Applying Computer Assisted Language Learning to Improve English Vocabulary Mastery through Multimedia Fun Vocabulary for Elementary Students

Eka Surya Fitriani, Virdyra Tasril, Ade Rizka, Siti Dewi Murni

Universitas Pembangunan Panca Budi, Medan ekafitriani@dosen.pancabudi.ac.id

ABSTRACT

There have been developments of multimedia language learning after Covid Pandemic. Many elementary schools have applied Computer Assisted Language Learning to overcome the process of learning vocabulary at class. Hence this study was conducted in purpose to see the use of multimedia and to improve the vocabulary mastery of grade IV elementary students in Kelambir V Kebun by implementing interactive designed multimedia called Fun Vocabulary. Applying qualitative research method, this study measured the users' evaluation on multimedia and pretest-posttest result. The development was carried out within five phases, i.e.: (1) Analysis, (2) Design, (3) Development, (4) Evaluation, and (5) Implementation. The subjects were the grade IV students of elementary students in Kelambir V Kebun. The instruments used in data collection were students' questionnaire and pretestposttest. The result of the study showed that: (1) the usefulness of multimedia Fun Vocabulary was in good category with the average score of the quality of the program in terms of students' evaluation of 4.1; and (2) there is an improvement between the average score of pretest (60) and posttest (82). As a result, this multimedia was appropriate and applicable for students to learning English at the class.

Keywords: CALL, English Vocabulary Skill

INTRODUCTION

English is still a foreign language used by Indonesian people. However, its function as an international language makes English one of

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the subjects applied in curriculum to be studied at every level of education in Indonesia. One of them is elementary level school. English lessons become additional lessons or local content in schools so that their presence is adjusted to the needs at the educational unit level (Hartin, 2017).

English was at first introduced to this level of students, even it counted as foreign language (EFL) in Indonesia and second language (L2) for other countries. Starting with vocabulary, students recognized English by words and phrases and created them into simple sentence. Vocabulary is an essential part to learn a language needed for written or spoken which covered language learning (Syarifuddin, Marbun & Novita, 2014). This means that the skill of vocabulary enables language use and conversely. In Indonesia, English is introduced in Elementary level. The students vocabulary acquisition plays an important role in mastering a language. A learner with insufficient vocabulary size will not perform well in every aspect of language itself (Susanto, 2017:183). It means vocabulary learning is potentially a main part how learners understand the other language than their mother language. There some factors describe how students felt difficult

But, the successful of learning achievement seems far away from the practice at school. Hadiji, Mulyasari and Fitriani (2019:374) that made an observations in elementary schools and discovered that the teacher only used the blackboard and instructed students simultaneously to repeat what had been written in the process of learning English. If this process learning conducted continuously, it would be happened worse to train students' potential. Conventional learning systems are less flexible in accommodating competency material developments because educators have to intensively adapt teaching materials to the latest technological developments. Hence the teacher need an integrated media to made the quality of learning English better for elementary students.

Beside the implementation of English learning at classroom should be right on the target. In addition, learning English must also be included with methods, models and media that are implemented to students appropriately. This is a concern for the teacher's role in applying learning in the classroom. English lessons will be easy for students to understand, but by paying attention to the right learning methods and models, the variety and material taught must be in accordance with the level of student development (Maili, 2018).

In addition, right after post Covid pandemic, the role of technology in the world of education is essential in the transition of learning which provides a different dimension and offer variation of different education process (Santosa, Nurkhamidah & Arianti, 2021: 75). It describes technology help the education to overcome the process of learning through designed multimedia. Regarding the use of multimedia, technology can. Its developments have been carried out to improve the quality of learning and to become an effective method for increasing elementary school students' learning comprehension, especially understanding English from an early age. Students will feel like playing while learning outside of their awareness. The feeling that was initially boring will become an interest in learning again. Besides, the media will help in overcoming the solution. Moreover, supported by advances in advanced technology, people can create an application media in which it can be used for learning. This is marked by the form of teacher creativity in packaging interactive multimedia-based material that is fun for elementary school students.

The development of interactive multimedia for learning English have been discovered in many researches. Retnomurti & Octavita (2017) designed a learning multimedia by using PROTATIK (Phonetic Table Program) to enhance English pronunciation skill for higher students. They developed this program in purpose to gain students ability in pronouncing English words or phrase and to rise their confidence to talk English. Hadiji, Mulyasari and Fitriani (2019) designed an interactive multimedia of English learning for Elementary students. By using Adobe Premiere Pro CS6 and Adobe Illustrator CS6, the design of multimedia focused on the development of vocabulary and simple sentence for third grade level of elementary students. Widyaningrum, Budiman and Azizah (2021) described their study in designing multimedia for spelling, which was called Spellearn. Designing the multimedia via website, this study did not describe which program they used and let the IT Expert did the design based on the program. The target user of this designed program was for kindergarten students and early childhood who were in the step of language acquisition.

Based on these descriptions, this study compiles "the Implementation of Web Based Multimedia of Fun Vocabulary as a Media for Developing English Vocabulary Skills in Elementary School Students".

METHOD

This research applies Qualitative research. Qualitative research was chosen to be the methodology of the study in which "the goal is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals" (Lambert & Lambert, 2012). The source of data were taken from students' evaluation after taking the test. There were 15 students of IV grade of elementary students in Dusun III Desa Kelambir V Kebun as the subject of the research. The research method used the ADDIE development method which consists of five stages, including: Analysis, Design, Development, Implementation, and Evaluation. The steps can be seen in Figure 1 below.

