MEDIA LEARNING DEVELOPMENT IN WRITING COMPLEX PROCEDURE TEXT BASED ON INTERACTIVE MULTIMEDIA FOR X GRADE STUDENTS OF VOCATIONAL SCHOOL (MULTI KARYA MEDAN, INDONESIA)

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ABSTRACT: *This Rresearch aims to: (1) describe the results of learning media development of writing complex procedure text based interactive multimedia for X grade students of Vocational School Multi Karya Medan,(2) describe the advisability result of learning media development of writing complex procedure text based interactive multimedia for x grade students of vocational school multi karya medan,(3) describe the learning result of writing complex procedure text by using learning media of writing complex procedure text based interactive multimedia for x grade students of Vocational School Multi Karya Medan. Learning media are developed based on interactive multimedia in the form of interactive learning CDs. This research method is Research and Development (R & D) with DDD-E model (Decide, Design, Develop, Evaluate). The subjects consists of material experts, designers of instructional media, Indonesian language teachers, students of Vocational School Multi Karya Medan in individual trials consisting of 3 students, 9 students in small group trials, and 35 students for group trial of limited field. Data on the quality of this development product are collected through a questionnaire. The results show that: (1) validation of material experts with an average of 85.25% on very good criteria; (2) validation of learning media design experts with an average of 91.25% on very good criteria, (3) teacher's response with an average of 89.17% with very good criteria; (4) individual trials with an average of 75 % on good criteria, (5) small group trial with an average of 82.5% on very good criteria, and (6) limited field group trial with an average of 93% on very good criteria. The learning result of students's writing test of complex procedure text before using the learning media of 73.85, while the learning result of the writing test of complex procedures text of students after using learning media increases 86.05. The difference is 12.2 from before to after. This proves that the learning media of writing text of complex procedures based on interactive multimedia developed can improve student's learning outcomes.*

KEYWORD: Learning Media,Complex Procedure Text, Interactive Multimedia

INTRODUCTION

Writing is one of the language skills in the 2013 curriculum that students must have. By mastering the skills of writing, students can convey and organize ideas, opinion, and thoughts into a paper, so it can be accepted by others. Tarigan (2005: 4) states that writing skills is the most complex language activities because in it there are activities that are expressive and productive. Therefore, writing activities should be done with repeated exercises. This exercise is intended to train the development of students' intuitive power and creativity to produce meaningful writing.

One of the competencies in Curriculum 2013 which emphasizes on writing skill is found in the material of X class, basic competency 4.2 that is producing complex procedure text. Based on the basic competency, students should be able to write text of complex procedures in accordance with predetermined topics. The text of complex procedures is a text that explains the complete, clear, and detailed steps about how to do something (Kosasih, 2016: 67). The learning of writing complex procedures text is not only focused on writing down the steps, but also it is focused on the structure and rules of language in the complex procedures text.

In fact, the learning activities of writing complex procedure text do not always work out. This is evident from the observation made by Wiraatmajaya and friends on October 21, 2014 at State Vocational School 1 Singaraja in a research entitled, "The Use of Serial Drawing to Improve Writing Ability of Complex Procedure Text on X Grade Students of Accounting A State vocational School 1 Singaraja", that of 30 Students, the average value of students in writing the text of complex procedures is still lower than minimum of criteria of mastery learning, which is 65. While minimum of criteria of mastery learning of Indonesian Language and Literature subject in X class is 75. It reinforces the paradigm that the mastery of learning to write the text of complex procedures is still not achieved. This condition indicates that the students' understanding in learning to write the text of complex procedures is still low, causing student's learning outcomes also tend to be low.

The lack of learning media used by teachers is one of the problems that become obstacles in the learning process. This situation can not be separated from the less developed innovative learning media and appropriate to the student's needs. This is in line with Prastowo (2015: 14) which states that educators seem to be less in developing their creativity to plan, prepare, and make the teaching materials to make the student interested. Teachers generally only provide and use teaching materials or media that are monotonous or already available, so eventually the students will be bored during the learning process and it will be ineffective and efficient in the learning process.

Therefore, teachers need to develop a learning medium that is able to stimulate the students' minds and interests in learning to write complex procedures text. In order to achieve these goals, researcher has the initiative to develop interactive multimedia based learning media as one effort that can be done to arouse the student's interest and attention in writing complex procedures text by using interactive multimedia. Interactive multimedia is a learning tool or means that contains learning materials and evaluations that are designed systematically and interestingly to achieve subject competence (Susilana and Riyana, 2009: 126). Interactive multimedia contains text, images, animations, sounds, and videos that can interest students' learning. Interactive multimedia aims to describe and facilitate the presentation of the material, overcome the limitations of time, and can be used appropriately and varied.

