INTEGRATED FLASHCARD AND LUDO VOCABULARY LEARNING GAME TO INCREASE VOCABULARY ACHIEVEMENT OF THE FIRST GRADE OF JUNIOR HIGH SCHOOL: RESEARCH AND DEVELOPMENT

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ABSTRACT

This research was aimed to establish, to find out the effectiveness, and to know the teacher's and student's responses of Flash Ludo Game as a vocabulary learning media for first grade students of Junior High School. The researcher was applied Research and Development (R&D) design whis is adapted from Sugiyono. It consisted of five phases, they were: data collection and finding potentials and problems, design and development, expert validation and revision, product trial, and final product. The final product of the model consisted of three kinds of flashcards, a set of ludo game, and three kinds of guidebooks. The result of design and development showed that the model was very valid, the average of material and media experts was 92.5%. The product trial was done with 20 seventh grade students as participants. The one-group pre-post test showed that before using the model, the average student's score was (45.80) and after using the model, it reached (84.05). From the t-test analysis, the researcher found that the sig (2.tailed) value was .000, it showed that the Sig. value (2-tailed) <0.05, in means that was a significant difference between pre-test and post-test. The result of teacher's and student's responses showed that the model was very proper, with the average result was 94%. The vocabulary learning media was effective and improve student's vocabulary achievement for the first grade students of Junior High School.
Keywords: *Vocabulary, Flashcard, Ludo Game, Flash Ludo Game*

1. INTRODUCTION

English is utilized by human beings from various nations to communicate among others. In Indonesia, English is a foreign language which is taught in an education levels, ranging from kindergarten until university. According to the Minister's Regulations of Education and Culture Republic of Indonesia number 42 year 2018 Chapter 1 article 11, a foreign language is the other language of Indonesia Language and Regions Language. This research is arranged on the English material as a foreign language for grade 7th.

The result of the policy analysis on the curriculum and syllabus, English is taught in order that the students are able to understand about short and simple text, speaking, reading, writting, understanding the language feature about discourse markers, vocabularies, grammar, speech, stress, intonation, spelling, and punctuation. The goal is that students can communicate other people in daily activities. In this case they are requirred to master vocabularies that make them to speak. It turned but the vocabulary is not taught separately. This is includes in the material based the theme. The curriculum opens the use of structural media for the teacher.

Based on observations carried out in the three schools, it showed that MTsN 4 Blitar, MTsN 2 Blitar and MTsN 8 Blitar have facilities and infrastructure that are appropriate with the Disregarded regulations. The three schools equip rooms that use to complete the teaching and learning process, schools also equip rooms that are used to

encourage extracurricular and place for play time also a worship place that can be used for all members of school. The teachers of three schools used limited media in vocabulary learning process. In vocabulary learning, the teacher of MTs Negeri 4 Blitar, MTs Negeri 2 Blitar and MTs Negeri 8 Blitar used learning media in the form of objects in around where the objects they are choose spontaneously. The students had a vocabulary learning media in the form of a dictionary that was brought and used in every English learning activity. But mostly the students did not bring it.

Based on the results of interviews of seventh grade teachers and students at MTs Negeri 4 Blitar, MTs Negeri 2 Blitar and MTs Negeri 8 Blitar, researcher found that students faced problems in vocabulary. It shows from students have difficulty in learning English because they do not understand the meaning of the word. Students find it is difficult to learn and memorize difficult vocabularies. The lack of student's interest in learning and lack of understanding of the problem purpose or material because they don't know the meaning of the word, it makes students tend to answer questions with inconsistent answers.

To complete the required data, the researcher used documentations in the form of student's vocabulary score of the three schools, these were 105 students. From 105 students there were 50 students were not fullfill standart minimum criteria. The vocabulary score from the students needed to be improved and make their vocabulary achievement will be better. Based on documents shown, the students need learning media that can improve their vocabulary to help them in English lesson.

