THE DEVELOPMENT OF TEACHING MATERIALS OF EXPERIENCE-BASED EXPLANATORY TEXT WRITING ON CLASS XI STUDENTS AT SMA NEGERI UNGGUL ACEH TIMUR

Warniatul Ulfah¹, Prof. Tiur Asi Siburian² and Prof. Rosmawaty Harahap²

¹Master Student at State University of Medan (Unimed), Medan, Indonesia
²Lecturer at State University of Medan (Unimed), Medan, Indonesia

ABSTRACT: This study aims to find out about the results of the development of teaching materials of experience-based explanatory text writing on the class XI students of SMA Negeri Unggul Aceh Timur. The research method used is research and development (R & D) proposed by Vienna Sanjaya refers to Borg & Gall model. The subjects consisted of 3 students with individual test, 9 students with small group test, and 32 students with limited field test. The data collection techniques used observation, interviews, questionnaires and writing test of explanatory text. The results showed that: (1) material expert validation included the content feasibility with an average of 88.09% on very good criteria, the presentation feasibility with an average of 89.05% on very good criteria, and the language aspects with an average of 90.9% with very good criteria, (2) the design expert validation with an average of 91.25% on very good criteria, (3) the teacher response with an average of 89.17% on very good criteria, (4) the individuals with an average of 75.26% with good criterion, (5) small group test with an average of 81.88% on very good criteria, and (6) limited field test with an average of 92.81% on criteria very good. The results of the students’ explanatory text writing test before using the module is 77.66, while the result of the students’ explanatory text writing test after using the module increased by 90.15. The difference is 12.49 from before to after. This proves that the improved teaching materials of explanatory text writing can improve the students’ learning achievement by using experienced-based learning methods.

KEYWORDS: Improvement Of Teaching Materials, Explanatory Text, Experienced-Based Learning Method

INTRODUCTION

The development of teaching materials needs to be done in an effort to improve the learning outcomes and establish materials based on the context of existing situations in schools located in the regions. Teachers as educators are in charge of managing and developing the learning resources as contained in the Law no. 20 year 2013 article 39, which is the educational staff have tasks to carry out administration, management, development, supervision, and technical services to support the educational process in the unit of education. The use of textbooks should be able to motivate and attract the students’ attention. Students will be easier to learn by using textbooks. When the students do not understand or lack understanding of the explanation submitted by the teacher then, the only way that students do is reading a textbook. In fact, the textbooks used by the students so far still make them confused in understanding them. This is stated also by Wena (in Lubis et al, 2015: 18), the provision of quality textbooks is still very lacking, the textbook used emphasizes more on the mission of conveying knowledge or the facts alone. The authors of the textbooks are less concerned about how the book is easy to understand and not boring, that caused the students’ learning motivation is reduced, the
completion of student tasks is not according to the time specified and the student test results also show low value. Therefore, it is very important to create a teaching material that is easy to understand and appeals to students.

One of the Indonesian materials learned in the class XI SMA/MA/SMK/MAK is the explanatory text contained in Basic Competence 4.4 "producing oral or written explanatory text by looking at the structure and the linguistic." This basic competency aims to enable students to write explanatory text based on structure and the linguistic.

The observations results on several sources obtained the data that the literacy in Indonesia today is experiencing the alarming conditions. As noted in the Sarmadan’s article who traces the Critical Issues in Education (2017), based on the results of the International literacy research released by Central Connecticut State University, the Indonesian literacy culture is ranked 64th out of 65 countries studied. It certainly gives an impact to educators in Indonesia to continue seeking in the learning process so that the expected competence can be achieved. The problem is also supported by the data mode of learning experience according to Peter Shea (in Sumiati and Asra, 2016: 176) with the acquisition of learning experience data ie, the students learn 10% of what the students read, 20% of what the students hear, 30% of what the students see, 50% of what the students see and hear %, 70% of what the students say, and 90% of what the students say and do. It turns out that learning with words is still low in the students’ learning experiences. Therefore, in order the learning can provide a better learning experience for the students, it is necessary to think of certain types of teaching materials that can bring the students to a more concrete experience.

