Development of Interactive Media on Learning Explanatory Text for Students of Eleventh Grade Junior High School Lieutenant General Haryono M.T.

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Abstract— **Media still has the same purpose but user input adds interaction and brings interesting features to the ease system in using the media. Interactive media is a method of communication where the output of the media comes from user input. Utilization Interactive media will introduce about dialogical communication. Use of the Internet as a learning medium can help students learn actively. Utilization of the internet in the learning process is currently still at the level of college and not evenly distributed. This is shown at the level of elementary to high school / vocational school, the utilization of the internet is still very minimal and limited to urban areas that already have a network or internet connection. The development of interactive media with this website is also based on the rampant literacy movement program that is being promoted by the government. In this case, the benchmark for developing interactive media websites is the movement of information literacy. The development of website-based learning media for Indonesian language subjects requires teachers to discover new things on activities that may affect student behavior. The explanatory text is a text that describes or explains the process of a natural or sociocultural phenomenon. Explanatory text learning will provide knowledge about a process that originates from cause and effect based on these causes. For high school level enthusiastic in learning Indonesian is still less than average. High school students still consider this Indonesian lesson as a boring lesson.**

Keywords— development, interactive, website, explanation

I. INTRODUCTION

Interactive media is a method of communication where the output from the media comes from user input. The media still has the same purpose but user input adds interaction and brings interesting features for the ease of use of the media system. The use of interactive media will introduce dialogical communication. The website is short for we website which has the potential to be developed as a learning medium (Gomes, 2015)[1]. With the development of website learning media, it is hoped that it will provide opportunities for more interesting and interactive learning activities. The development of interactive media with this website is also based on the proliferation of literacy movement programs that are being promoted by the government. In this case, the benchmark for developing interactive media websites is the information literacy movement. The development of website-based learning media for Indonesian language subjects requires teachers to find new things about activities that can affect student behavior. The explanatory text is a text that explains or explains the process of a natural or sociocultural phenomenon. Learning explanatory text will provide knowledge about a process that starts from cause and effect based on these causes.

The development of website-based learning media for Indonesian language subjects requires teachers to find new things about activities that can affect student behavior. In the case of using online media, the teacher must be able to change students' negative habits into positive things. This website-based learning media will be developed with micro scope. The development of instructional media on this website is designed to be a closed website because only members of the website will become members of the study and two Indonesian teachers. This website will be designed using a login system (webnet) that uses a username and password. This website will be designed in such a way that attracts students' attention. This website-based learning media will also be developed interactively to provide opportunities for students who have not had time to discuss in the classroom. This website-based learning media will also provide discussion forums to provide

opportunities for students who do not understand the material. This is based on the reality in the field, the allocation of learning time in class still tends to be less.

II. RESEARCH METHODS

The type of this research is research development (Research and Development) that is development of writing text writing materials explanation-based problem-solving method for high school grade XI. According Sugiyono (2016: 297)[5], research and development methods are research methods used to produce a specific product and test the effectiveness of the product. This research and development refers to the theory of teaching materials developed by Borg and Gall. The steps of development research according to Borg and Gall can be seen in the following diagram:

Fig.1. The steps of development research according ADDIE

The study was conducted at the High School Lieutenant General Haryono M. T. who was in Jalan Pinang Baris Dua Gang Sekata Medan. The research will be conducted from August to September 2018.

Subjects in this development study were eleventh grade high school students over Lieutenant General Haryono M. T. with a total of 32 students and there were four expert validators consisting of two material experts and two design experts. The object of this development research is the development of interactive learning media in the form of websites on explanatory text material.

This research is a type of research and development. This research method is used to produce certain products and test the effectiveness of these products. Sugiyono (2010: 407) [4] describes the method of research and development is a research method used to produce certain products and test the effectiveness of these products. Research and Development is a research method that intentionally, systematically, aims or is directed to find, formulate, improve, develop, produce, test the effectiveness of products, models, methods, or strategies, with procedures that are superior, effective, efficient, productive, and meaningful. In this study the website interactive learning media will be developed that are suitable for students' needs. The final objective of this research is to develop a product that can be used, namely interactive learning media that will be

evaluated based on the product quality aspects that are determined.

