cards to be used in matching games, which aim to enhance students' vocabulary, pronunciation, and understanding of English language usage in a fun and interactive manner. This development also considers the cognitive stage of elementary school students, who are in the concrete operational stage, ensuring that the media is visual, manipulative, and easy to understand.

The feasibility level of combination flash cards refers to the results of expert validation and English teacher responses. In the assessment by material experts, it gets a score of 56 out of 60 with a percentage of 93.33% which is included in the very feasible category. On the assessment by media experts, it gets a score of 51 out of 55 with a percentage of 92.73% which is included in the category very feasible. On the assessment by learning experts, the score is 98 out of 105, with a percentage of 93.33% which is included in the category very feasible. Teacher responses get a score of 90 out of 100, with a percentage of 90% in the very good category.

Student response to the combination flash cards is very good. This is evidenced by the results of the response of class IV A MI Al-Huda Karangnongko students, totaling 26 students, getting a score of 234 out of 260, with a percentage of 90% which is included in the very good category.

Muhammad Fikruzzaman Makarim, Deana Indah Haimima, Iftinan R Azzah S

Declaration of Conflicting Interests

-

Funding

-

Orcid iD

Muhammad Fikruzzaman Makarim   iD   https://orcid.org/0000-0002-6576-2079

Deana Indah Haimima   iD   https://orcid.org/0009-0001-4861-1391

Iftinan R Azzah S   iD   https://orcid.org/0000-0001-7345-9101

References

Adnan, Mf., Sonang Siregar, P., & Rokania, S. (2020). Pemanfaatan Media Pembelajaran Pada Pembelajaran Tematik Terpadu Di Sekolah Dasar. *Jurnal Basicedu*, *4*(2), 337–343. https://jbasic.org/index.php/basicedu

Alam, M. I., Wicaksono, A., & Kediri, P. (2024). Using Flashcards To Teach English At Elementary School. *The 10th ELTT Conference*, 368–372.

Arsana, A. A. P., & Maharani, A. A. P. (2021). The Use Og Flashcards in English Vocabulary Learning. *JOSELT (Journal on Studies in English Language Teaching)*, *2*(2), 24–33. https://e-journal.unmas.ac.id/index.php/joselt/article/view/3441/2682

Batubara, hamdan husein. (2021). *Media Pembelajaran MI/SD - Hamdan Husein Batubara - Google Buku*. CV graha edu. https://books.google.co.id/books?hl=id&lr=&id=Fu9ZEAAAQBAJ&oi=fnd&pg=PP1&dq=media+pembelajaran+di+sd&ots=rhAcAoDXnU&sig=nX9jmosGL2g2KhsjamNSvQOGul4&redir_esc=y#v=onepage&q=media pembelajaran di sd&f=true

Brown, D. (2018). *Prinsip Pembelajaran Dan Pengajaran Bahasa*. Pearson Education, Inc.

Cancela, A., Sanchez, A., & Macairas, R. (2012). Designing a flashcard with knowledge pills for learning to solve chemistry exercises. *European Journal Og Enginering Education*, *37*(4), 37–41. https://sci-hub.se/10.1080/03043797.2012.697128

Drugs, B. (1977). *Handbook of X-ray and ultraviolet photoelectron spectroscopy.* . Heyden.

Febiani Musyadad, V., Supriatna, A., & Gosiah, N. (2020). Upaya Meningkatkan Kemampuan Membaca Siswa Dengan Menggunakan Media Flash Card Pada Mata Pelajaran Bahasa Indonesia Di Kelas Iii Sdn Kertamukti. *Jurnal Tahsinia*, 85–96.

Fitania, M., & Puspitarani, R. (2019). Flashcard Learning Media to Improve English Vocabulary for Elementary School Students. *4th National Seminar on Educational Innovation*, *2*(1), 147–152. https://jurnal.uns.ac.id/shes

Fitriyani, E., & Nulanda, P. Z. (2017). Efektivitas Media Flash Cards dalam Meningkatkan Kosakata Bahasa Inggris. *Psympathic : Jurnal Ilmiah Psikologi*, *4*(2), 167–182. https://doi.org/10.15575/psy.v4i2.1744

Ghufron, S., Rulyansah, A., & Saputri, T. (2024). Effectiveness of Innovative Learning Media in Elementary Schools during the Covid-19 Pandemic. *Pegem Journal of Education and Instruction*, *14*(3), 230–242. https://doi.org/10.47750/pegegog.14.03.22

Gusti, I., Putu, A., Pratami, S., Nitiasih, P. K., Gd, L., & Budiarta, R. (2023). Development of Educational Games as Learning Media for English Learning for Primary Students. *Language Circle: Journal of Language and Literature*, *17*(2). http://journal.unnes.ac.id/nju/index.php/lc

Hamer, W., & Rohimajaya, N. A. (2018). Using Flash Cards as Instructional Media to Enrich the Students' Vocabulary Mastery in Learning English. *Journal of English Language Studies*, *3*(2), 167–177. https://jurnal.untirta.ac.id/index.php/JELS/article/view/3875