The formulation of the problem in this research are: (1) How is the result of the learning media development of writing complex procedure text based interactive multimedia for x grade students of vocational school multi karya medan?, (2) How is the advisability result of learning media development of writing complex procedure text based interactive multimedia for x grade students of vocational school multi karya medan?, (3) How is the learning result of writing complex procedure text x grade students of Vocational School Multi Karya Medan.by using learning media of writing complex procedure text based interactive multimedia?

REVIEW OF LITERATURE

Complex Procedure Text

The text of complex procedures is a text that describes or explains the steps in doing something. (Kosasih, 2016: 67) explains the definition of complex procedure text as a text that explains the complete, clear, and detailed steps about how to do something, in this case about the way or the trick to learn effectively. (Education and culture ministry, 2014: 36) states that the text of complex procedures contains steps that must be taken to achieve the goal. Dirgeyasa (2016: 98) states that the text of complex procedures is a text that is made to explain how something is achieved in a sequence based on certain actions or steps. It explains how someone's different processes works in a sequence based on the steps taken.

The complexity of a text procedure can be seen from the explanation contained in each step. That explanation makes the text of complex procedures 'complex'. The explanation of each step of a complex procedure text is required in order that the actions taken at each step are easily understood. The complexity of a procedure can also be seen from how many steps in a procedure text (Education and culture ministry, 2014: 40). Based on the opinion of these experts, it can be concluded that the text of complex procedures is a text that contains steps to create or do something that has a stage at each step to achieve certain goals.

The text structure of complex procedures according to Kosasih (2016: 68) consists of goals, steps, and closing. Education nd culture ministry (2014: 39) also describes the text structure of complex procedures consisting of goals and steps. Meanwhile, Dirgeyasa (2016: 101) divides the text structure of the procedure into four parts, namely topics and statements of purpose, materials, sequence of steps to explain the way of activity, and closing. Based on the description above, it can be concluded that the text structure of complex procedures consists of goals, steps, and closing.

Learning Media

Media is derived from Latin and is the plural of the word "medium" which literally means "intermediary" that is the intermediary of the message source by receiving the message (Susilana and Riyana, 2009: 6). This is also in line with the opinion of Sadiman and friends (2014: 6), which states that the media is an intermediary or messages sender from the sender to the message recipient. In addition, the media is everything that can be perceived and function as an intermediary / means / tool for the Communication process (Rohani, 1997: 3). Media also means tools that can simplify the job (Rusman, 2013: 159). Based on the opinion of the experts above, it can be concluded that the media is the channel of information from the sender to the recipient of the message as a tool that facilitates the work.

As a means of channeling messages, media can be considered as a medium of learning to achieve learning aim. Similarly, the opinion of Scramm in (Rusman, 2013: 159) which states that the media is a messenger technology that can be functioned for learning needs. Media is also a vehicle for channeling learning information. Media used in the learning process is called learning media. Learning media is a physical means to deliver the subject matter, both in print and electronic devices.

Based on the description above, it can be concluded that the learning media is an integral component of the learning system. it means that learning media can not be separated from the

learning process. Without learning media, learning process can not happen. Each teaching and learning process requires the selection and use of at least one medium to transfer learning.

Rusman (2013: 163) states that learning media has a very strategic function in learning, namely: (1) as a tool in the learning process, (2) as a component of learning sub-system, (3) as a guide in learning, (4) As a game or to arouse students' attention and motivation, (5) to improve learning outcomes and processes, (6) to reduce verbalism, and (7) to overcome the limitations of space, time, energy, and sense power.

Based on the presentation and presentation manner, Susilana and Riyana (2009: 14-24) classify media types in seven groups, namely: (1) graphic media, printed materials and images, (2) silent media projection, (3) Audio media, (4) silent audio visual media, (5) motion picture, (6) television, (7) multimedia.

Interactive Multimedia

Wati (2016: 129) states that multimedia is the unification of various forms of information elements used as a means to convey certain purpose. Information Elements include text, graphics, images, photos, animation, audio, and video. The same thing is expressed Susilana and Riyana (2009: 22) that multimedia is a delivery system by using various types of learning materials that form a unit or package and Rusman (2013: 150) states that, "Multimedia can be interpreted as a technology that optimizes the role of computers as media that displays text, sound, graphics, video, animation in an integrated and interactive display.