**MMETHODOLOGY**

**Module as a Teaching Material**

Teaching materials is one the learning source that is very essential in learning process. Majid (2011: 173) states that "teaching materials are all forms of materials used to help the teachers in carrying out teaching and learning activities." The same opinion is also stated by Hamdani (2011: 120), "teaching materials are all material forms or material systematically arranged that used to assist the teachers or instructors in carrying out teaching and learning activities to create an environment or atmosphere that allows the students to learn". Another opinion (quoted in Hamdani, 2011: 120), “they are required for planning and review upon training implementation. Text and training equipment are included in the teaching material.” Teaching materials are information, tools, and texts that the teachers or instructors need for planning and reviewing the implementation of learning.

Broadly speaking, teaching materials consist of knowledge, skills, and attitudes that the students must learn in order to achieve a defined standard of competence. The same thing is also conveyed by Prastowo (2015: 17), who concludes that teaching materials are all materials (either information, tools, or text) systematically arranged, which display the complete figure of competence that will be mastered the learners and used in the learning process with the aim of planning and reviewing the implementation of learning. The examples are textbooks, modules, handouts, LKS, model makets, audio teaching materials, integrative teaching materials, and so on. Teaching materials are the information, tools and texts that teachers need for and studying the implementation of learning.
Based on the above opinions, it can be concluded that teaching materials are a set of learning materials (information, tools, or text) systematically arranged and used in learning. Teaching materials can be categorized into several types. According to Majid (2011: 74), teaching materials are grouped into four categories, namely 1) printed teaching materials, 2) listening materials (audio), 3) audio visual subject materials, and 4) interactive teaching materials. Hamdani (2011: 219), various forms of teaching materials are 1) teaching materials in printed form, such as student worksheets (LKS), handouts, books, modules, brochures, leaflets, wallchart, and others, 2) Audio visuals, such as movies/videos and VCDs. 3) Audio-shaped teaching materials, such as cassettes, radio, audio CDs. 4) Visual, such as photos, pictures, models/mockups and 5) Multimedia, e.g Interactive CD, computer based learning, internet. In line with Hamdani's opinion, Prastowo (2015: 40) states that teaching materials according to their forms are divided into four kinds namely printed materials, hearing materials, teaching materials, and interactive learning materials.

The module is a printed material that is designed to be learned independently by the learning participants. According to Prastowo (2015: 106), "the module is basically a teaching material that is arranged systematically with language that is easily understood by learners according to their age knowledge level, so that they can learn independently with the help or minimal guidance from learners." Daryanto (2013: 9) states that module is one form of teaching materials that packed in a complete and systematic, in which contains a set of planned learning experience and is designed to help the learners to master specific learning objectives.

Through the module, the students can measure their own levels of knowledge on the materials discussed in each one module unit, so that when they have mastered it, then they can continue on one unit of the next level module. Hamdani (2011: 219), defines "a module is a learning tool that contains materials, methods, limitations of learning materials, instructional activities, exercises and evaluating ways systematically which are designed and interesting to achieve the expected competencies and can be used independently."

Furthermore, module learning is stated by Sani (2014: 183), is an independent learning process on a particular unit by using teaching materials that are arranged systematically, operationally and directionally to be used by learners, along with the guidance of its use for the teachers. The module can be formulated by a self-contained complete unit and consists of a series of learning activities designed to help learners achieve specific and clear objectives.

The use of modules in teaching and learning activities aims to achieve the goal of education effectively and efficiently. The students can follow the teaching program according to their own speed and ability, more self-study, can know their own learning result, emphasize mastery. Hamdani (2011: 220), stated that the purpose of module preparation is to provide the
instructional materials in accordance with curriculum demands by taking into consideration the students’ needs, that is teaching materials in accordance with the characteristics of teaching materials and the characteristics of students, as well as the setting or background of their social environments.