Harisanty, D., Srirahayu, D., Kusumaningtiyas, T., Anugrah, E., & Permata, I. (2020). The Utilization of Flashcards in Children information Literacy The Utilization of Flashcards in Children Information Literacy Development Development. *Library and Information Science Commons* . https://digitalcommons.unl.edu/libphilprac

Hariyanto, A., & Candra Dewi, M. (2009). *Membuat anak anda cepat pintar membaca*. Diva Press. https://balaiyanpus.jogjaprov.go.id/opac/detail-opac?id=11616

Herlina, & Nidya Chandra Muji Utami. (2019). *Teching English to Student of Elementary School* (1st ed.). Bumi Aksara.

Hikmah, D. (2019). Media For Language Teaching And Learning In Digital Era. *IJoEEL*, 84–89.

Ibrahim, A., Alang, A. H., Madi, Baharuddin, Ahmad, M. A., & Darmawati. (2018). *Metodologi Penelitian* (1st ed.). Gunadarma Ilmu.

Ichda Faridatunnisa. (2020). Kebijakan dan Pelaksanaan Pembelajaran Bahasa Inggris untuk SD di Indonesia. *Preseding Seminar Nasional "Inplementasi Merdeka Belajar Berdasarkan Ajaran Tamansiswa,"* 191–199.

Idham Syahputra. (2014). Strategi Pembelajaran Bahasa Inggris Sebagai Bahasa Asing Strategi Pembelajaran Bahasa Inggris Sebagai Bahasa Asing Dalam Meningkatkan Kemampuan Berbahasa Siswa. *Kutubkhanah: Jurnal Penelitian Sosial Keagamaan*, *17*, 127–145.

Indriyani, N., & Usriyah, L. (2022). Pentingnya Belajar Bahasa Inggris Di Sekolah. Sabilarrasyad*: Jurnal Pendidikan Dan Ilmu Kependidikan*, *7*(1), 39–45. https://jurnal.dharmawangsa.ac.id/index.php/sabilarrasyad/article/view/3127

Isnaeni, N., & Hildayah, D. (2020). Media Pembelajaran Dalam Pembentukan Interaksi Belajar Siswa. *Jurnal Syntax Transformation* , *1*(5), 148–156.

https://media.neliti.com/media/publications/330005-media-pembelajaran-dalam-pembentukan-int-7de7e6bd.pdf

Kaniawati, E., Mardani, M. E., Lestari, S. N., Nurmillah, U., & Setiawan, U. (2023). Evaluasi Media Pembelajaran. *Journal of Student Research(JSR)*, *1*(2), 18–32. https://ejurnal.stie-trianandra.ac.id/index.php/jsr/article/view/954/757

Kiki Safitri. (2020). Pengembangan Kartu Kata (Flash Card) Bahasa Arab Berbasis Kosakata Bagi Siswa Kelas IV Madrasah Ibtidaiyah. *Prosiding Semnasbama IV UM Jilid 2 Peran Mahasiswa Bahasa Arab Dalam Menghadapi Revolusi Industri 4.0*, 272–283.

Komachali, M. E., & Khodareza, M. (2012). The effect of using vocabulary flash card on Iranian pre-university students' vocabulary knowledge. *International Education Studies*, *5*(3), 134–147. https://doi.org/10.5539/ies.v5n3p134

Kristanto, A. (2016). *Media Pembelajaran*. Penerbit Bintang Surabaya.

Langi, A., Widyanti, E., & Setyaningtyas, W. (2022). Pengembangan Media Cerita Bergambar Interaktif untuk Menumbuhkan Minat Baca Peserta Didik Kelas II Sekolah Dasar. *JIIP: Jurnal Ilmiah Ilmu Pendidikan*, *05*(12), 5296–5303. http://jiip.stkipyapisdompu.ac.id/jiip/index.php/JIIP/article/view/1234/1115

Mufida Istati. (2016). PerkembanganPsikologi Anak di Kelas IV SDN Kebun Bunga 6 Banjarmasin. *Jurnal Tarbiyah Islamiyah*, *6*(2), 110–116.

Muh. Rijaul Akbar. (2022). *Flash Card Sebagai Media Pembelajaran Dan Penelitian* (Pertama). Penerbit Haura Utama.

Noer, M. Z., & Dkk. (2024). Pengaruh Media Flashcard Terhadap Minat dan Kemampuan Membaca Bahasa Inggris Siswa. *Jurnal Ilmiah Wahana Pendidikan*, *10*(5), 964–969. https://jurnal.peneliti.net/index.php/JIWP/article/view/8817/5567

Pagarra, H., Syawaliddin, A., Krismanto, W., & Sadiman. (2022). *MEDIA PEMBELAJARAN*. Badan Penerbit UNM.

Pedoman Penerapan Kurikulum Dalam Rangka Pemulihan Pembelajaran, Mentri Pendidikan, Kebudayaan, Riset, dan Teknologi (2022).