Based on the policy study and field study, the researcher found potential problems encountered in vocabulary learning, namely: (1) Seventh grade students had difficulty in learning English because they did not know the meaning of the words learned (2) Lack of student interest in learning English, especially in learning vocabulary (3) The use of learning media that is less varied causes boredom in students so students are not interested in learning.

Based on the analysis showed, the use of learning media that was used in the three schools was not interested for the students, whereas the goverment's policy gives the opportunity for teacher to use the learning media creatively. The solution to this problem is to use interesting and varied learning media. The use of Flash Ludo Game is as a medium for learning vocabulary is for increasing learning interest and student achievement in vocabulary. Students can learn while playing to understand and remember vocabulary. To make sure this solution will be true for research, the researcher make analysis of theory and previous research.

Based on Hasnida (2015: 49) the use of learning media provides benefits, namely (1) as a tool of helping to create an effective learning situation (2) becoming a component in order to create a situation expected learning (3) accelerate the learning process, students can grasp goals more easily and quickly (4) improve the quality of the learning process (5) can lay concrete foundations for thinking.

In the research of Jannah and Wiyatmo (2018), showed that the development of Ludo was proper to be used by students class X SMAN 1 Gamping. The result showed that the average was 3.96 (very good), and the result of students response was 2.98 (good) for preliminary field testing and 3.18 (very good) for main field testing. This media was proven to improve student's physics material comprehension, the result of standard gain was 0.68 (medium) from preliminary field testing and the standard gain from main field testing was 0.70 (high), and (3) Ludo game learning media could improve student's interest at learning physics. It was showed from the standard gain 0.31 (medium) on preliminary field testing, also the standard gain 0.40 (medium) from

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main field testing. It was proven that Ludo media could improve student's interest in learning. Based on the analysis, the researcher conducted the research by using Flash Ludo Game. Therefore, the tittle of this research is "Integrated Flashcard and Ludo Vocabulary Learning Game to Increase Vocabulary Achievement of The First Grade of Junior High School: Research and Development".

2. METHODOLOGY

The researcher used a research development design. This design was developed from the combination of qualitative and quantitative approaches. The qualitative approach was used to collect and analyzed non quantitative data. Including words, sentences, utterances, and behaviour of the regarding. The quantitative approach was used to collect and analyzed quantitative data in terms of validation, pre-test, post-test, and questionnaires.

The design of this research, the researcher adapted and modified Sugiyono's framework as a reference. The following were the framework adaptation and procedures.
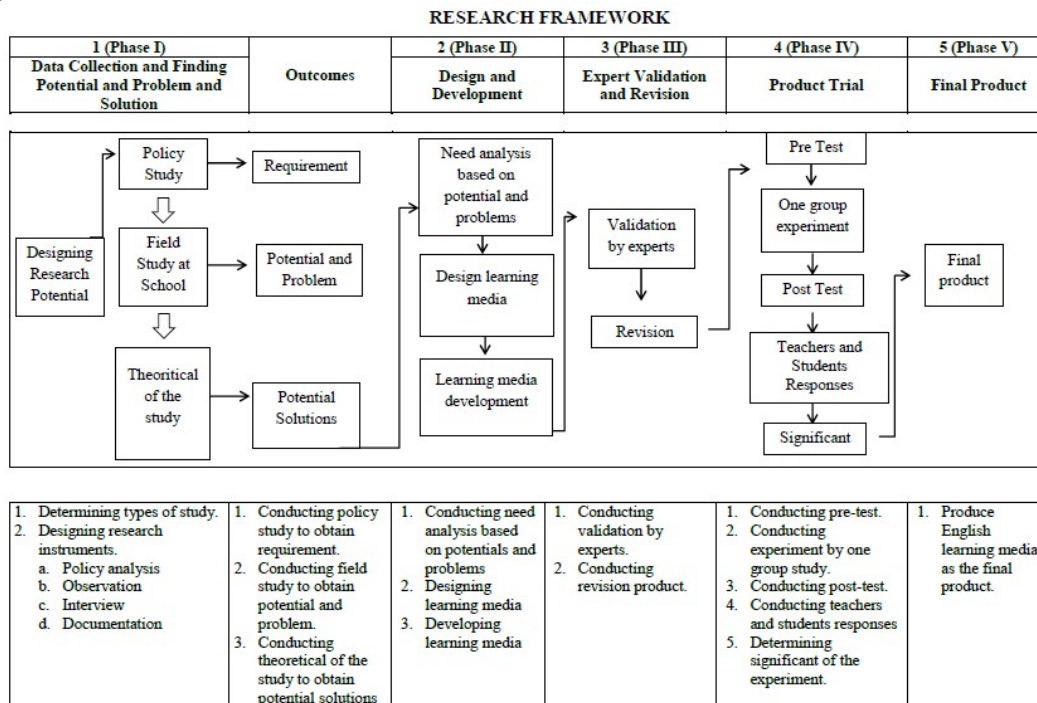
RESEARCH FRAMEWORK