Furthermore, according to Prastowo (2015: 108), the purposes of module preparation are: (1) in order the learners to learn independently without or with the teachers’ guidance; (2) in order the educators’ role to be less dominant and authoritative in the learning activities; (3) to train the honesty of the learners; (4) to accommodate the learners’ various learning levels and speed. For the learners whose learning speed is high, they can learn faster and complete the modules faster. (5) in order the learners to be able to measure their own level of mastery the material that have been studied.

The purpose of the module preparation is also stated by the Ministry of National Education (2008: 5), namely (1) Clarifying and facilitating the presentation of the message for not to be too verbal. (2) Overcoming the limitations of time, space, and sensory power, both learners and teachers/instructors. (3) Can be used appropriately and varied, such as to improve motivation and passion of learning, to develop the ability, to interact directly with the environment and other learning resources that enable the learners to learn independently according to their abilities and interests. (4) Allowing the learners to measure or evaluate their own learning outcomes.

**Explanatory Texts**

The text in the Curriculum 2013 is not interpreted as a form of written language. The text is a complete expression of the human mind in which there is a situation and context. According to Halliday (in Muchtar, 2012: 89), "the text as a product, is a text which is seen as a result which can be expressed by certain terms. The text is formed by the context of the language situation usage in which there is a register or variety of language underlying the creation of the text."

The explanatory text contains the process or activity of an event. Blake Eduqation (2006: 50) states, when the author begins to write explanations, first the author begins to establish the existing phenomenon, then explains why or how the phenomenon occurs. The author must acquire a lot of content knowledge before starting writing the explanatory text. There are different types of explanatory based on the question of how and why. The examples of explanatory texts that describe an event or how something works, such as explaining how a lawn mower works, how technology describes computers work, and how natural landslide phenomena occur. The examples of explanatory texts that explain why something happened, including explaining why there is a mist on the bathroom mirror when we bath, why the earth has gravity. Yet other types can explain the similarities and differences between objects, explain the procedure to the reader how to do something and detail how it works. The explanatory text according to Kemendikbud (2014: 1) "contains an explanation of the state of things as a result of something else that has happened before and causes something else to come later." The explanatory text has a social function to explain the process of the occurrence of something according to the cause-result principles. The explanatory text is closely related to natural and social events. Dirgeyasa (2016: 84) states, explanation genre is to explain the processes involved in the formation or working of natural or socio-cultural phenomena.. Kosasih (2013: 85) says, "explanatory text is a text explaining or explaining the process or phenomenon of nature and social." Furthermore, according to Sani (2014: 298), "explanatory
text is a kind of text that explains scientifically how natural phenomena and technology appear, for example: how and why something happened.

The purpose of the explanatory text is expressed Priyatni (2014: 82), to explain the process of formation or activity associated with natural, social, scientific, or cultural phenomena. An explanatory text comes from the authors' questions concerning why and how a phenomenon occurs. The purpose of the explanatory text according to Blake Education (2006: 50) is on the following quote.

An explanation is written to explain how and why something in the world happens. It is about actions rather than about things. Explanations play a valuable role in building and storing our knowledge. Technical and scientific writing are often expressed in this form. When writing explanations we establish that the phenomenon exists and then explain why or how this came about. The writer should acquire a great deal of content knowledge before beginning the explanation.

Further Kosasih (2014: 191), states that the important thing that needs to get the main attention in preparing an explanatory text is that the explanatory text is a text that explains a phenomenon either it is with regard to nature, culture or social. The development can be chronological pattern or causality.

The linguistic rules relates to the explanatory text according to Borneo (2014) consist of (1) conjunctions; (2) a verb; (3) nouns; (4) complex clauses and simplex clauses; and (5) the word term. Kosasih (2014: 183) states, the explanatory text has a linguistic rule. Linguistic features that mark the explanatory text which are not much different from the features or linguistic rules commonly found in the text of the procedure, especially in terms of the use of adverbs and conjunctions. The explanatory text as shown in some examples uses number of words of description of time and with a meaningful description of the way.