Peraturan Mentri Pendidikan Nasional Republik Indonesia Nomor 23 Tahun 2006 Tentang Standar Kompetensi Lulusan Untuk Satuan Pendidikan Dasar Dan Menengah (2006).

Pradana, P. H., & Gerhni, F. (2019). Penerapan Media Pembelajaran Flash Card untuk Meningkatkan Perkembangan Bahasa Anak. *Journal of Education and Instruction (JOEAI)*, *2*(1), 25–31. https://doi.org/10.31539/joeai.v2i1.587

Puspitarini, Y. D., & Hanif, M. (2019). Using Learning Media to Increase Learning Motivation in Elementary School. *Anatolian Journal of Education*, *4*(2), 53–60. https://doi.org/10.29333/aje.2019.426a

Saputri, S. W. (2020). Pengenalan Flash Card Sebagai Media Untuk Meningkatkan Kemampuan Bahasa Inggris. *Jurnal ABDIKARYA*, *2*(1), 56–61.

Saski, N. H., & Sudarwanto, T. (2021). Kelayakan Media Pembelajaran Market Learning Berbasis Digital Pada Mata Kuliah Strategi Pemasaran. *Jurnal Pendidikan Tata Niaga (JPTN*, *9*. https://forms.gle/1Q95Vm9t21TRrjFb6.

Siti Sakdah, M., & Anas, N. (2023). Pengaruh Media Flashcard Terhadap Keterampilan Membaca Siswa Kelas V SDN 104231 Kecamatan Batang Kuis Kabupaten Deli Serdang T.A 2018/2019. *EUNOIA (Jurnal Pendidikan Bahasa Indonesia)*, *3*(2), 127–138. https://jurnaltarbiyah.uinsu.ac.id/index.php/eunoia/article/view/3027

Sugiyono. (2013). *Metode Penelitian Kualitatif, Kuantitatif dan R&D* (19th ed.). CV.ALVABETA.

Sukiman. (2012). *Pengembangan Media Pembelajaran* (Pertama). PEDAGOGIA. www.insanmadani.com

Suparlan. (2020). Peran Media Dalam Pembelajaran di SD/MI. *Jurnal Keislaman Dan Ilmu Pendidikan*, *2*(2), 298–311. https://ejournal.stitpn.ac.id/index.php/islamika

Umar, Aulia, E. A., & Supriadin. (2023). Penyiapan Generasi Global Melalui Pembelajaran Bahasa Inggris pada Siswa SD Negeri Empan. *Madaniya*, *04*(04), 1964–1970. https://madaniya.pustaka.my.id/journals/contents/article/view/617/462

Wahyuni, S. (2020). Penerapan Media Flash Card untuk Meningkatkan Hasil Belajar Tema "Kegiatanku." *Jurnal Ilmiah Sekolah Dasar*, *4*, 9–16.

Wahyuningsih, S., & Afandi, M. (2020). Investigating English speaking problems: Implications for speaking curriculum development in Indonesia. *European Journal of Educational Research*, *9*(3), 967–977. https://doi.org/10.12973/EU-JER.9.3.967

Wahyuningsih, S., & Izzah, N. S. (2023). Introducing english vocabulary to young learners through flashcards: evidence from Indonesian elementary school teachers. *Jurnal Ilmiah Pendidikan Dasar*, *10*(2), 88. https://doi.org/10.30659/pendas.10.2.88-99

Wen, J.-M., Do Hai-Dung, Liu, E. Z.-F., Lin, C.-H., & Huang, S. K. (2020). Educational Board Game and Flashcard: Which one is better for learners at beginner level of Chinese language? *International Journal of Serious Games*, *7*(4), 89–104. https://journal.seriousgamessociety.org/index.php/IJSG/article/view/347/408

Wirawan, F. (2020). A Study on The Teaching Media used by The English Teacher at SMP Muhammadiyah 2 Malang. *Jurnal Ilmiah Profesi Pendidikan*, 89–95. https://jipp.unram.ac.id/index.php/jipp/article/view/115/107

Ying, Y., Marchelline, D., & Wijaya, G. (2021). Using Technology-Flashcard to Encourage Students Learning Mandarin. *Journal of Physics: Conference Series*, *1764*(1). https://doi.org/10.1088/1742-6596/1764/1/012138

Yusuf, F. (2023). Trend Learning Media of Elementary Education Indonesian Teacher in Practice Field Experience. *Jurnal Ilmiah Wahana Pendidikan*, *9*(19), 902–911. https://jurnal.peneliti.net/index.php/JIWP/article/view/6339/4345

Zahrotulmuna Sya, A., Cynthia Johan, R., & Mulyadi, D. (2022). The Role of Interactive Learning Media in Improving Students' English Language Skills Pedagogia Jurnal Ilmu Pendidikan. *Pedagogia Jurnal Ilmu Pendidikan*, *20*(3), 243–250. https://doi.org/10.17509/pdgia.v20i3.67443