1 (Phase I)		2 (Phase II)	3 (Phase III)	4 (Phase IV)	5 (Phase V)
Data Collection and Finding Potential and Problem and Solution	Outcomes	Design and Development	Expert Validation and Revision	Product Trial	Final Product

| 1. Determining types of study. 2. Designing research instruments.   a. Policy analysis   b. Observation   c. Interview   d. Documentation | 1. Conducting policy study to obtain requirement. 2. Conducting field study to obtain potential and problem. 3. Conducting theoretical of the study to obtain potential solutions | 1. Conducting need analysis based on potentials and problems 2. Designing learning media 3. Developing learning media | 1. Conducting validation by experts. 2. Conducting revision product. | 1. Conducting pre-test. 2. Conducting experiment by one group study. 3. Conducting post-test. 4. Conducting teachers and students responses 5. Determining significant of the experiment. | 1. Produce English learning media as the final product. |

Figure 1. Research framework of Flash Ludo Game of vocabulary learning media of first grade junior high school, adapted from Sugiyono (2015:298).

Phase I was data collection and finding potential and problem and solution. To find problem and potential the researcher analyzed the problems from policy analysis and field study to find the potential of the research. The policy analysis was done in order to find out the requirement of teaching vocabulary. The sources of data were curriculum, syllabus, and lesson plan. The data were collected by using documents. The data were analyzed by using content analysis. The content was checklist content summary.

The field study was conducted to find out potencies and problems. To conduct field study, the researcher formulated research protocol consisting of criteria for selecting sites, determining samples for observation and in-depth interview by using

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purposive sampling method and snowballing technique. The data was collected by observation, interview, and documentation. The observation contain descriptive observation, selective observation and focus observation, especially English teaching and learning process in which focus on media was observed. The instruments of observation was field note. The researcher conducted passive observation.

The key informant of interviews were English teachers and seventh grade students of Junior High School. The instrument of data collection for interview was recording. The interview used guided interview schedule. The researcher used in-depth interview. To complete the required data, researcher used documentations in the form of student's vocabulary score. Data analysis of observation was done by using observation contact summary. The data analysis of interview was done by using transcription and observation contact summary form. The validity and reability of interview was check by using triangulation of sources. The analysis of documentation was done by using content analysis and documentation contact summary.

Design and product development was the Phase II. In design, the researcher focused on learning materials and instructional media. In this phase, the researcher conducted need analysis based on potential and problems to design the learning media. The researcher used the theories of vocabulary, learning vocabulary, part of speech, learning media, media development, flash card, and Ludo game. In addition, the researcher also analyzed the previews study to make sure that the media will be true for research. To design and develop the product, the researcher also used the criteria of media was used to know the effectiveness of the product, those were practical feasibility and technical feasibility. Whereas, the product was designed in the form of a combination between flashcard and Ludo game that were equipped by the guidebook.