**Experienced-Based Learning Methods**

Experiential learning or experienced-based learning has been widely used in learning practice and research. Experiential learning is based on the work of Kurt Lewin, John Dewey and others. Experiential learning theory offers a dynamic theory based on learning cycle driven by the resolution of action/reflection and experience/abstraction. These two dimensions define the holistic learning space as the learning process that takes place between individuals and the environment. Silberman (2014: 10), states experience-based learning is "the involvement of learners in concrete activities that enable them to 'experience' what they are learning. This learning is based on real work/life experiences and structured experiences that simulate or approach actual work/life experiences." Sanjaya (2010: 160), defines "experiential learning is a number of student activities performed to obtain information and." According to Sani (2014: 153),"experience-based learning is inductive, student-centered, and activity-oriented."

Based on some explanations above, it can be concluded that experiential learning is a student-centered learning method based on the idea that people learn best from experience directly. Broad experience will change the students' behaviors, understanding and thinking. Through various experiences students are more creative in making decisions.

The steps of experience-based learning methods according to Huda (2014: 172), underlines two interrelated approaches in understanding experiences: concrete experiences and abstract
conceptualizations as well as two approaches to changing experiences: reflective observation and active experiments. The four approaches can be described in the following circle:

1) Concrete Experience

At this stage the learners do not yet have an awareness of the nature of an event. The learners can only feel the incident as it is and have not been able to understand and explain how and why the incident happened. This is happening in the first stage of the learning process.

2) Reflective Observation

At this stage learning should give the opportunity to all learners to observe actively to the events that happened. It begins by seeking the answers and thinking about the events that exist in the world around them. The learners do reflection by developing questions of how and why it can happen.

3) Abstract Conceptualization

After the learners are given the freedom to make observations, then they are given the freedom to formulate (conceptualization) on the results of his observations. This means that the learners attempt to create an abstraction, develop a theory, concept or law and procedures about something that becomes the object of his attention.

4) Active Experiment

This stage is based on the assumption that the outcome of the learning process must be a real product. At this stage someone is able to apply the concepts, theories or rules into real situations. Learning should give space for freedom to practice and test theories and concepts in the field.

This research type is a research development (research and development) that is a development of teaching materials of experience-based explanatory text writing for class XI of SMA. The subjects consisted of 3 students with individual trials, 9 students with small group trials, and 32 students with limited field trials. The data collection techniques used are observation, interviews, questionnaires and explanatory text writing tests.
DISCUSSION

Initial Product Descriptions

The search results from the questionnaire found 100% of teachers and 90.62% of students stated need experience-based teaching materials, especially on explanatory text writing materials in the learning process to run more effectively and in order to be made by students as a means of learning individually. The results of the questionnaire distributed found that 100% of the teachers stated need the teaching materials that have been developed in the learning process so that the learning process is more effective, in accordance with the applicable curriculum and 90.62% of the students expressed the need of teaching materials that have been developed as a means of learning individually.

Description of Test Result Data on Module as Teaching Materials

The percentage result from the material experts on the feasibility of the contents shows that the assessment sub-component of material feasibility with KI and KD has an average percentage of 87.50%, the accuracy of the material with an average of 92.86%, the materials' degradation with an average of 91% and the encourage curiosity with an average of 81%. The average percentage result of the overall assessment sub-component of the feasibility aspect on the content presentation is 88.09% with the criterion "very good."

On the feasibility of the presentation, the material experts assessed that the teaching materials in the form of a developed experienced-based explanatory text writing module for class XI of SMA Negeri Unggul Aceh Timur has a feasibility of presentation with an average percentage score of 89.05% with the criteria of "very good". The average percentage results from the feasibility aspect of the assessment sub component of the presentation technique, presentation of learning, and completeness of presentation.

