## Development of Digital-Based Expository Text Learning Media for Class X Students of SMA Negeri 1 Bagan Sinembah

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**Abstract.** This research aims to produce digital-based learning media as a form of learning variation in expository textsusing the Borg and Gall development model. The results of the research show (1) the development of learning media with a 10-stage process is running well and in accordance with the development of Borg and Gall, (2) the form of digital-based learning media products has an attractive appearance and content, (3) The feasibility of learning media is declared suitable for use based on validation from material experts and design experts who obtain an average score with the criteria of being feasible and very feasible, (4) the effectiveness of learning media has increased from the pretest and posttest results. The research results show that digital-based learning media has good suitability for use as a variation of new learning media in Indonesian language lessons

Keywords: Learning media, digital, exposition text.

## 1 Introduction

Technological developments in the 21st century are accelerating rapidly, one of the fields that is significantly impacted by this technological development is the field of education. Basically, education is a process of communication and information from educators to students, where educators are the media and source of information. The development of information technology has led to digital technology which is characterized by the development of social network-based systems. The development of information technology is also increasingly rapid, characterized by the development of mobile phone application technology and the development of multimedia technology, both audio and video streaming.

In the 2013 curriculum, it is stated that one of the objectives of Indonesian language subjects is that students can communicate, both orally and in writing according to applicable ethics. The characteristics of the 2013 Curriculum are that it develops cognitive, affective and skills aspects and applies them in various situations both at school and in society. In developing

cognitive, affective and skill aspects, learning media is needed that can improve the quality of student learning. Learning media is a tool that can be used by educators so that the expected learning process can be achieved. This is in line with the opinion of (Rusman, 2013: 161) who states that learning media is a vehicle for conveying messages or information from the source of the message to the recipient [1].

Apart from having many benefits in the learning process, learning media can also provide motivation for students. According to Munir (2012: 134) the benefits that can be obtained are that the learning process is more interesting, more interactive, the amount of teaching time can be reduced, the quality and attitudes of students' learning can be improved and the learning process can be carried out anywhere and at any time [2]. In this case, teachers are expected to be increasingly innovative in the learning process carried out.

Teachers must be able to change their own paradigm, namely from being student centered, from material-oriented learning patterns to competency-based learning, which requires individual learning models, then the use of digital-based learning technology can be an alternative as an effective learning model, learning with Using digital technology allows learning to be more enjoyable for students. Learning using digital technology does not mean replacing the role of the teacher, but to complement it in order to improve learning outcomes, because basically each learning material has characteristics that are mutually exclusive.

The reality in the field shows that the use of information and communication technology has not been implemented properly by teachers. This is proven by the results of observations made at SMA Negeri 1 Bagan Sinembah through interviews with Indonesian language teachers, that the facilities and infrastructure at the school are adequate as evidenced by the availability of projectors, laptops and computer laboratories. It's just that these information technology facilities have never been applied by Indonesian language teachers in learning. The class only uses printed books and explanations from the teacher. Likewise, it shows that Indonesian language teachers do not make maximum use of the availability of computer laboratories in the learning process.

Based on the results of observations and interviews conducted with the Indonesian language subject teacher at SMA Negeri 1 Bagan Sinembah, Mrs. Wiwik Hartati, S.Pd. revealed that the average score for daily Indonesian language tests, especially in writing expository text material, was 60 with 60% completeness. Meanwhile, the KKM standard set is 75. The reality in the field is that only 60% of students are able to achieve this KKM score. This condition shows that students' understanding in the learning process of writing expository texts is still low, causing student learning outcomes to tend to be low. Apart from that, the results of interviews with students obtained information that students had difficulty learning the material for writing exposition texts because of the lack of teaching media for writing exposition texts that could be used as a reference for writing exposition texts.