Design of explanation interactive media on learning can be seen in the following chart:
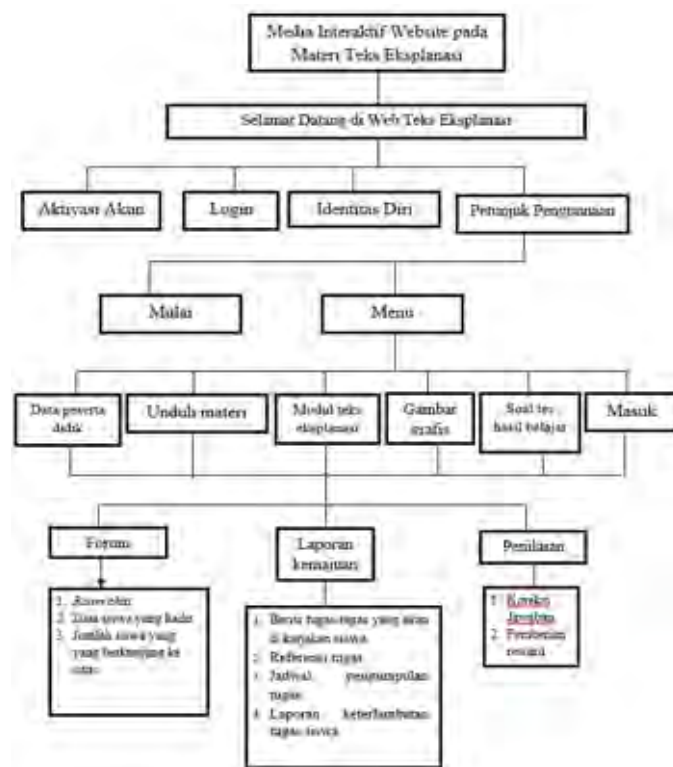

Fig.2. Design of explanation interactive media on learning

Instruments used in this study to collect data are grouped into 2 kinds, namely:

1. Instrument validation team of experts on learning materials writing explanatory text-based troubleshooting methods.

   a. The questionnaire validation sheet of the subject matter material

   b. Questionnaire design validation master of the questionnaire

2. Instrument responses of students and teachers on teaching materials
   a. Individual trial 3 people
   b. Trial of small group of 9 people
   c. Field trials are limited to 32 people
   d. Response Indonesian teacher 2 people

The instrument lattice validation sheet by material experts and design experts can be seen in tables 1 and 2 below.

TABLE 1 The angket is validated and the expert on learning materials

No.	Komponen Indikator Penilaian	Banyak Soal
A. Kelayakan Isi		
1	Kesesuaian materi dengan KI dan KD	2
2	Keakuratan materi	7
3	Kemutakhiran Materi	7
B. Kelayakan Penyajian Media Pembelajaran		
1	Teknik Penyajian Media Pembelajaran	4
2	Penyajian dan Pembelajaran	3
3	Kelengkapan Penyajian	6
C. Aspek Kebahasaan		
1	Komunikatif	4
2	Kesesuaian dengan tingkat perkembangan peserta didik	2
3	Keruntutan dan keterpaduan alur pikiran	2
4	Penggunaan istilah, gambar, dan symbol	6
	Jumlah	**43**

TABLE 2 The angket is validated and the expert on learning materials

No.	Komponen Indikator Penilaian	Banyak Soal
1	Tampilan Tulisan	7
2	Tampilan Gambar	9
3	Kemenarikan	10
4	Keterpaduan	4
	Jumlah	**30**

Data analysis techniques conducted in this development study is this data collected through expert validation, questionnaire distributed to students. Assessment instruments for validations and individual trials, small groups and limited field groups are created in the likert scale that has been scored as in the table below.

TABLE 3. Criteria Answers Instrument Validation Item with Likert Scale

No.	Answer	Scor
1	Very Good	4
2	Good	3
3	Not Good	2
4	Poorly	1

(Sugiyono, 2016: 93)[5]

Then the data is analyzed descriptively quantitative, that is calculated percentage of indicator for each category on instructional material developed.

$$\% \, skor = \frac{number \; of \; indicators \; per \; category}{the \; number \; of \; indicators \; of \; all \; categories} \times 100\%$$

Based on the calculation of the formula above, the figure is generated in percent. The classification of the score is then changed to classification in the form of percentage (Sugiyono, 2011: 118)[5], then interpreted with qualitative sentences.

