

DEVELOPING OF LEARNING MEDIA BASED ON STUDENT NEEDS FOR TENTH GRADE STUDENTS OF SMK NEGERI 2 TARAKAN

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ABSTRACT

This research was aimed to develop learning media for class X at SMK Negeri 2 Tarakan and produce effective learning media products from the design and material aspects and attract students' interest by learning English. This research is a research and development of the ADDIE model which consists of five stages (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. The instrument uses a material expert validation questionnaire, as well as a media validation (design) questionnaire and a student response questionnaire. The results of the research from the validation of interactive learning media through validation by material experts and media experts reached a percentage of 82% with very good qualifications and 78% with good qualifications. The results of the student response questionnaire to interactive learning media were divided into three, the one to one formative evaluation trial with a percentage of 71.2% with good qualifications, the small evaluation group test trial with a percentage of 78.2% with good qualifications, and the field test formative evaluation trial, with a percentage of 78.5% with good qualifications. Product trials were carried out in class X SMK Negeri 2 Tarakan. The results of research and development of learning media are suitable for use in learning English.

Keywords: *Research Development, Learning Media, ADDIE, Learning English*

INTRODUCTION

Learning is the process of acquiring and understanding new things. It has relation between teacher and students where the process of learning is taught by the teacher to the students. One of the things that can support the achievement of better education is the use of learning media in schools. The quality of education is influenced by several things, such as the availability of learning facilities, time utilization, and the use of learning media. The teacher is obliged to achieve learning activities that are able to develop cognitive, psychomotor and affective abilities for students to achieve optimal learning outcomes (Bahar, 2002).

One of the things that can support the achievement of better education is the use of learning media in schools. For teachers it is not enough to only use oral to deliver lessons. However, it also requires facilities or tools to channel messages from teacher explanations, commonly referred to as media. Without the media, the teacher will have difficulties and needs extra energy to deliver lessons, so media or tools are needed to assist in the process of learning activities (Dimiyati and Mudjiono, 2009).

Learning media has several types, namely; print media, exhibition media (Display), audio media, visual media, video media, multimedia and computer devices (Yaumi, 2012). Learning

media will be the focus of the researcher is printed media, where print media is a simple and easy to get media anywhere and anytime. This media can also be purchased with relatively cheap costs and can be reached at the nearest stores. Books, brochures, leaflets, modules, student worksheets, and handouts including parts of print media. The print media that is the focus of researcher is Leaflet-based teaching media.

Leaflets are media in the form of a piece of paper that is given a picture and writing (usually more writing) on both sides of the paper and folded so that it is small and practical to carry usually A4 size paper folded in three. This media contains ideas directly to the subject matter and describes how to take action in a short and straightforward manner. According to Effendi in Falasifah (2013), leaflets are small pieces of paper containing printed messages to be distributed to the public as information about a thing or event. According to the Merriam Webster dictionary, Leaflets are a folded printed sheet that is generally expected to be distributed for free. Leaflets are generally only used by companies to advertise or disseminate a product that exists in the company so that the community has an attraction to the company's products.

Based on the preliminary study and the understanding of leaflet, researcher has the initiative to create learning media in the form of leaflets. Leaflets contain more concise material and prepared using language that was easily understood by students and then included with images related to the material presented for tenth grade students of SMK Negeri 2 Tarakan to gain their motivation for learning English.

Definition of Learning

Learning is a stage of change in all individual behaviors that are relatively settled as a result of experience and interaction with the environment that involves cognitive processes (Syah: 2008). Learning is a process carried out by a person to obtain a change in new behavior entirely, as a result of his own experience in interaction with his environment (Slameto: 2010).

It can be concluded that learning is a process of humanizing humans. Activities by involving someone in gaining knowledge, positive life values and also skills by utilizing everything as a source of learning.

Learning Media

Media is a tool to convey information or messages from one place to another place. In learning process, it used to convey the information or knowledge from the teacher to the students. According to Aqib (2013) learning media is an intermediary for everything that can be used to channel messages and stimulate the occurrence of learning processes in students.