One of the texts in Indonesian language learning is exposition text. According to Keraf (in Arianto, 2017: 2), expository text is a form of writing that attempts to explain and explain a main idea that can broaden a person's views [3]. According to E. Kosasih (2017:23) states "exposition comes from the word expos which means to form accompanied by analysis and explanation"[4]. In development, expository text uses facts, written ideas, or expert opinions, and the text can even be equipped with visual media, such as tables, graphs, maps and others.

Mahsun (2014:31), states that "expository text is a presentation of ideas or suggestions about something personal" [5]. That is why exposition texts are often called argumentation texts. This is due to exposure to something based on a person's perception but not forgetting statements based on existing facts and data regarding that matter.

Meanwhile, according to Hasani (2005:30), exposition is a form of writing that is often used to convey scientific descriptions and does not try to influence the reader's opinion [6]. Through exposition the reader is not forced to accept what is stated by the author. In the Ministry of Education and Culture (2013: 121) states, exposition is a type of text that functions to express ideas or propose something based on strong arguments [7]. This text contains a description or explanation of a topic with the aim of providing or additional information for the reader.

Exposition text aims to convince readers of an issue raised by the author. In line with Priyana's opinion (2008:59) "exposition text proposes or suggests a certain topic which may only be pro or contra, not both". ("expository text aims to propose or suggest a certain topic which may only be something that is pro or con, or neither")[8]. In writing an expository text, a person must be able to master the concept of the article they are going to write, carry out information gathering studies as concrete support in their writing.

Learning expository texts in class KD 3.3 contains identifying (problems, arguments, knowledge and recommendations) expository texts that are heard and/or read. KD 4.3 contains about developing the content (problems, arguments, knowledge and recommendations) of expository texts orally and in writing. KD 3.4 analyzes the structure and language of exposition texts. KD 4.4 constructs expository text by paying attention to content (problems, arguments, knowledge and recommendations), structure and language. Students' ability to understand expository texts will increase if the learning carried out by the teacher is appropriate,

Based on a literature survey of exposition text material, it can be seen that there are four different basic competencies, namely analyzing the structure of exposition text content, developing exposition text content, studying the structure and language of exposition text, and constructing exposition text. The objectives of these four competencies are different, requiring students to be able to achieve the expected goals. However, not all of the objectives of this competency have been achieved in learning.

If students are not able to analyze the structure of the content of expository texts, then students will not be able to develop and construct expository texts, therefore achieving the first basic competency goal influences the achievement of the second, third and fourth basic competency goals. For example, when analyzing the structure of exposition texts on theses and arguments. Students still have difficulty understanding facts and opinions in the thesis and argumentation sections. This results in the error of completing the thesis with opinion and completing the argument with supporting facts. Students still tend to write arguments only in opinion, without a clear basis for data and facts. Therefore, it is ultimately difficult for students to convey ideas in expository texts in different languages.

Through digital-based learning, problems experienced by teachers in implementing learning can be overcome. This is in accordance with the opinion of Onno W. Purba (in Rusman, 2013.289) who stated that all teacher problems in conventional learning can be overcome with digital-based learning [9]. There are three things that must be done to design digital learning,

namely simple, personal and fast. A simple system will make it easier for students to utilize technology on the available menus. Personal requirements mean that educators can interact well like a teacher communicating with students in front of the class. Then this technology is supported by a fast response to complaints and other student needs.

Based on the description above, it is necessary to carry out research and development in digital-based learning on expository text material, in this case the author raises the research title "Development of Digital-Based Expository Text Learning Media for Class X Students of SMA Negeri 1 Bagan Sinembah"

### 2 Research Result

This research is a development research which is often referred to as Research and Development (R&D), namely research oriented towards researching, designing, producing, testing and validating the products produced. This research refers to the development theory put forward by Borg and Gall (in Sugiono, 2015:35). This research was conducted at SMA Negeri 1 Bagan Sinembah, located on Jl. Sisingamangaraja, Bagan Batu, Bagan Sinembah District, Rokan Hilir Regency, Riau.

