DEVELOPMENT OF DISCUSSION TEXTUAL TEACHING MATERIALS BASED ON THE FINDING ON STUDENTS CLASS VIII SMP NEGERI 4 MEDAN

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ABSTRACT: *This study aims to find out about the results of the development of discussion textual writing teaching material based on the finding in the seventh grade students of SMP Negeri 4 Medan. The research method used is research and development research and development (R & D) proposed by Vienna Sanjaya refers to Borg & Gall model. The trial subjects consisted of 3 students with individual trials, 9 students with small group trials, and 32 students with limited field trials. Technique of data collection used observation, interviews, questionnaires, and test of writing text. The results showed that: (1) material expert validation includes content feasibility with an average of 89.84% on very good criteria, presentation feasibility with an average of 88.46% on very good criteria, and language assessment with an average of 90.38% on very good criteria, (2) validation of design experts with an average of 92.08% on very good criteria, (3) teacher response with an average of 89.17% on very good criteria, (4) individual testing with an average of 76.39% on good criteria, (5) small group trials with an average of 81.94% on very good criteria, and (6) limited field tests with an average of 92.77% on very good criteria. The result of discussion textual writing test before using the module is 70,87%, while the result of the test of writing discussion text of the student after using the module increased by 80,09%. The difference is 9.22%. from before to after using the module. This proves that teaching materials to write discussion texts developed can improve student learning outcomes by using discovery-based learning.*

KEYWORDS: Teaching Materials, Discovery-Based Learning, Development, Discussion Texts

INTRODUCTION

One of the demands of the Teacher Law Number 14 Year 2005, Article 8, requires Teachers to be able to develop innovative teaching materials in accordance with the curriculum, the development of student needs, as well as the development of technology and information. The demands of the Law are in line with Yaumi's opinion (2013:247) which stated that Teachers are not just as learners who in their everyday teaching would stand in front of the classroom to present the material, but also as developers of learning as well as developing learning materials.

The big demands and roles imposed on teachers indicate to perform an interview with Indonesian teachers in order to obtain information and facts that exist in SMP Negeri 4 Medan. The interview was conducted to Mrs. Dra. Lince Rismauli Siahaan, M.Pd and Mrs. Krista Purba S.Pd as Indonesian language teachers at SMP Negeri 4 Medan. Based on the results of interviews, information and facts that Indonesian teachers in SMP Negeri 4 Medan still rely on textbooks of curriculum 2013 provided by the government as the only source of student learning.

The results of interviews on teachers also revealed the facts about some shortages of teaching materials used in SMP Negeri 4 Medan. Based on the results of the interviews, it was found that the teaching materials used in SMP Negeri 4 Medan, the textbooks of curriculum 2013, has unexplained text sample content. In addition, text learning in the textbook of curriculum 2013 only applies a general seintific approach without applying specific learning methods or models in the presentation of material in textbooks to facilitate student understanding.

The development of teaching materials will also have an impact on the development of learning materials. the highest basic competencies that must be achieved by students in curriculum 2013 in class VIII is basic competence 4.2 which is to produce discussion text both oral and written. This is because this basic competence is the most productive basic competence, which is to produce a writing. Discussion text lessons will provide an opportunity to develop a sense of ability. Techniques used in the discussion text include the use of thought, provoking questions, analysis point of view and repetition of words, phrases and concepts.

The problems that have been described above make the researchers to develop teaching materials to write discovery-based discussion text, the goal is so that students could more easily explore his ideas into writing through teaching materials to be arranged in the form of modules. Development of teaching materials in the form of modules is one of the innovations that support learning Indonesian language because it has advantages namely: students can follow the learning activities in accordance with the speed and ability alone, Module can be used anytime and anywhere, thus students' activity can increase, students could know their own learning outcomes.

Discovery is one way of learning or review in nature of seeking to solve problems in a critical, analytical, and scientific way by using certain steps toward a conclusive conclusion because it is supported by data or reality. The implementation is that teachers divide the task to students to examine a problem in class. Students are divided into groups, and each group gets a certain task. They study, research, or discuss their work within the group. After that, they discussed it and made a report. By using this technique, the teacher has a goal, namely students are encouraged to carry out the task and actively seek for themselves and examine the problem solving. They searched for their own resources and studied with the group. They must express their opinions and formulate conclusions.