In the Phase III was product design validation. Design validation was a process to assess the feasibility of product effectiveness, which is carried out by several experts or experienced experts to assess the product that produced Sugiyono (2016: 302). Therefore, the experts of this study were material experts and media experts. To collect the data of validations, the researcher used questionnaire. The questionnaire was done given to expert validation. The experts provided an evaluation of the product prior to revision. After the expert evaluation done, the researcher made revision conduct further validation. This stage was done to make the product be better and evaluation by asking the validators. The criteria of data analysis were described below:

Precentages (%)	Description
81-100	Very Valid
61-80	Valid
41-60	Valid Enough
21-40	Less Valid
0-20	Not Valid

Table 1. Criteria of data anlysis (Adapted: Sugiyono (2016))

The percentages of the result of questionnaire:

$$\text{Percentage} = \frac{\text{The result of calculating data}}{\text{The total of criterion score}} \times 100\%$$

Phase IV was product trial as the experimental study. In this phase, the researcher did trial the product to know the effectiveness of the product. The researcher used one-group pre-test and post-test. Because of the Covid-19 pandemic, the researcher used limited trial that consisted of 20 seventh grade students as the object trial. In this study, the researcher analyzed test data used t-test on SPSS 25 application. The independent

sample t-test was one of the ways to find out whether two groups of samples had significant differences or not.

The researcher used the response of the students to find out how the student's responses after using the Flash Ludo game as a learning media. This data collection was taken through a questionnaire given to 20 students after the post-test. The data from the teacher's response aimed to determine the response of the teacher about the Flash Ludo Game as a vocabulary learning media. The researcher asked five Junior High School English teachers to rate the product through a questionnaire. The researcher appointed and explained the product to the teacher, then the teacher gave an assessment.

The final Product was Phase V. The developed media was the final product, after try out and evaluation, and then the media ready to use in learning process. The final product of this research was the Flash Ludo Game as a learning media for learning vocabulary of seventh grade students.

3. RESULT AND DISCUSSION

The final model of learning media was called "Flash Ludo Game". In the form of a board game by entering the flashcard in this game. It consisted of a board, eight pawns, and two dices. The size of Ludo board was 63 cm x 63 cm. This board can be folded, with the measurement 63 cm x 31.5 cm. There were three box flashcards, eight pawns, two dices, and three guide books. The picture design of the board was pasted on sticker, the size of sticker was 60 cm x 60 cm. There were three kinds of guidebooks, they were guidebook for teacher, guidebook for student, and guidebook for public measured A5 paper size. The content of the three guidebooks were acknowledgments, table of content, core competence, basic competence, Flash Ludo Game, Flash Ludo Game rules, instruction to use Flash Ludo Game for students, vocabularies list (word, phrase, sentence), exercise (word, phrase, sentence, final test), sources of the pictures, references, and profile. The guidebook for teacher and public were equipped with key answer from the exercise. And another addition for the teacher's book was equipped with lesson plans that could be used in the use of flash ludo games as vocabulary learning media in the classroom. It could help to increase vocabulary achievement of the first grade of junior high school students.

Theoritically, the use of media and learning processes can contribute to the achievement of student learning abilities, Hasnida (2015: 49) the use of learning media provides benefits, namely (1) as a tool of helping to create an effective learning situation (2) becoming a component in order to create a situation expected learning (3) accelerate the learning process, students can grasp goals more easily and quickly (4) improve the quality of the learning process (5) can lay concrete foundations for thinking. Based previous study by Jannah and Wiyatmo (2018) proven that Ludo media could improve student's achievement and interest in learning. This mean that the final model of this research supported these theories. Practically, the final model has been improved during the research. Before conducting product trial, the researcher validated and revised the product. Product validation was done by researcher to assess the validity from the product by experts. At this stage, the product validation was done by three material experts and three media experts.