In the context of learning communication, Rusman (2013: 140) mentions that, "Multimedia can be viewed as a computer utilization to create and combine text, graphics, audio, moving images (video and animation) by combining links and tools that enable the user to navigate of Interacting, creating, and communicating". Completeness of media in multimedia technology involves the utilization of all the five senses, so the imagination of creativity, fantasy, and emotions of students develop to be better. Based on the opinion of the experts above, it can be concluded that multimedia is a tool that combines a variety of media, such as text, graphics, animation, audio, and video used as a means to convey a certain purpose.

Rusman (2013: 151-152) states some objects owned multimedia, including: text, graphics, sound, video, hybryd, and animation and Wati (2016: 129) devides multimedia into two categories, namely multimedia linear and interactive multimedia. Multimedia linear is a multimedia that is not equipped with any controler tool that can be operated by the user. For example is television and film. Interactive multimedia is a multimedia equipped with controler tools that can be operated by the user.The controller tool functions so that users can choose what they want for the next process. For example aplication of learning media from both multimedia categories, interactive multimedia is the right media used in learning. As Rusman (2013: 143) states that, "Interactive multimedia is the best medium and source that can be used as a source of communication media" because the most important thing in the media is that students not only pay attention to media or objects but the students are also required to interact during Learning.

Rusman (2013: 144) mentions that there are three kinds of interaction criteria in learning media, The first interaction is students to interact with a program, for example students are asked to fill the paper on program of learning materials. The second interaction is the students to interact with computer media, for example Interactive CD, simulators, computer laboratory, or a

combination of them in the form of interactive video. The third interaction is to manage the interaction between students regularly but not programmed. For example it can be seen in various educational games or simulations involving students in activities or issues that require them to cooperate with groupmate in solving the problem.

Based on its structure, the elements of composing interactive learning media can be divided into two kinds, namely interactive CDs and people (Prastowo, 2015: 333). The structure of learning media in the form of interactive CD includes six components, namely: (1) title, (2) learning guidance, (3) basic competence or subject matter, (4) supporting information, (5) training, and (6) assessment. While the structure of interactive teaching materials in the form of people includes seven components, namely: (1) title, (2) learning guidance, (3) basic competence or subject matter, (4) supporting information, (5) practice, (6) assignment and (7) assessment. Musyaffak (2014: 3) mentions several stages in the process of making interactive CDs: (1) creating intros, (2) preparing background images and buttons; (3) importing background and icon images; (4) creating scenes; Intro menu, (6) designing main menu, (7) converting icon into button, (8) making button animation, (9) creating video menu, (10) inserting video, (11) making button navigation with action script, (12)) Creating a music menu, (13) creating the cursor by self, (14) creating autorun, (15) publishing, (16) CD burning, (17) designing CD label, and (18) designing label cover.

METHODOLOGY

This research type is research of development (Development and Development) where learning media development of writing complex procedure text for X class student by using DDD-E model (Decide, Design, Develop, Evaluate). The trial subjects consist of 3 students on individual trial, 9 students in small group trials, and 35 students on a limited field trial. Data collection techniques use observation, interviews, questionnaires and the writing tests of complex procedures text.

DISCUSSION

Description of Beginning Product

Based on the results of needs analysis can be concluded that the development of learning media based interactive multimedia is needed by teachers and students in the learning process. It is seen from 100% of teachers and students claiming to require learning media based interactive multimedia and the results of oral interview with Indonesian teachers also states that they need learning media based interactive multimedia to support the learning process, especially in material of writing complex procedure text so that students are more interested And understand how to write complex procedures text.

Data Description of Trial Result of Learning Media Based on Interctive Multimedia

The validation results of learning media by the material expert is stated "very good" .The validation results include 3 aspects of the assessment, the content advisability, advisability of presentation, language assessment, and graph. The assessment results of the content advisability aspects are stated "very good" with an average percentage of 87%. The assessment

of the advisability of the presentation is "very good" with an average percentage of 88%, the language assessment aspect is "very good" with an average percentage of 85%, and the aspect of the graph assessment is "very good" with average of 81%.

The validation results of learning media by designers of learning media is stated "very good". The results of the advisaibility assessment of the content are stated "very good" with an average percentage of 88%. The assessment of the advisability of the presentation is "very good" with an average percentage of 94%, the programming assessment aspect is "excellent" with an average percentage of 92%, and the aspect of the graph assessment is "average" with average of 91%.

The results of Indonesian teacher validation on the quality of leaning media based interactive multimedia are in the "very good" category with an average of 85%. Assessment of advisability aspect of content and presentation, is in the criteria "very good" with percentage 87,6%, from language advisability aspect, is in "good" criterion with percentage 77,6%, from graph aspect, is in criterion "very good" with a percentage of 89.8%, from the language advisibility aspect is in the category of" very good" with the percentage of 89.8%.