III. RESEARCH RESULT

Based on the formulation, objectives, results and discussion of teaching materials development research in the form of explanatory text interactive media on learning proposed.

Based on the formulation, objectives, results and discussion of teaching materials development research in the form of explanatory text interactive media on learning proposed. previously mentioned, it can be concluded discussion and research results as follows. At the beginning of the study will spread questionnaire needs analysis to 34 respondents, consisting of 32 students and 2 teachers.

Based on the data needs analysis by students obtained the following conclusions:

1. All teachers and students (100%) said they were familiar with the explanatory text media based on problem solving.

2. All teachers and students (100%) stated that they do not use learning-based explanatory text interactive media on learning in the learning process and never use the media.

3. All teachers and students (100%) stated needing explanatory text interactive media on learning proposed..

The validation result from the material expert, in the form of scoring score on learning component of explanatory text of interactive media on learning, can be known through the assessment done by the material expert from the quality aspect of the learning media which includes the quality of the content feasibility, feasibility of presentation, language feasibility, and feasibility interactive media on learning is rated "excellent" with the percentage of scores for validation scores from material experts is 95.08%.

The validation results of the design experts, in the form of scoring scores on the learning component of explanatory text of interactive media on learning, can be known through the appraisal done by the design expert from the quality aspect of the learning media that the aspect of the feasibility of grading is considered "excellent" with the percentage of scores for the validation score from design expert is 86.96%.

The validation result from the material expert, in the form of scoring score on learning component of explanatory text of interactive media on learning, can be known through the assessment done by the material expert from the quality aspect of the learning media which includes the quality of the content feasibility, feasibility of presentation, language feasibility, and feasibility based on method problem solving is rated "excellent" with the percentage of scores for validation scores from material experts is 95.08%.

The validation results of the design experts, in the form of scoring scores on the learning component of explanatory text of interactive media on learning, can be known through the appraisal done by the design experts from the quality aspect of

the learning media that the aspect of the feasibility of the grading is considered "excellent" with the percentage of scores for the validation score from design expert is 86.96%.

Very good quality individual test (94,76%), very good small group test (97,64%) and last assessment of field test with excellent quality (96,20%), result of effectively test to student studying using learning based interactive is indicated by the results of data processing obtained value "t", then matched with the table at a significant level of 5% = 1.66. This proves that t count < t table is 1.66 <4.07. Thus, it is concluded that the development of instructional materials in the form of learning medias on explanatory text learning is very feasible, easy and effective to used on learning text explanation in high school class XI.

IV. USING THE TEMPLATE

Instrumental in the learning process. The development of teaching materials needs to be done in an effort to improve learning outcomes and establish the material based on the context of the situation in the school. Teaching materials have a very important position in learning, namely as a representation of the teacher's explanation in front of the class. Factors that cause the learning material explanation text conducted by teachers in the classroom is still less interesting and monotonous is the teacher still using conventional materials that are oriented on the results of students, not on the learning process so that students are only given theories of writing and forced to understand the material, while still there are students who have not understood about the material of explanatory text and its concept. The accuracy of teachers in choosing, applying and developing teaching materials used in explanatory text materials greatly affect the learning process, but in this case the teacher is still not quite right.

Based on the theory, the development of teaching materials in the form of explanatory text with interactive media is needed to support students in improving knowledge in explanatory text material. This media is also needed to support the progress of student learning outcomes in explanatory text material. The media is also developed with interactive media, this method will serve as the color and characteristic of the media developed and make the media increasingly attract students' attention. The development of this learning media is a programmable development in a systematic sequence and meets the characteristics to support students in learning. The last test subject of two Indonesian subject matter experts, two design instructional experts, three students for individual testing, nine students for small group test and thirty-two students for field test. Data about the quality of this development product were collected by questionnaire with the result of the research showed that the experimental material was very good (95,08%), the test of the excellent category learning to design expert (86,96%), the excellent quality individual test (94,76%), very good small group test (97,64%) and last assessment of field test with very good quality (96,20%), result of effectively test to student learning to use problem-based learning media is shown with result of data processing obtained value "t", then matched with table at significant level 5% = 1.66. This proves that t count< t table is 1.66 <4.07. Thus, it was concluded that the development of teaching materials in the form of learning medias on learning text of class XI high school explanation.

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