Based on the definition above, it can be concluded that media is everything that can be used to channel messages or information that is presented using equipment with the purpose of sending messages so that it can stimulate thoughts, feelings, attention, and interests. So, learning media is everything that can be used to provide information in the form of knowledge from educators to students with the aim of stimulating students' thoughts, feelings, attention, and interest in learning

Leaflet

Leaflet is a piece of paper that contains printed writing about a particular problem for a target with a specific purpose. Leaflets are also interpreted as one of the medias that use a piece of paper that contains printed writing about a particular problem for the target who can read and is usually presented in the form of folds that are used to convey information or reinforcement messages delivered.

Majid (2013) stated that in order to look attractive usually leaflets are carefully designed with illustrations and using short and easy to understand languages. Leaflets as learning media must also contain material that can accompany students to master one or more basic competencies.

METHOD

According to Borg and Gall (1989) A research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure. Research design is the conceptual blueprint within which research is conducted. A research design should be based more or less on some methodology the research design should be made once the topic and problem of research have been selected and formulated.

In this study researcher used the quantitative method with research and development method. Sugiyono (2014) defines Research and Development as a research method, which is used to produce educational research and development is a process used to develop and validate educational product. According to the definition above, the purpose of this research was to design learning media based on student needs for tenth grade students at SMK Negeri 2 Tarakan.

Research Procedure

The research procedure of this research is called ADDIE's model, in this model consists of Analysis phase, Design Phase, Developmet Phase, Implementation Phase, and Evaluation Phase (Reiser dan Molenda: 1990).

1. Analysis Phase

This was the first phase, where the problem was clarified, the instructional goals and objectives was established and the learning enviroentment, learner's existing knowlege and skills were identified and researcher will distribute students' need.

2. Design Phase

Design phase dealt with learning objectives, assessment instruments, exercises, content, subject matter analysis, lesson planning and media selection.

3. Development

Development phase was the researcher create and assemble the content assets that were created in the design phase. At the development phase several activities are carried out such as: searching and gathering various relevant sources to enrich material, making illustrations, charts, and graphs needed, typing, editing, and setting layouts on learning

media. The following activities in the development phase are activities that validate the draft product development and revision after input from experts.

4. Implementation

In the implementation phase, after the learning media is valid, then a limited trial is carried out at the school that has been determined as the place of research. At this stage the test results of student learning tests are conducted to determine the effectiveness of the learning media developed. Then at this stage the response questionnaire was filled in by the students. This response questionnaire aim for determine the practicality of the learning media developed.

5. Evaluation

At this stage the researcher revised the learning media based on the input obtained from the response questionnaire. It aims for make the learning media developed really appropriate and usable.

Setting and Subject

This research was conducted on first semester at SMK Negeri 2 Tarakan. It was located at JL. Aki Balak RT 20, Karang Anyar Pantai, Tarakan Barat, Kota Tarakan. The subject of this research is tenth grade students

Instruments of Data Collection

There were three (3) instruments of data collection that the researcher used in designing learning media based on student need for tenth grade students at SMK Negeri 2 Tarakan. There were: a. Documents, b. Validation Sheet, and Questionnaires.

Procedure of Data Collection

The data collection procedure in this research began after conducting the validation sheet for the validators. The validation sheet used to validate the product, the validation contained two kinds of validation, the first is validation for the material of learning media, and the second is validation for the design of learning media. Then, when the validation sheet was validated by the validators, the next step was doing a product test. In the product test, there were three phases.

The first is one to one formative evaluation, the second is a small evaluation group, and the third is a formative evaluation field test. In one to one formative evaluation, the students were chosen from three category the highest English score, average English score, and lowest English score. There was one student for each category. After conducted the test, the researcher gave the students a questionnaire to evaluate the product. If there is any revision that needs to be revised from the product, the researcher would revise the product.

If the product no needs to be revised, the researcher continued to the second phase, Small group evaluation. In a small group evaluation, the students were chosen from three categories, highest English score, average English score, and lowest English score. There were five students for each category. After conducted the test, the researcher gave the students a questionnaire to evaluate the product. If there is any revision that needs to be revised from the

product, the researcher will revise the product. If the product no needs to be revised, the researcher continued to the third phase, formative evaluation field test.