The results of the trial assessment of the students are conducted in 3 processes: individual trial (3 students), small group trial (9 students) and limited field trial (35 students). The acquisition of individual trial results is "good" with an average percentage of 75%. The acquisition of small group trial results is "very good" with an average percentage of 82.5%. The acquisition of a Limited Field Trial result is "very good" with an average percentage score of 93%.

Based on the discussion of the results of the research described above, it can be concluded that the results of learning media development of writing complex procedures text for the advisability of learning media is considered very feasible because it is in the category of "very good" and for student's learning outcomes it is considered able to improve student's learning outcomes in writing Complex procedures text with the category "very good".

Student's Learning Outcomes

After getting learning by using learning media of writing complex procedure text based interactive multimedia, student's learning outcomes before and after using the learning media experiences a significant increase of 12.2%. It is known that the average score of students before (pretest) uses learning media based interactive multimedia of 73,85 and average score after (posttest) 86,05. Therefore it can be concluded that learning uses learning media of writing complex procedure text based interactive multimedia can improve student's learning outcomes in the subjects of Indonesia language especially on the material of writing complex procedures text.

Discussion of Learning Media Development Result of Writing Complex Procedure Text Based on Interactive Multimedia

The result of product development from learning media based interactive media is interactive multimedia CD that has outline as the followings: (1) opening section, contains welcome and entry button in learning media; (2) the contents (menu), contains competency standards and basic competencies, indicators and learning objectives, material of complex procedures text (definition, structure, rules, writing steps, video, text examples), instructions, profiles, and literature; And (3) closing section, containing evaluation (quiz / exercise questions) and evaluation results (score). The development of learning media based interactive multimedia

encompasses several components of media such as text, images, animation, audio, and video. It also include element combination into integrated parts, so it produce learning media that is coherent and easily understood by the students.

The result of this learning media development receives a good response for teachers and students. This is seen from the results of needs analysis conducted, where all students and teachers (100%) states require that learning media based interactive multimedia as learning media alternative. Teachers' responses to learning media based interactive multimedia are on "very good" category with an average of 85% percentage.

Benefits derived from the use of learning media is the concept presented easy to be learnt, understood and systematic. Learning media gives students the opportunity to learn based on their own ability independently, to learn more focus and not cause boredom because it is furnished with material, examples of text, illustrations, pictures, videos, and practice question. In addition, there are also results of the evaluation obtained by students to find out how far the students' understanding of learning materials.

Discussion of Feasibility of Development of Media of Writing Text of Writing of Interactive Multimedia Based on Complex Procedure

The Product of learning media development of writing complex procedure based text based interactive multimedia developed by paying attention into the aspects of learning materials and learning design. The Research of development has been done is directed to produce a product in the form of learning media based interactive multimedia on learning of writing complex procedure text for X grade students State Vocational School SMK Multi Karya Medan used to improve the learning process and competence of learners.

Therefore, in the process this research is done by first conducting preliminary study, then designing the product in the form of learning media, product validation, revision and refinement based on validation data analysis from material expert, design expert of learning media, followed by individual trial, Small group trials, and limited field trials to produce appropriate learning media to be used in accordance with the characteristics of subject and students as users.

The revised and perfected aspects are based on data analysis, experimentation and input from material experts, designers of learning media and students as users of this learning media. Learning media variables have a very good average value. There the learning media variables assessed include the advisability of the content, presentation, language, and graph. The validation result of learning media product of writing complex procedure text based interactive multimedia conducted as follows:

1. The validation results of learning media by the material experts stated "very good". Validation results include 3 aspects of the assessment. they are the content advisability, advisability of presentation, language assessment, and graph. The results of the assessment of the content advisability aspects are stated "very good" with an average percentage of 87%. The assessment of the advisability of the presentation is "very good" with an average percentage of 88%, the language assessment aspect is "very good" with an average percentage of 85%, and the graph aspect is "very good" with total of the average percentage of 81%.

2. The validation results of learning media by the instructional media design experts are stated "very good". The results of the assessment of content advisability aspects are stated "very good" with an average percentage of 88%. The assessment of the advisability of the presentation is "very good" with an average percentage of 94%, the programming assessment aspect is stated "very good" with an average percentage of 92%, and the assessment aspect of graph is "excellent" with average percentage of 91%.

