Developing English Learning Media through Digital-Based to Improve Students' Vocabulary

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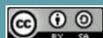*nande12@gmail.com

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ABSTRACT

To be able to master the four English language skills require mastery of a lot of vocabulary, vocabulary is the most important part in a language, one of which is English. This study aims to develop and produce digital-based learning media to improve students' English vocabulary and to determine students' perceptions of learning media that are developed. The type of research method in this study is R&D (Research and Development) method with 4D development model which is then simplified into 3D (define, design, and development). The subject of this study were students of Class VII SMP Negeri 5 Campalagian which amounted to 24 students. The instruments used in this study were interviews and questionnaires used to test the feasibility of the product and determine the perception of students. The results obtained in this study are (1) Digital-based learning media made in the form of android applications to improve students' English vocabulary and named is LEV (Learning English Vocabulary). Learning media has gone through 3 stages of development namely define, design, and development and has been tested for feasibility by 2 experts, namely media experts and material experts. (2) learning media is stated to be interesting based on the results of the questionnaire analysis of student's perceptions of the developed media that is 100% and based on the results of interviews conducted by researcher on 10 students regarding their comments on the developed media that they provide positive comments on the learning media.

INTRUDUCTION

To be able to master the four English language skills require mastery of a lot of vocabulary. In another word, vocabulary is the most important part in a language, one of which is English. A person who has a large amount of vocabulary is someone who is good at using a language (Coxhead. 2021). The importance of vocabulary in a language fosters the needs to enhance the vocabulary. Since, it the most basic of foreign language learning.

In addition, vocabulary is claimed to be a major barrier when using a foreign language (Haidari et al, 2020). In mastery vocabulary, there are several problems including errors in spelling, pronunciation, and word selection that are not appropriate in writing or speaking activities (Hartatiningsih, 2022).

In Indonesia, efforts to improve English Vocabulary owned by students, educational institutions use digital media technology for the English learning process. English is the most widely spoken language in the world. At the moment, there are several Learning media that are carried out with digital

technology, for example, Multimedia annotations, smartphone-based vocabulary tutors, Youtube videos and blogs, dynamic and Non-dynamic glossaries mediated by mobile phones, Virtual Reality applications (Marlina & Bashori, 2021). From this we can know that digital technology media has an influence on a person's vocabulary in a foreign language. At the moment, digital technologies are widely used in alternative education systems in different languages. Many digital tools can be used in the teaching and learning process. Digital technology tools commonly used in learning, such as online or offline dictionaries, language video games, applications, weblogs, wikis, multimedia, social media. Integration of digital technology into the world of Education provides convenience for students in the process of mastering English Vocabulary (Haidari et al. 2020).

Digital-based learning Media is needed in education units because most schools still use and are very based on textbooks without looking at the abilities of the students in the classroom. In Indonesia, especially in remote areas, educators still lack an understanding of the use of digital media that can provide convenience in the learning process. The number of digital-based learning media created in various models can help students in the learning process of foreign languages including English as an international language.

The research problem in this study is 1) How is development of English learning media through digital-based to improve students' vocabulary?, 2) How are the students' perceptions about English learning media through digital-based to improve students' vocabulary?

RESEARCH METHODS

The study was conducted at the SMP Negeri 5 Campalagian on April 2024. This study used the Research and Development (R&D)analyse questionnaires while descriptive data analysis techniques qualitative used to analyselso can be used to refine the existing product. This study aimed to developed English learning media through digital-based to improve student vocabulary. The development model of this study was the 4D model by Thiagarajan (1974). However, it was later modified into 3D, namely define, design, and development so as not to use a lot of time in the development process.

The study used two research instruments namely questionnaire and interview. The questionnaires were one of the effective data collection techniques if the researcher already knows the variables to be measured and has known what is expected from the respondents. Questionnaires were used to determine the feasibility of Learning media developed and to determine the perception of the Learning media. Researcher conducted interviews with some students to obtain the desired information. The type of Interview used by researcher in this study was an unstructured interview. This type of interview was chosen by the researcher so that the interview process has no limits so that the researcher can get unlimited information.

Data analysis techniques used in this study was to describe all the opinions, suggestions and responses given by experts on the criticism and suggestions sheet. This study uses quantitative data analysis techniques and qualitative descriptive analysis techniques. Quantitative data analysis techniques used to analyse questionnaires while descriptive data analysis

techniques qualitative used to analyse interviews.

RESULT AND DISCUSSION

This research phase was conducted at SMP Negeri 5 Campalagian school. This study involved 2 experts, namely media experts and material experts, the designated media expert is one of the English education lecturers who are experts in media while the material expert is an English teacher at school. This study also involved 30 students as respondents, namely Grade 7 students. The development Model used in this study is a 4D development model by Thiagarajan which is then simplified into 3D whose development process includes define, design, and development. The following are the stages of 3D development models used by researchers in this study, as follows:

1. Define

a. Front-end analysis

In this analysis, researcher conducted direct interviews with students and English teacher to obtain information. Based on the results of interviews conducted, it is obtained that the learning process is still traditionally or by using the lecture method and students have difficulty in understanding the material presented by the teacher because of the lack of English Vocabulary known by students.

b. Student analysis

This analysis was conducted by interviewing students to obtain information needed by researcher. From this analysis, the researcher found that students feel bored if the learning process is carried out by the method of lectures and students find it difficult in the learning process because of the lack of English vocabulary that they know. This interview process was conducted on 3 students in the same place and at the same time and they experienced the same difficulties.