The percentage results from the material expert about language assessment found that the sub-component assessment of the assignment has an average percentage of 95.83%, communicative with an average of 93.75%, dialogical and interactive with an average of 88%, conformity with the students' level development with an average of 81%, the demands and the integration of thinking flow with an average of 88%, and the use of terms, symbols and icons with an average of 94%. The average percentage result of the overall sub-component of the language assessment aspect was 90.09% with the "very good" criterion. The average percentage result from the design expert found that the assessment sub-component on the size of the teaching materials had an average percentage of 93.75%, the design of the material cover with an average of 85%, and the design of the instructional materials with an average of 95%. The average percentage result from the entire sub-component of the feasibility assessment of the presentation was 94.59% with the criteria of "very good". This means that the teaching materials in the form of a developed experience-based explanatory text writing module can meet the demands of the learning needs.

The result of responses made by Indonesian teachers concluded that the teaching materials in the form of an experienced-based explanatory writing module include the "very good" criteria with an average percentage of 89.17%. The result of the response from the Indonesian teachers to the teaching materials is in the form of a module of experience-based explanatory text writing.
The average percentage result obtained shows that the material assessment has an average percentage of 92.18%, the language with an average of 92.97%, and interest with an average of 93.28%. The average percentage result of all limited field tests is 92.81% with the criteria of "very good". The responses from the students of SMA Negeri Unggul Aceh Timur concluded that the teaching materials in the form of developed a module of experience-based explanatory text writing is declared eligible and meets the needs with the criteria of the overall "very good". This means that the developed teaching materials have improvement and can meet the demands of the learning needs.

**Student Learning Achievement**

After learning by using developed experienced-based explanatory text writing, the students’ learning achievements before and after using the teaching materials had a significant increase of 12.49%. It is known that the students’ average score before (pretest) using was 77.66, the teaching material and the mean score after (posttest) was 90, 15. Here is the average value of pretest and posttest.

**Table 1 the Summary of Pretest and Posttest Average Values**

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Average Values</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before (Pretest)</td>
<td>77,66</td>
<td>12,49</td>
</tr>
<tr>
<td>2</td>
<td>After (Posttest)</td>
<td>90,15</td>
<td></td>
</tr>
</tbody>
</table>

Based on the above table, it can be concluded that learning by using teaching materials of experienced-based explanatory text writing module can improve student learning achievement in Bahasa Indonesia subject especially explanatory text writing materials.

**The Relevance of Learning Method of experienced-based in the Teaching Materials on the Explanatory Text Writing**

The research results on the relevance of learning method of experienced-based in the teaching materials on the explanatory text writing was declared relevant or appropriate between the experienced-based learning method with explanatory text writing materials. This can be proven from the needs analysis reviewed in advance, in the needs analysis questionnaire there is an explanation about the experience-based learning method. The attainment of need analysis result to the teachers and the students that all the teachers (100%) stated the need of developed teaching materials in accordance with curriculum 2013 in the learning process and most of the learners (90,62%) claimed the need of developed experience-based teaching materials in the learning process.

The relevance of experienced-based learning method to the explanatory text writing can also be seen from the acquisition of the experienced-based explanatory text writing results. After learning by using the teaching materials of experienced-based explanatory text writing, the students’ learning achievement before and after using the teaching materials of experienced-based has a significant increase of 12.49%. It is known that the students’ average score before using the teaching material (pretest) was 77.66 and the mean score after it (posttest) was 90,15. Based on the above explanation, it can be concluded that the experienced-based learning
method is relevant to be used in the teaching materials of experienced-based explanatory text writing.

**Discussion of the Research Results of Product Improvement**

The variables of teaching materials have a very good average value. The variables that are assessed include the feasibility of the content, presentation, language, and graphics. The acquisition of product validation results entitled "Experience-Based Explanatory Text Writing" can be detailed as follows.

1. The assessment conducted by the material experts includes three assessment aspects, namely the content feasibility, the presentation feasibility and the language assessment. The assessment result of the material content feasibility aspect is "very good" with an average percentage of 89.24%. The assessment of presentation feasibility is "very good" with an average percentage of 88.46%, and the language assessment aspect is "very good" with an average percentage of 90.09%.