The main objective of the learning model of the invention is to develop knowledge mastery, which is the result of data processing or information. In this activity, students are actively involved in the process of finding out to be able to interpret information, distinguish between right and wrong assumptions, and view a the correct ones and its relationship to various situations. So, the students not only have information, but furthermore, students put themselves as a scientist who conducts research, thinking, and feel the research environment. In this study, researchers designed the teaching materials in the form of valid modules used by teachers and students in the learning process in accordance with the characteristics of students and potentials that exist in schools so as to improve creativity and student learning outcomes.

LITERATURE REVIEW

Teaching Materials

Teaching materials is one source of learning which is very instrumental in the learning process. Majid (2011:173) "teaching materials are all materials used to assist teachers/instructors in carrying out teaching and learning activities." The teaching materials can be either written or unwritten. The same opinion is stated by Hamdani 2011:120 "teaching materials are all forms of materials or materials systematically arranged that are used to help teachers or instructors in carrying out teaching and learning activities so as to create an environment or atmosphere that allows students to learn." Another opinion, National Center for Competency Based Training (2007) in Prastowo (2015:16), teaching materials are all forms of materials used to help teachers or instructors in carrying out the learning process in the classroom.

Based on the above opinion it can be concluded that the teaching materials are all materials (both information, tools, and text) arranged systematically, which displays the complete figure of competence that will be mastered by learners and used in the learning process with the purpose of planning and review of learning implementation. for example, textbooks, modules, handouts, worksheets, models or makets, audio teaching materials, interactive teaching materials, and so on.

Module

Majid (2011:176), "suggested that a module is a book written with the aim that learners can learn independently without or with teacher guidance, so the module contains at least about all the basic components of teaching materials. "Other than that delivered by the Ministry of National Education (2008: 13)," learning with a module allows a learner who has a high speed in learning will be faster to complete one KD compared to other learners".

Prastowo (2015:106), "conveyed that a module is a systematically organized learning material with language that is easily understood by students, according to their age and level of knowledge so that they can learn independently with minimal guidance from educators".

Students can measure their own level of knowledge on the material discussed in each module unit, thus if they have mastered it, then they can proceed to one unit of the next level module. Hamdani (2011:219), "module is a tool or means of learning that contains materials, methods, limitations of learning materials, instruction in learning activities, exercises and how to evaluate systematically designed and interesting to achieve the competencies expected and can be used independently ". In line with this opinion, Tanjung, Daulay and Ghafari conclude, "module is teaching material arranged systematically that consists of material, method, border of learning material, learning activity instuctions, exercise and evaluations that can be used by students independetly". D Russel (in Sumiati and Asra, 2016:114), module learning system is:

> A module is an instructional package dealing with single conceptual unit of subject matter. It is attempt to individual learning by enabling the student to master one unit of contents before moving to another. A multy media learning experiences are often presented in a self instructional format. The student controles the rate and intensity of his study….. The student can take it to the library, to a study carrel or to home. The length may very from only a few minutes of student time to several hours. The module can be used individually or combined in a variety of different sequences.

Based on the opinions above there are important things in defining the module of self-learning materials, helping students master their learning objectives, and program packages are structured and designed in such a way for the benefit of student learning. So it can be concluded that the module is a package of programs that are structured and designed in such a way as independent learning materials to help students master their learning objectives. Therefore, students can learn according to their respective speed.

Writing Discussion Text

Writing is finding or describing graphic symbols depicting a language understood by someone so that others can read the graphic symbols if they understand the language and graphic picture in question (Tarigan 2008:22). While Semi (2007:14) writing is a process of stringing letters or numbers with a sign of language so that it becomes a writing that can be understood by readers. Nurgiyantoro (2001:271) revealed that writing is an active, productive, complex, and integrated language skill in the form of disclosure and manifested in writing.