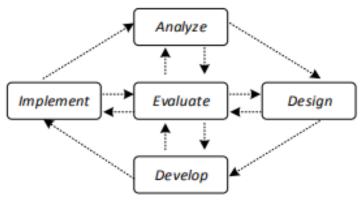


Figure 1. Stages of the ADDIE Method Source: (Sugihartini & Yudiana, 2018)

The ADDIE model is widely used for learning development because it is considered more systematic in describing instructions. The following is an explanation of each stage:

1) Analysis

The first stage in the ADDIE model is the analysis stage, which at this stage collects the information needed to define learning needs and determine the limits of the material to be developed. The analysis was carried out based on the learning achievements of elementary school students in grade IV which is adapted into the syllabus for the student learning curriculum.

2) Design

The stage that is carried out after carrying out the analysis is the design stage, which at this stage contains a learning algorithm that is designed systematically and is directed in the design process. The

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design of the Fun Vocabulary application uses Adobe Flash CS 3 software in its later implementation.

3) Development

At this development stage, there are several activities carried out including developing learning materials that are adapted to the syllabus of learning outcomes. Where the result of this development is an application product in the form of multimedia-based practice quiz questions that are adapted to the research questionnaire.

4) Implementation

At this stage is the stage of applying the method used and the design that has been developed in field conditions, namely trials with elementary school students in the classroom. The application that is carried out also pays attention to the software used and also the hardware that supports the application so that it is easy to use.

5) Evaluation

The evaluation stage is the final stage in the ADDIE development model. Where at this stage see how the learning system created was successfully implemented, whether it is in line with expectations or not. At this stage only use the formative evaluation stage to collect data that is effective and efficient in achieving the desired goals. Evaluation activities at this stage are not only limited to carrying out when designing developing and implementing products but are

when designing, developing, and implementing products, but are also carried out when carrying out all stages of the ADDIE model development. (Sugihartini & Yudiana, 2018).

Therefore this method provided the result of data. The data collection was taken from the instruments which were the test result and questionnaire to complete the process of analysis through the implementation of multimedia Fun Vocabulary in learning English vocabulary.

RESULT AND DISCUSSION

The improvement technology in language learning had create multiple development of learning tools. This research began with the first stage, namely Analysis, Design and Development. In this step, the learning achievement of IV Grade students was being highlighted to seek the plan for designing English material and exercises before creating into the platform. In IV grade level, or it called Phase B, students understand everyday vocabulary with support from pictures/illustration. They read and respond to a range of short, simple, familiar

texts in the form of print or digital texts, including visual, multimodal or interactive texts (guru.kemdikbud.go.id). This learning achievement raised the

The second stage was implementation. This step was the process of the used of multimedia by IV grade students of elementary students. After the multimedia was designed with material (English Vocabulary) and exercises, the English learning platform was used by the students. In this stage, students were also guided and assisted in accessing the multimedia while also learnt English vocabularies with the mentors. The students at first were taught about the use of multimedia, then they asked to take the test provided in the multimedia. After that, the students was given the treatment, in which the mentor gave them vocabulary learning about fruits, animals and transportation. Through multimedia, students explored the lesson about English vocabulary in terms of spelling and pronunciation of those words. In addition, the questionnaire also were taken at the end of the learning process. Students were asked about the performance on accessing the multimedia Fun Vocabulary. The implementation stage included the process of learning English vocabulary done by IV grade students of elementary school for one meeting classroom activity. Followed by 15 students, the process of learning English vocabulary run well and fun.

The last stage was evaluation. Evaluation process took the test result after the students take learning and questionnaire. The test result was taken twice, which were pre-test and post-test. Pre-test was conducted before treatment or learning process. The purpose of conducting pre-test and post-test was to obtain student score data to determine student learning completeness after using the developed product. The results of the language test provided in the platform of multimedia Fun Vocabulary from the pre-test scores conducted on students can be seen in table 1 below.

Table 1. The results of the Pre-Test and Post-Test score of students working on quiz questions

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Student	Pre Test Score	Post-Test
1	65	80
2	70	90
3	60	85
4	70	80
5	75	85
6	65	85

7	60	80
8	70	85
9	70	80
10	65	75
11	75	80
12	70	80
13	60	80
14	60	80
15	65	85
Average	60	82

Based on the test result above, it can be concluded that multimedia Fun Vocabulary for learning English vocabulary for grade VI elementary school has a positive impact on students' learning completeness and helps make it easier for students to learn English vocabulary.

Otherwise, the questionnaire was one of instruments used to assess the implementation of multimedia Fun Vocabulary. The statement on questionnaire formulated the performance of platform multimedia and the criteria was listed from one to four item namely, very bad, poor, enough, interesting/attractive, very interesting/very attractive. After taking a note one-by-one from the participants, the result showed most the answer marked the attractiveness of the multimedia developed in the "very attractive" criteria. The attractiveness criteria were obtained based on the conversion of quantitative data to qualitative data on a scale of 5 according to Sukardjo (in Mardika, 2008). It can be concluded that the developed product is attractive.

This conclusion was drawn because more than half of the number of students indicated that the attractiveness of the attractiveness of the product is in the "very attractive" criteria.

SUMMARY

This research formulate the following summary. Firstly, based on the research results, it can be concluded that has been successfully developed learning media based on Adobe Flash CS3 professional for IV grade students of elementary school in Desa Kelambir V Kebun using the ADDIE development model which includes 5 stages, namely: Analysis, Design, Development, Implementation and Evaluation.

Secondly, the implementation of multimedia *Fun Vocabulary* has a positive impact on student learning completeness. Fifteen students who had participated completed learning with an average score of 82 in the post-test differently in pre-test which they got in average of 62. This learning completeness is very good. Thirdly, based on the questionnaire result, it was concluded that the platform of multimedia is "attractive", because more than half of the students stated that the product was "very attractive". This showed that the multimedia was designed well as language learning media for elementary students.

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