2. The validation results of the teaching materials by learning media experts stated "very good" with an average total percentage of 91.25%. The total percentage obtained on the cover material size of 93.75% in the "very good" category, 85% cover material design in the "very good" category and the design of the material content of 95% is in “very good” category.

3. The result of responses made by the Indonesian teachers on the teaching materials in the form of an experienced-based explanatory text writing module is "very good" with an average percentage of 89.17%.

4. The results of the students’ trial assessment were conducted in 3 processes: the individual testing (3 students) test, the small group test (9 students) and the limited field test (32 students). The acquisition of the individual test results is "good" with an average percentage of 76.39%. The acquisition of small group test results is "very good" with an average percentage of 81.94%. The acquisition of a limited field test result is stated "very good" with a total average score percentage of 92.77%.

5. The students’ average acquisition in experienced-based explanatory text writing test before using the developed material was 77.66 while the average obtained after using the material was 90.15. This proves that the students’ learning outcomes in the experienced-based explanatory text writing test increased by a difference of 12.49.

Based on the discussion of the research results described above, it can be concluded that the developed teaching materials of experienced-based explanatory text writing for the feasibility of teaching materials is declared eligible in the category "very good" and for the students’ learning achievement it was declared as able to improve the students’ learning achievement in experienced-based explanatory text writing.

**The Reason for Using the Learning Method of Experienced-Based Explanatory Text Writing in Developing the Teaching Materials (Module)**

The reason for using the learning method of experienced-based explanatory text writing in developing the teaching materials (module) is seen from the theory of experienced-based or experiential learning, needs analysis, and the students’ learning result. The explanation can be detailed as follows.

---

50

ISSN 2055-6063(Print), ISSN 2055-6071(Online)
1. Theoretically, the learning method of experienced-based is appropriate in explanatory text writing activities because the students can more easily pour their ideas when finding out the direct experience. Experience can be gained through 4 stages: 1) concrete experience, 2) reflective observation, 3) abstract conceptualization and 4) active experiment. The process of the learning method of experienced-based explanatory text writing includes 4 stages: 1) to search the source of ideas obtained from the concrete experience. Concrete experiences can be obtained based on the visual image display in the event flow. The learners can understand with the example presented at the beginning of the materials; (2) formulating new ideas can be obtained from the reflective experience that has been pursued in the concrete experience. The experiences gained previously can be used by the learners to formulate ideas that will be written based on the events contained in the learning module; (3) determining the title, the sequence of natural causes, the consequences that have been obtained from the concrete experiences and the reflective experiences on the abstract conceptualization; and (4) the last stage of making a draft of writing, editing, publishing (writing) at the active trial stage.

2. The attainment of need analysis result to the teachers and the students that all the teachers (100%) stated the need of developed teaching materials in accordance with curriculum 2013 in the learning process and most of the learners (90.62%) claimed the need of developed experience-based teaching materials in the learning process.

3. The students’ average acquisition in experienced-based explanatory text writing test before using the developed material was 77.66 while the average obtained after using the material was 90.15. This proves that the students’ learning outcomes in the experienced-based explanatory text writing test increased by a difference of 12.49.

CONCLUSION

Based on the formulation, objectives, results, and discussion in the development research of teaching materials experienced-based explanatory text writing on the students of class XI of SMA Negeri Unggul Aceh Timur previously mentioned can be summarized as follows:

1. The product developed in the form of developed teaching materials of experienced-based explanatory text writing module entitled "Experienced-Based Explanatory Text Writing" for students of Class XI is qualified and deserved to be used as an individual resource. Based on the assessment of materials expert, design learning expert, learning media expert, student responses on individual test, small group test, and limited field test of the module of developed teaching materials are categorized as very good so they are acceptable and worthy as the textbooks.

2. The use of teaching materials in the form of experience-based modules can improve the learning achievement when compared with without using it. It is shown from the results of the students’ learning using a higher module than the students’ learning achievement learned without using the module.
REFERENCES