Wiyanto (2000:1), defined "the word discussion comes from the latin discussio, discussi, or discussum which means to examine, talk about, discuss. Kemendikbud (2014:89), discussion text is a text that contains a discourse that contains about a problem. Discussion text discusses a problem issue that contains two arguments namely supporting arguments and opposing arguments. The problems presented in the discussion text will be discussed based on the two points of view.

Sumiati and Asra (2016:141) revealed that discussion text is one of learning so that students can share their knowledge, views, and skills. The purpose of the discussion is to explore different opinions or views and to identify possibilities. Furthermore Davis (1993); Brookfield and Preskill (1999), a discussion text learning system is:

> Discussions can be an excellent strategy for enhancing student motivation, fostering intellectual agility, and encouraging democratic habits. They create opportunities for students to practice and sharpen a number of skills, including the ability to articulate and defend positions, consider different points of view, and enlist and evaluate evidence.

Based on the opinion of the experts above can be concluded that discussion text is a writing that helps students to think critically. Discussion text discusses an issue with arguments or opinions that either support or oppose. The issue ends with a conclusion and recommendations or suggestions from the writer.

Structure of Writing Discussion Text

The structure of writing discussion text includes issue, argument consisting of supporting argument (pro) and counter argument (contra) and conclusion or suggestion, below is the graph of discussion text structure according to Kemendikbud (2014:91).
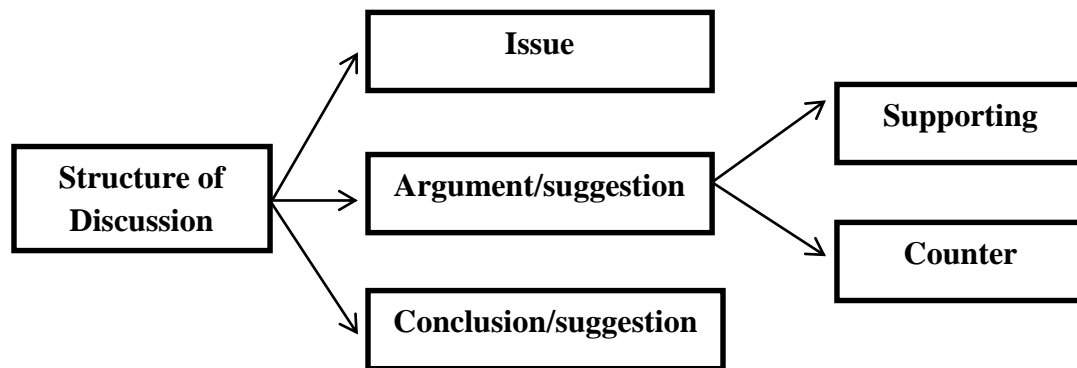
Figure 2.1: Discussions Text Structure Chart Kemendikbud (2014:91).

Part of discussion text structure can be explained as follows.

a. Issue

A discussion begins with a brief introduction to describe the situation. This introduction contains multiple points of view. Issues in the discussion text contain issues that will be discussed or discussed further.

b. Argument

An argument contains an opinion that will be presented. The argument consists of supporters (pro) containing support and opposition (contra) containing refutations or responses contrary to the issues discussed.

c. Conclusion or Suggestion

Is the final part of the discussion text that contains the conclusions and suggestions in the form of a way out of a problem.

FINDING (INQUIRY)

The inquiry approach is a series of learning activities that emphasize critical thinking and analytical thinking, to seek and find out for themselves the answer to a questionable problem (Sanjaya, 2008:196). Gulo (2008:86) Inquiry approach means a series of learning activities that involves maximally all students' ability to search and investigate systematically, critically, logically and analytically, so as to formulate their own findings confidently.

Bransford, Brown, & Cocking (2000), "The inquiry-based teaching approach is supported on knowledge about the learning process that has emerged from research." Prince and Felder (2006), "Inquiry-based learning falls under the realm of 'inductive' approaches to teaching and learning, an excellent review of which is provided." Basyiruddin Usman quoted by Istarani (2012:132) said that inquiry is a way of teaching lessons by examining something that is critical, analytical, and argumentative (scientific) by using certain steps toward a conclusion.