Based on the assessment of the material validator had a total score 200 and a percentage is 95%. This value was concluded in the range of values of 80% - 100% in the criteria for scoring included in very valid. Based on the assessment of the media validator has a total score 230 and a percentage is 90%. This value is concluded in the range of values of 80% - 100% in the criteria for scoring included in very valid.

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The result of the validity of the product described below:

No.	Validator	Total Score	Precentage (%)	Criteria
1.	Material Validator	200	95%	Very Valid
2.	Media Validator	230	90%	Very Valid

Table 2. The result of validity the product

To find out the effectiveness of the product, the researcher measured the effectiveness by comparing the student's pre-test and post-test scores. The researcher used one-group pre-test and post-test. Because of the Covid-19 pandemic, the researcher used limited trial, it consisted of 20 seventh grade students as the object trial. The researcher gave 50 questions about the vocabulary consisting of 20 multiple choice questions, 10 matching questions, 10 missing letter questions, and 10 jumble word questions. Based on the test results, the student's post-test scores got better scores than the pre-test scores. It showed as follow:

Pre-Test and Post-Test Mean Score

	Pre-Test Score	Post-Test Score
Value	45.8	84.05
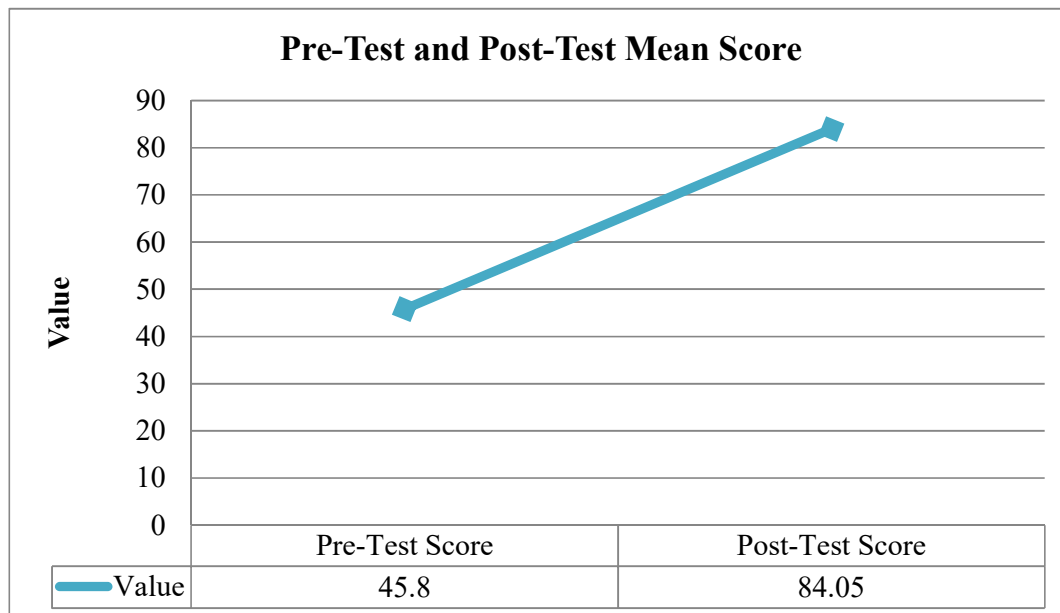
Based on the chart above, the researcher could be conclude that the student's scores increased from pre-test to the post-test. The mean score of pre-test of the 20 students was 45.8 and then increased to 84.05 on the post-test. The score of pre-test and post-test were calculated by t-test analysis. The result of t-test analysis, the researcher found that the sig (2.tailed) value was .000, it meant that the result was <0.005. The Sig. value (2-tailed) <0.05, there was a crucial difference between pre-test and post-test score. Therefore, it was be interpreted that H1 was accepted and H0 is rejected. From this result, it could be concluded that, there was the effectiveness of Flash Ludo Game as vocabulary learning media to encrease student's vocabulary achievement of the first grade of Junior High School.