3. The results of the trial assessment of the students are conducted in 3 processes: individual trials (3 students), small group trials (9 students) and limited field trials (35 students). The acquisition of individual trial results is "good" with an average percentage of 75%. The acquisition of small group trial results is "very good" with an average percentage of 82.5%. The acquisition of a Limited Field Trial result is "very good" with an average percentage score of 93%.

Based on the discussion of research result, it can be concluded that the results of learning media development of writing complex procedures text for the advisability of learning media is considered very proper because it is in the category of "very good" and for student's learning outcomes it is considered able to improve student learning outcomes in writing Complex procedure text with the category "very good".

Learning Result Discussion of Writing Complex Procedure Text by Using Learning Media of Writing Complex Procedure Text Based Interactive Multimedia

The learning result of writing complex procedure text for X class students of State Vocational School Multi Karya Medan by using learning media based interactive multimedia is in "very good" category. The result of learning can be seen from the average value obtained by students after using learning media developed. there is the difference of average value of students before and after using developed learning media. The achievement of the average value of student in writing test of complex procedure text before using the developed learning media 73,85, while the average gain after using learning media based interactive media to 86,05. This proves that the students' learning outcomes in writing test of complex procedure text increases to 12.2 score after using learning media based interactive multimedia on complex procedure text as writing material.

Based on the students' learning result, it can be concluded that the learning media based interactive multimedia developed in the material of writing complex procedure text is very helpful for students in writing complex procedure text, and able to improve student learning outcomes.

CONCLUSION

Based on the formulation, objectives, results, and discussion in research of learning media development of writing complex procedure text based interactive multimedia that have been stated before, it can be concluded as follows: The result of product development from learning media based interactive multimedia-based is in the form of interactive multimedia CD developed based on the learning of writing complex procedures text and students needs, where all students and teachers (100%) state that they need learning media based interactive multimedia as Alternative of learning media. In addition, the results of teacher responses to learning media based interactive multimedia are in the category of "very good" with an average

percentage of 85%. The advisability result of learning media development of writing complex procedure text based interactive is considered very proper because all the assessment results are in the "very good" category. The validation results by the material experts are stated "very good" with all aspects of assessment got an average of 81 % and the validation results by the instructional media design experts are "excellent" with all aspects assessment getting an average of 91%. The acquisition of individual trial results is "good" with an average percentage of 75%. The acquisition of small group trial results is "very good" with an average percentage of 82.5%. The acquisition of a Limited Field Trial result is "very good" with an average percentage score of 93%. The learning result of writing complex procedure text for x grade students of Vocational School Multi Karya Medan after using learning media based interactive multimedia is in "very good" category with average value of 86,05 and average value before using learning media based interactive multimedia of 73.85 in the "good" category. This proves that the students' learning outcomes in writing test of procedure complex text increases with 12.2 score difference after using learning media based interactive multimedia on writing material of complex procedure text.

REFERENCES

Dirgeyasa, I Wayan. 2016. *College Academic Writing: A genre-Based Perspective.* Jaarta: Kencana.

Kemdikbud. 2014. *Bahasa Indonesia Ekspresi diri dan Akademik.* Jakarta: Balitbang Kemdikbud.

Kosasih, E. 2016. *Jenis-jenis Teks.* Bandung: Yrama Widya.

Mahsun. 2014. *Teks dalam Pembelajaran Bahasa Indonesia Kurikulum 2013.* Jakarta: Raja Grafindo.

Musyaffak, Ahmad. 2014. *Cara Aktif Membuat CD Interaktif.* Jakarta: Elex Media Komputindo.

Prastowo, Andi. 2015. *Panduan Kreatif Membuat Bahan Ajar Inovatif.* Jogja: Diva Press.

Rohani, Ahmad. 1997. *Media Instruksional Edukatif.* Jakarta: Rineka Cipta.

Rusman. 2013. *Belajar dan Pembelajaran Berbasis Komputer.* Bandung: Alfabeta.

Susilana, Rudi dan Cepi Riyana. 2009. *Media Pembelajaran.* Bandung: Wacana Prima

Tarigan, Henry Guntur. 2005. *Menulis Sebagai Suatu Keterampilan Berbahasa.* Bandung: Angkasa.

Wati, Ega Rima. 2016. *Ragam Media Pembelajaran.* Jakarta: Kata Pena.

Wiraatmajaya, I Gst. Ngurah Adi, I Wayan Artika, Ida Ayu Made Darmayanti. 2014. *Penggunaan Gambar Berseri untuk Meningkatkan Kemampuan Menulis Teks Prosedur Kompleks pada Siswa Kelas X Akuntansi A SMK Negeri 1 Singaraja.* Bali: Universitas Pendidikan Ganesha.