In the formative evaluation field test, the students were chosen from three categories, highest English score, average English score, and lowest English score. There were ten students in each category. After conducted the test, the researcher gave the students a questionnaire to evaluate the product. If there is any revision that needs to be revised from the product, the researcher would be revised the product. If the product no needs to be revised, the product can be perfected and the final product of learning media is done and can be used and disseminated especially for the English teacher and tenth grade of senior high school students.

Technique of Data Analysis

The technique of data analysis used in this research were :

1. The analysis of validation score The analysis of mean score is used to analyze the data from experts validation result. The formula of mean score

$$V = \frac{\sum x}{n} \times 100\%$$

v = validation score

$\sum x$ = total score

n = Total maximum score

The score of validation sheet used is the Likert Scale with 100% as the highest score and 1% as the lowest score. According to the criteria from Akbar (2013), Each score represents an option of the answer as shown in the following table:

Table 3.1. Validation Sheet Scoring

No.	Option of The Answer	Score
1.	Very Good (VG)	81% - 100%
2.	Good (G)	61% - 80%
3.	Good Enough (GE)	41% - 60%
4.	Poor (P)	21% - 40%
5.	Very Poor (VP)	1% - 20%

(Akbar, 2013)

- If the product reaches a scores of 81% - 100%, the product is on the category very good and highly recommended for testing.
- If the product reaches a scores of 61% - 80%, the product is on the category good and recommended for testing.
- If the product reaches a scores of 41% - 60%, the product is on the category good enough and good enough for testing.
- If the product reaches a scores of 21% - 40%, the product is on the category poor and not recommended for testing.
- If the product reaches a scores of 1% - 20%, the product is on the category very poor and strongly not recommended for testing.

2. The analysis of student evaluation score The analysis of student evaluation score is used to analysis the data from the student evaluation score sheet. The formula used is as follows:

$$S = \frac{\sum x}{n} \times 100\%$$

S = Student evaluation score

$\sum x$ = total score

n = Total maximum score

The score of student evaluation sheet used is the Likert Scale with 100% as the highest score and 1% as the lowest score. According to the criteria from Akbar (2013), Each score represents an option of the answer as shown in the following table:

Table 3.2. Students Responses Scoring

No.	Option of The Answer	Score
1.	Very Good (VG)	81% - 100%
2.	Good (G)	61% - 80%
3.	Good Enough (GE)	41% - 60%
4.	Poor (P)	21% - 40%
5.	Very Poor (VP)	1% - 20%

(Akbar, 2013)

- a) If the product reaches a scores of 81% - 100%, the product is on the category very good and highly recommended for testing.
- b) If the product reaches a scores of 61% - 80%, the product is on the category good and recommended for testing.
- c) If the product reaches a scores of 41% - 60%, the product is on the category good enough and good enough for testing.
- d) If the product reaches a scores of 21% - 40%, the product is on the category poor and not recommended for testing. If the product reaches a scores of 1% - 20%, the product is on the category very poor and strongly not recommended for testing.

FINDINGS

Result of Students Needs Questionnaire There were twenty questions in the questionnaire were asked to students related to their necessities, lacks and wants. The data gained were used as the standard in developing the learning media. The first group of question in the questionnaire was intended to know about the prioritized skill that learned by the The result of the questionnaire can be concluded as follows:

1.) Prioritized skill learned is reading by (39.7%), 2.) Assessment of listening skill is multiple choices (45.3%), 3.) Assessment of speaking skill is presentation (64.1%), 4.) Assessment of reading skill is multiple choices (52%), 5.) Assessment of writing skill is making sentences (71.1%), 6.) Activities in English Learning is paired discussion (63%), 7.) Problem faced by students is limited vocabulary by (43.7%), 8.) selected materials are recount text (28.3%), introduction (19.7%) and narrative text (15.9%), 9.) Problem in speaking skill is limited vocabularies (58.3%), 10.) Problem in reading skill is vocabularies understanding (64.1%), 11.) Problem in writing skill is lacks of grammatical knowledge (81.4%), 12.) Problem in listening skill is the speaker talked fast (63.9), 13.) Use of leaflet for tenth grade students is yes (85.4%), 14.) color variation for the leaflet is bright color without any interfere the view (73.3%), 15.) The types of font for the leaflet is comic sans MS (34.4%), 16.) The sizes of the leaflet are variation size (73,1), 17.) The fold styles for the leaflet is trifold (77.4%), 18.) The paper types for the leaflet is HVS paper (71.1%), 19.) The level of understanding in English grammar is difficult (52%), 20.) The importance of English language is important (41.7%).