Sugiyono (2018) states that a research subject is an attribute or characteristic or value of a person, object or activity that has certain variables that are determined to be studied and conclusions drawn [10]. The subjects of this research and development were class X students of SMA Negeri 1 Bagan Sinembah to carry out learning using the products developed. Small scale trials will involve 11 students, large scale trials will involve 31 students. The object of this research is internal school data which has previously been summarized for the purposes of this research.

Before conducting research, observations were made regarding development needs involving teachers and students. The expert team's validation questionnaire sheet was used to obtain data from the validator regarding the validation of the product being developed, namely digital-based learning media on expository text material in class X.

This research uses the R&G (Research and Development) method with the stages proposed by Borg and Gall. The stages of this research are potential and problems, data collection, product design, design validation, design improvement, product trials, product revisions, field trials, product improvements, product results. The following is an explanation of the research and development stages.

# Process of Developing Digital-Based Expository Text Learning Media for Class X Students of SMA Negeri 1 Bagan Sinembah

The process of developing learning media is carried out through ten stages of Borg and Gall development, which is a product development and validation process in the form of developing digital-based expository text learning media for class X students of SMA Negeri 1 Bagan Sinembah by following steps, procedural and descriptive. The Borg & Gall development model is a model that is suitable for the media to be developed, where this development model has quite ideal and detailed stages consisting of ten stages, namely as follows.

#### 1. Potential and Problem Stages

The initial stage carried out in this development was to carry out an analysis so that the product being developed could be accepted by the research targets. This is done by analyzing the needs of teachers and students. Danny Meirawan (2002) states that need is a term in planning that shows the gap between the results achieved and the desired results [11]. Needs assessment is part of the planning process in identifying needs and placing needs in order of priority and efforts to select needs. Needs analysis is an important step when planning is truly expected to be in accordance with real circumstances.

## 2. Information Gathering Stage

At this stage, observations and interviews are carried out to find out the information available in the school, especially on exposition text material in class X, so that the development product can be accepted. This observation was carried out at SMA Negeri I Bagan Sinembah and the interviewees were Indonesian language subject teachers and class X students.

## 3. Product Design Stage

At this stage, the learning media that will be developed is designed, starting from the materials and design. The material designed must be concise, in accordance with the meaning of teaching materials. The material presented must be related to Basic Competencies. Furthermore, the presentation of questions or quizzes on electronic teaching materials must also be in accordance with the learning objectives that have been set so that they can be achieved optimally, while the product design must be made as attractive as possible so that it makes students interested interested to learn it.



Fig. 1. Product design cover.



Fig. 2. Basic competencies and achievement indicators for digital-based learning media.



Fig. 3. Identifying information in expository text.

The image above is the initial design stage before going through the validation stage by material experts and design experts. Design at this stage is carried out by combining colors with animation according to the context of the learning video.

#### 4. Design Validation Stage

After the product is finished, the next stage is to validate it with material experts and media experts to test the suitability of the teaching materials that have been designed in the next stage. The results of this stage are criticism and suggestions given verbally and in writing to researchers regarding the learning media that has been developed. Criticism and suggestions given to researchers can be seen in the following table.

**Table 1.** Input and suggestions from material and design experts.

NO	Material Expert Criticism and	Design Expert Criticism and	
	Suggestions	Suggestions	
1	Material needs to be developed according to learning outcomes	Pay attention to the use of color, use more contrasting colors to make it more	
	and objectives.	interesting.	
2	Relevant examples or stages need to be added.	Pay attention to the emphasis on certain words, use emphasis by differentiating the color of the word.	
3	The training videos are too fast.	Adapt the illustration to the level of class X students.	

### 5. Design Improvements

(before revision)



#### (after revision)



Fig. 4. Cover of learning media products.

Based on Figure 1, the improvement made is the color contrast on the cover of the teaching materials. On the cover before the revision, the color selection tended to be monotonous and the color combinations were not quite right. So there needs to be improvement in terms of color contrast. Figure 5 shows the product results before and after revision.