Based on the opinion of the experts above, it can be concluded that the approach of inquiry is a student-centered strategy where the group of students looking into an issue or seeking

answers to the content of questions through clearly defined procedures and inquiry which can improve understanding of concepts and develop students' critical thinking skills that are good to apply in learning.

METHODOLOGY

This research was conducted in SMP Negeri 4 Medan in grade VIII students. The study was conducted in the odd semester of January 2018 until February 2018. This research type is research development of Research and Development (R & D). The process stages in the development of learning based on Borg and Gall model. The instruments used in this study to collect the data are grouped into 2 kinds: (1) expert team validation instrument of teaching materials writing discovery-based discussion text with validation sheet of subject matter validation material and questionnaire validation of instructional design, (2) students and teachers to the teaching materials are: individual trials 3 people, small group trials 9 people, field trials limited to 35 people and responses by Indonesian language teachers 2 people. The data obtained is data about the state of Indonesian language learning materials on discussion text material. This data is collected through expert validation, questionnaires distributed to students. Research instruments for individual validators and trials, small groups and limited field groups are created in the form of a likert scale that has been scored as in the table below.

Table 3.5 Criteria of Answers in Instrument of Validation Item with Likert Scale

No	Answer	Score
1	Very good	4
2	Good	3
3	Not good	2
4	Not good	1

(Sugiyono, 2016:93)

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

$$\text{Percentage of questionnaire score} = \frac{total\ scores\ obtained}{total\ ideal\ scores} \times 100\ \%$$

From the calculation results using the above formula produces a number in percent form. The score classification was then converted to classification in percentage form. Sugiyono (2011:118) then further interpreted with qualitative sentences

DISCUSSION OF RESEARCH RESULTS

This development study was conducted with the aim of producing a product in the form of a discovery-based module on discussion text material. The process of research development was done based on several stages namely (1) needs analysis and curriculum analysis and the results of the analysis obtained data that the students desperately need teaching materials. (2)

designing teaching materials. (3) developing discovery-based teaching materials. (4) validate material and design experts. (5) conducting individual trials, small groups and limited field.

Teaching Materials Needs

Before developing the teaching materials first perform the stages of needs analysis. From this stage, it is found that only 78.12% of students have not understood the material of the discussion text, 93.75% of students stated that all this time they only use the teaching material of government issue without any other handbook. And 90.62% of students need other teaching materials, especially teaching materials that contain discovery.

The results of the analysis show that the content of low discussion text is mainly on the text structure and linguistic rules. This is evident when students find it difficult to distinguish the discussion text structure with the review text. When the description on the part of another number stated the thesis is part of the discussion text structure 90.62% of students also agreed. Thus it can be concluded that students have not been able to understand the differences in the structure of the discussion text with other texts, the language aspects of discussion text, students also still do not understand. Students are still confused between pro sentence and contrary sentence. Students do not understand the type of text that uses both sentences. As a result students assume both types of sentences used in the discussion text.

The result of requirement analysis also shows that during this time learning in school only use textbook from government without any book companion. Students stating the availability of other teaching materials will help students to learn other examples of the discussion text. 68.75% of students stated that teaching materials that have been used in schools have not fulfilled their needs in studying discussion texts. Students need teaching materials that contain fuller discussion text materials, varied discussion text examples, exercises that can train their skills, and guidelines for writing discussion texts.

The selection of the discovery base in developing this module is aimed to enable students not only to understand the subject matter of the text while using this module, but also to understand the social and the nature around them.

Based on the above exposure it can be concluded that the teaching materials used during this time in school has not been in accordance with the needs of students. Therefore the development of discovery-based discussion text materials will certainly help students to study the discussion text.

Teaching Materials Feasibility

The content feasibility aspect obtained an average of 88.09% with very good category. Validation results indicate that the indicators and learning objectives developed are in accordance with the Core Competencies (KI) and Basic Competence (KD) contained in curriculum 2013. The material presented is also in accordance with KI and KD. Thus, the material contained in teaching materials, especially the discussion text can be used by teachers and students in learning.