To find out student's and teacher's responses, the researcher used a questionnaire that was given to 20 students and five teachers to collect the data. The total of the result of student's responses had 2039 total score with the criterion score 2200, while the percentage was 93%. The value result included 81- 100% was very valid. Whereas, the total of teacher's responses result had 474 total score with the criterion score 500, while the percentage was 95%. The value result included 81- 100% was very valid. So, the researcher concluded that student's and teacher's responses were very good in the used of Flash Ludo Game.

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The final stage of this research was the publication of the final product. The researcher made products suitable for use in the vocabulary learning process of seventh-grade junior high school. The final model of learning media was called "Flash Ludo Game", in the form of a board game by entering the flashcard in this game. Flashcards in this media consist of three types, namely word flashcards, phrase flashcards, and sentence flashcards. The material of this product was about vocabulary for seventh grade students second semester regarding Nouns, Verbs, Adjectives, and Adverbs. This media was accompanied by a guidebook consisting of three types of guidebooks, namely a guidebook for teacher, a guidebook for student, and a guidebook for the public.

The results of the study indicate that the product was suitable for use as a vocabulary learning media for seventh grade students. The learning material was in the form of English vocabulary for seventh grade in the second semester based on the 2013 curriculum and based on the results of the problem finding that the researcher has done. Theoritically, Afrianti, Daulay, and Asilestari (2018) mentioned that the game ludo affect developmental aspects for children, that are: (1) train soft motoric skills, (2) train patience and carefulness (emotional), (3)train the spirit of sportsmanship, (4) practicing analytical skills (cognitive), and (5) be able to undergo socialization contact.

4. CONCLUSSION

The researcher concluded that the model of Flash Ludo Game as vocabulary learning media for the first grade students of junior high school was effective and appropriate to learn vocabulary. The researcher conducted need analysis based on potential and problems to design the learning media. The researcher used the theories of vocabulary, learning vocabulary, part of speech, learning media, media development, flash card, and Ludo game. In addition, the researcher also analyzed the previews study to make sure that the media will be true for research.

The final product of this research was Flash Ludo Game. Flashcards in this media consist of three types, namely word flashcards, phrase flashcards, and sentence flashcards.This media was accompanied by a guidebook consisting of three types of guidebooks, namely a guidebook for teacher, a guidebook for student, and a guidebook for public. Based on the results of experts validation, the total score of the three material experts had score 200 and the percentage was 95%. Whereas, the total score of the three media experts was 230 and the percentage was 90%. The material and media values were concluded in the range of 80% - 100%, in the criteria for scoring included in very valid.

Based on the result of pre-post test and the t-test analysis, those test showed that the use of Flash Ludo Game as vocabulary learning media was effective. The result of pre-test scores obtained an average score 45.8, whereas the post-test scores got an average score 84.05. From the t-test analysis, the researcher found that the sig (2.tailed) value was .000, it meant that the result was <0.005. So, the Sig. value (2-tailed) <0.05, it was meant that, there was a significant difference from the pre-test and the post-test score.

The result from student's responses had the total of the result 2039 total score with the criterion score was 2200, while the percentage was 93%. Whereas the total score of the teacher's responses was 474 from the criterion score 500, while the percentage was 95%. The value result of student's and teacher's responses included 81-100% was very valid. From the data that has been obtained, the researcher concluded that the responses were very good in the used of Flash Ludo Game.

5. SUGGESTION

Based on the result of this research, the researcher suggested to use the Flash Ludo Game for seventh grade students as vocabulary learning media. It developed from the student's need, validated by the experts and has been tried out. It can support learning, and also can improve the quality of learning, that can produce good learning quality. The suggestion for other researchers can try to use the other game variations, so there are more references will be used for vocabulary learning process.

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