DISCUSSION

The research objective was to develop a learning media (Arifin, et all, 2017) that compatible with the needs of the students and also as learning media that can help the students to strengthen their understanding towards learning material. The learning media was designed and developed based on the ADDIE's (Analysis, Design, Development, Implementation, and Evaluation) model. Some suggestion from experts and tenth grade students of SMK Negeri 2 Tarakan as the respondent in this research were also the input for the development of learning media. The implementation of ADDIE's model were divided into five phases, the analysis phase of ADDIE was implemented by analysed the students' questionnaire to gain the data and material that inputted in the learning media. Based on the result of questionnaire, the media used in this research was a printed learning media. Also, there were three topics inputted in this learning media namely: (1) Recount text, (2) Introduction; and (3) Narrative text. All the topics had been included in the learning media.

In designing the learning media, the researcher used printed media stated by Yaumi (2012), in designing the material that inputted in the learning media, the researcher adapted the materials from textbook and internet which used in the learning media (De Vega et al., 2016). There were three materials in which the title of each represent the topic namely Recount text (28.3 %), Introduction (19.7 %), and Narrative text (15.9 %). The learning media has to meet several requirements in order to make it eligible for students.

Based on experts' validation, the result showed that the learning media based on leaflet were considered as valid for Material aspect (82% with the qualification of Very Good) as well as valid for the design aspect (78% with the qualification of Good). It means that the learning media had fulfilled the criteria of eligibility to be used by students in learning. Nevertheless, the researcher still had to revise the learning media according to the suggestions from the experts before test.

The researcher conducted three tests for the students. The test was conducted to get response and feedback from students towards the learning media. The first test is one to one formative evaluation, the test was done by doing test to 3 students as the respondents. After that the questionnaire was given to the students after the test as the evaluation for the learning media. The evaluation questionnaire consists of 10 questions that related to the students experience while using the leaflets as learning media. Each of the students' choice was scored and calculated to interpret their final response. The result showed the students' responses towards learning media is (71.3% with the qualification of Good). After that the researcher continue to the second test, it's the small evaluation group test. Similar with the first test, the difference is the test was done by doing test to 15 students as the respondents. After that the evaluation questionnaire was given to the students. The result showed the students' response towards the learning media is (78.5% with the qualification of Good). Then the researcher continued to the final test, it called field test formative evaluation. Similar with the other tests before. The difference is the test was done by doing test 55 to 30 students as the respondents. After that the evaluation questionnaire was given to the students. The result showed the students' response towards the learning media is (78.5% with the qualification of Good). It indicated that the learning media based on leaflet is compatible with the students' needs.

CONCLUSION

Based on the data analysis regarding the testing of learning media developed both the validators and students result, it can be concluded that:

1. The development of learning media for tenth grade students of SMK Negeri 2 Tarakan was done with five steps of ADDIE's model namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. Analysis phases began with analyzing the students' needs after that the researcher designed the learning media according to the result of the students' need questionnaire. After designed the learning media, the researcher continued to the development phase, in this phase the learning media was validated by the validators. After the learning media was validated by the validators, the next phases were the Implementation phases, the researcher conducted tests for the learning media for tenth grade students of SMK Negeri 2 Tarakan. After the implementation phases is done, the researcher gave the students questionnaires to get responses for the evaluation phases.
2. The result of validation for materials of learning media is 82% with the qualification of very good, the result of validation for design of learning media is 78% with the qualification of good. The result show that the learning media which developed was good for student of tenth grade students at SMK Negeri 2 Tarakan.
3. Based on the student evaluation questionnaire which given to the students after the implementation are one to one formative evaluation is 71.3% with the qualification of good, small group evaluation is 78.5% with the qualification of good and field test formative evaluation is 78.5% with the qualification of good. It means the learning media was very good with students' need and characteristics.

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