The aspect of feasibility of presentation is averaged 89.05% with very good category. Validation results indicate that the presentation of learning has started from easy to difficult. It also shows the questions in each chapter, practice questions at the end of each chapter,

introduction, glossary and bibliography. Thus, in terms of presentation of this teaching materials it can be used by teachers and students in discussion text learning.

Aspect of language obtained an average of 90.09% with very good category. In accordance with government regulation No. 2005 on National Education Standards that teaching materials are said to have the language feasibility when the language offerings in it have 1) comformity with the level of development of targeted readers, 2) communicative, 3) language accuracy, 4) demands and unity of ideas. From the assessment given by the validator states the language used in the material is in accordance with the rules of the Indonesian language is good and true, communicative and easy to read and easy to understand. Thus, it can be concluded that the developed teaching materials can be used by teachers and students on learning discussion text.

The average score is obtained after the revision of the validator. Improvements in teaching materials developed are the addition of material and word selection on the contents of the module. The validator revises the material for the invention to be submitted to the module so that students know the meaning of the invention itself. In addition there are some improvements in the selection of words that are less precise on the contents of the module. Another improvement is to present the assessment guidelines at the end of each activity.

The results of design expert validation on the discovery-based discussion text design show that the module size has an average percentage of 93.75%, the module cover design with an average of 88% and the module content design with an average of 94%. All three subcomponents are in very good category.

Based on the above description of the assessment of material experts and design experts, it can be concluded that the discovery-based discussion text material designed for students of class X SMP Negeri 4 Medan is categorized as very valid and fit for use in learning discussion text. This can be seen from the validation questionnaire given to 4 expert lecturers. Thus, teaching materials can already be piloted to students to see the practicality and effectiveness of the modules that have been developed.

In accordance with the Borg & Gall Research and Development Flow, the trials conducted on students include 3 stages: individual trials (3 students), small group trials (9 students) and limited field trial (32 students). In the individual trial, the average score of 76.39% was obtained with good category. At this stage there is some writing that needs to be improved. In the small group trial obtained an average of 81.94% with good category. Then a limited field trial obtained an average of 92.77% with very good category. Based on these data, it can be concluded that discovery-based discussion text teaching materials can be used by teachers and students in terms of ease of use, suitability, and attractiveness.

Effectiveness of Teaching Materials

The effectiveness of teaching materials is seen from the students' learning outcomes using the instructional materials that have been designed. Learning outcomes are derived from the score of writing a discussion text test. The test is given to 32 students before (pretest) and after (posttest) using module teaching materials. The result of the analysis shows that the average pretest score of 70.87% with sufficient category and the average score of the final test (posttest) is 80.09% with good category. If viewed individually, there are 19 students worth under mastery with fair category and less. While the postest there are 5 students whose score is under mastery with sufficient category. Based on the test for the work it is known the causes of non-completion of students in writing discussion text is the lack of understanding of discussion text

structure of the observation report and lacks of ability to develop the contents of the topic described.

The difference in percentage increase from pretest is 9.22%. Improved preliminary test results to the final test is the evidence that teaching material for discovery-based discussion text is effective if used by teachers and students on discussion text material.

CONCLUSION

The results of the research and discussion in the development of teaching materials of discussion text writing based on this invention can be summarized as follows:

1. The result of requirement analysis shows that 78.12% of students have not understood the material of discussion text, 93.75% of students stated that all this time they only use the material published by the government without any other handbook. And 90.62% of students need other teaching materials, especially multicultured teaching materials.

2. Product of discovery-baseddiscussion text writing developed for students class VIII SMP Negeri 4 Medan are basing on the required needs and feasible to use. This is evidenced by the validation of expert material that includes the feasibility of the contents with an average of 89.84% on the criteria of very good, the feasibility of deliveries with an average of 88.46% on the criteria of very good, aspect of language with an average of 90.38% on excellent criteria and design expert validation with an average of 92.08% on very good criteria.

3. The use of teaching materials to write discovery-based discussion text is more effective than textbooks that students use. This is evidenced by the results of better student learning that is the use of textbooks (pretest) 70.87% with sufficient category and the use of multicultural based learning materials (postest) of 80.09% with good category.

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