c. Task analysis

This analysis was conducted to determine whether the existing competencies can be achieved by students after using the learning media or not. This analysis aims to determine the main tasks that will be given to students in order to achieve learning objectives. The results obtained from this analysis is a description of the material needed in the learning process based on CP English phase D which is then used as a reference material in the development of digital-based learning media.

d. Concept analysis

The fourth stage is concept analysis, researcher identify the components of the material contained in CP English phase D that are appropriate in increasing student vocabulary.

e. Specifying instructional objectives

Researchers determine the learning objectives in accordance with the material and indicators that have been determined. Researcher formulates learning objectives in accordance with the results of task analysis and concept analysis carried out previously. It is in line with Roswanti (2022) that learning objectives is the results of task analysis and concept analysis.

2. Design

Next is the design stage, at this stage are 3 steps. The first step is develop learning materials, the material used is some vocabulary related to the material in the book English for Nusantara grade 7. Researcher chose vocabulary material because it is the most important thing in learning a language and this is related to what Coxhead (2021) said someone who is good at using language is someone who has a lot of vocabulary. The learning media is made using English for Nusantara material to make it easier for students to understand the material contained in the book. The researcher chose this material because the book is a book that is used in the learning process so that it is harmony with the subject matter received by students in the classroom. With this the teacher can more easily convey the subject matter in the classroom and the learning process that takes place is not boring.

The second step is the selection media, researcher choose the media to be used in digital-based learning media tailored to the needs of students. The media used are PowerPoint to create product designs. It is related with Santosa et al (2020) the learning application designed using Microsoft PowerPoint 2013. PowerPoint is chosen to be a medium for designing learning media so that it looks more attractive and users do not have difficulty in understanding the material presented in the learning media. PowerPoint has the feature of adding images so that learning media does not only contain material in the form of writing. By using PowerPoint learning media can also contain sound. Therefore, the researcher added a sound feature that can help students in knowing how to pronounce an English word. iSpring Suite 11 to convert design files into HTML and Website 2 APK Builder Pro to convert HTML into android applications. Pratama (2023) stated that, researcher used iSpring Suite and Website 2 APK Builder Pro as the step to make android app. The researcher used the Website 2 APK Builder Pro so that the resulting application can be used in offline mode, making it easier for students to access the application. Researcher chose the android version because students prefer to learn by using digital media especially in the android version. By using android students can also access learning anywhere and anytime especially in offline mode that does not require internet access which can be an obstacle in the learning process of students. the evaluation questions in accordance the previously learned material. After the researcher tested the

product on students, the researcher gave questionnaires to students whose answer types were "Yes" and "No" to determine their perception of the product being developed. The initial design made by the researcher namely the initial part consist of the name of the applications and the Start icon while the middle and final part consist of the material and evaluation.

3. Development

The last stage is development, at this stage the researcher produces digital- based learning media which are then tested feasibility against experts, namely material experts and media experts. The validation process was carried out using questionnaires, the researcher made two questionnaires, namely for the validation of material experts and validation of media experts. The material experts validation questionnaire is given to a material expert and provides an assessment of the learning media developed while the media expert validation questionnaires given to the media expert and is given the freedom to provide its assessment of the learning media developed by the researcher. The validation process of experts is done once because the results are satisfactory and only get comments from media experts to improve the initial display of learning media and vocabulary writing. The results of material expert validation is 100% which means the material used in the product is considered very feasible. While the validation results of media experts is 97,91% which means that the media used is also very feasible. Based on the results of the feasibility test, digital-based learning media is feasible to be tested on students.

The end results of this study is a digital-based learning media to improve students' vocabulary named LEV (Learning English Vocabulary). According to Makoe & Shandu et al (2018), applications that can help students to improve them English vocabulary, they named is as VocUp. This learning media contains a number of English vocabulary equipped with audio on how to mention vocabulary and evaluation that can help students in testing their understanding of the previous material. This learning media can be used anywhere and anytime because it is made in the android version. Digital-based learning media are made for the individual needs of students, but the role of teachers is still needed in explaining the use of learning media and to make it easier for students to understand the material if it is needed by students.

After the product is developed and declared fit for use, the product is given to 24 students as a sample, namely grade 7 junior high school. This is done to determine the perception of students about digital-based learning media products made in the form of android applications. Product testing is carried out 2 times by providing different material, students are asked to learn the material first and then work on the evaluation questions in accordance the

previously learned material. After the researcher tested the product on students, the researcher gave questionnaires to students whose answer types were "Yes" and "No" to determine their perception of the product being developed.

The results obtained are 100% which means digital-based learning media is very interesting to use based on the students' perception. Hendriyanto & Rokhman (2021), developed applications that helps the students to learn something easily and it is very interesting application to use. It's also related to the excerpt ≠1 (2024), she stated that using the program can accelerate our interest in learning English since it was so delighted like playing game.

CONCLUSION

The result of the development is a digital-based learning media made in the form of an android application and can be operated in offline mode and named LEV (Learning English Vocabulary). The learning media is made in the form of an application to make it easier for students to understand the nature of the lesson and can increase the amount of English vocabulary they know and can help teachers in delivering subject matter easily. Students can run the application anywhere and anytime without the need for internet access.

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