#### 6. Small Scale Trials

The small group trial was carried out by 11 class X students of SMA Negeri I Bagan Sinembah. The collection was carried out randomly (random). The results of the small group trial score according to the student respondent questionnaire were 75% and included in the feasible category. Meanwhile, small-scale trials on subject teachers were 90.50% and included in the very feasible category.

#### 7. Product Revision

The next stage is product revision. At this stage the researcher made several improvements based on the results of teacher and student responses. After carrying out small-scale trials, improvements that must be made include learning objectives, additional tasks and exercises.

## 8. Large Scale Trials

Large-scale trials or also called field trials were carried out by 31 class X students of SMA Negeri I Bagan Sinembah. This trial was carried out to obtain data that will be used to determine the benefits and suitability of the product being developed for its users.

It is known that the results of testing digital-based learning media products based on respondent questionnaires filled out by students online achieved an average result of 85% and were included in the category suitable for use as teaching materials in this subject, the teaching and learning process of expository text material. Meanwhile, the results of teacher responses in the learning area have a feasibility value with a percentage of 92.75% and are included in the very feasible category.

## 9. Product Revision

In accordance with the suggestions received by researchers based on large-scale test response questionnaires, namely making digital-based learning media more interesting. The revision is to add several moving image effects and music effects to each page.

#### 10. Results

The final stage of product development is the final result that has been revised and validated by material experts and design experts. This product has also been tested by teachers and students through online questionnaires.

## Product Form Digital Based Learning Media Class X at SMA Negeri I Bagan Sinembah

The form of teaching materials developed in this research is prepared based on a deliberate, systematic, focused/directed R&D method to discover, formulate, improve, develop, produce, test the effectiveness of a particular product, model/strategy/. ways, services, procedures that are superior, new, effective, efficient, productive and meaningful. Preparation of learning materials according to the KD exposition text stated in the syllabus. The innovation provided in digital-based learning media is related to expository text material which is the attraction of teaching materials. In the development of this learning media there are practice questions related to exposition text material. Apart from that, there are videos that are presented which are useful as a stimulus for students so that they can motivate students to learn.

## Appropriateness Digital Based Learning Media Class X at SMA Negeri I Bagan Sinembah

Validation of learning media is carried out by: 1) material experts who are competent in the field of expository text material; and 2) design experts who are competent in the field of teaching material design. The following are the results of due diligence from material experts and design experts.

Table 2. Results of responses from material experts and design experts.

NO	Validator	Score	Criteria
1.	Material expert	93%	Very worthy
2.	Design expert	87%	Very worthy
	Average	90%	Very worthy

## Effectiveness Digital Based Learning Media Class X at SMA Negeri I Bagan Sinembah

The implementation phase was carried out at SMA Negeri I Bagan Sinembah class Based on the results of the pretest and posttest scores for writing expository texts both before and after implementing digital-based learning media, the average score obtained by students during the pretest was 67 and the average posttest score was 90.

## 3 Conclusion

Based on research results and discussions in developmentdigital-based learning mediafor class X studentsIt can be concluded from SMA Negeri I Bagan Sinembah that learning media is digital-based has content appropriateness, obtained an average score of 93.70% with good criteria, in the aspect of appropriateness of presentation, obtained an average score of 82.30% with "very good" criteria, and in the language appropriateness aspect obtained an average score of 97.75% with "very good" criteria. The design expert's assessment based on the graphic feasibility aspect obtained an average score of 85.00% with the criteria "very good". The response assessment from three language teachers obtained an average score of 86.50%

with the criteria "very good". The trial assessment of class X students was seen to obtain an average score of 87.

The use of expository text learning media is declared effective in improving student learning outcomes in expository text material. This is supported by student learning outcomes which have increased after using the developed teaching materials. The application of digital-based learning media is effectively used in the expository text learning process so that it can improve student learning outcomes. It can be seen that the average student score during the pretest was 66, after implementing digital-based learning media in class X SMA Negeri I Bagan Sinembah the average student score 86 passes the KKM value of 85.

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