DEVELOPING MULTIMEDIA FOR DESCRIPTIVE PARAGRAPH WRITING USING SCAFFOLDING TECHNIQUE

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ABSTRACT: This study is intended to develop multimedia for writing a descriptive paragraph that can be used as independent learning activities. The procedures cover need analysis to obtain data, developing blueprint and paper-based material, developing the multimedia, validating, and revising the product. The results of product validation are positive. The learning program, which implements scaffolding techniques, is an interesting and easy-to-understand learning material that is expected to be able to develop the students’ writing skill better.

Keywords: multimedia, descriptive paragraph, scaffolding technique

Descriptive paragraph is a paragraph that tells readers “how something looks, feels, smells, tastes, and sounds” (Hogue, 1996:70) and that it “gives an impression of something” (Folse, Muchmore-Vokoun, & Solomon, 2004:122). Descriptive paragraph is one of the first text types taught to students in seventh grade, according to Indonesian’s Standard of Competence and Basic Competence (Ministry of Education, 2011). Learning how to write a good descriptive paragraph is quite important for students because descriptive paragraph can be found not only as short individual text but also as part of other types of texts.

However, despite the importance of descriptive paragraph, observation in the results of descriptive paragraph written by students in junior high school show that many students still have difficulties in putting their ideas in a proper way. The difficulties that they encountered in writing a descriptive paragraph, for example, center around connecting a topic sentence and supporting sentences, grammar, and the mechanics of writing, like spelling and using capital letters.

“Writing skills must be practiced and learned through experience” (Myles, 2002). That is why students need much time dedicated to practice in order to make their writing better. Learning writing should be done not only in class, but also outside the class. However, learning writing at home, where guidance from teachers or tutors is often difficult to get, is not easy. Therefore, in order to help students who need guidance in writing, especially outside class, learning material with sets of guidance to help them learn independently is needed. One of them is by using multimedia program that can be used independently in learning how to write a descriptive paragraph.

Wahono (2008) explained that multimedia is a “combination of text, graphic, animation, sound, and video which are used to deliver messages to the
public.” Using multimedia environment in learning writing can help improve students’ writing ability (Rao, et al., 2009). So that the multimedia material can better guide the students in writing descriptive paragraphs, a technique called scaffolding is used. There are four types of scaffoldings according to Hill and Hannifin (in Way & Rowe, 2004), procedural, conceptual, strategic, and meta-cognitive, which can be used in the creation of multimedia program. They will appear in the form of instructions, feedback, steps on how to write descriptive paragraph, questions, and checklist for self-assessment.

In multimedia material for autonomous learning, the scaffolding techniques can greatly benefit the students because step-by-step instructions that are embedded in the scaffolding technique can act as temporary replacement for teacher’s instruction. By using multimedia material that employs scaffolding techniques as the way to present the material to help students learn writing proper descriptive paragraph, along with giving the product attractive appearance, it is expected that students will be more interested in learning outside class and that it can help them improve their writing skill.

METHOD

The model of development for this project is called ADDIE, which stands for Analysis, Design, Development, Implementation, and Evaluation according to several researchers like Molenda (2003) and Castagnolo (2007). Based on ADDIE model, the procedures of development for the product are (1) doing need analysis to obtain data for product development, (2) deciding participation team; the experts – two lecturers from the English Department, University of Malang – and a number of 7th grade students from SMPN 3 Malang, (3) writing blueprint of the material, which contains the goal, objectives, activities, and time allocation, (4) writing storyboard of multimedia program, (5) deciding the layout for multimedia material, (6) developing multimedia material using, mainly, MS Word and HotPotatoes programs, (7) validating the product – both the expert validation and the empirical validation (tryout) – and collecting data from product validation, (8) revising the product based on the analysis of the data from product validation, and (9) finalizing the product.

The qualitative data are in the forms of comments, critiques, and suggestion from both the experts in product validation and the students in empirical validation or tryout. The data is collected using several instruments, like rubric of assessment for the experts in expert validation and questionnaire for the students in the tryout. After the data is collected, it is separated into two parts, content quality and multimedia quality. The data is put in the form of table in order to make data analysis easier. The result of data analysis is used as basis of product revision.

FINDINGS

Based on the expert validation, the experts deem the product as good enough in terms of content quality, which includes instruction, material, answers and key answers aspects. In the instruction aspects, the instructions for both the
exercises and steps in writing descriptive paragraph are clear and easy to follow. In the material aspect, the explanations to help students understand the structure, the content, and the grammar involved in writing descriptive paragraph is easy and clear. However, the language use in the content need to be checked again. There are also some suggestions made by the expert about the material. The expert suggested that it would be better if the materials also include ‘English across curriculum’ material and activities that lean towards “critical elaboration of ideas”.

In the difficulty aspect in operating the product, both experts deem it quite easy. The key buttons to operate the product are quite easy to operate, the sequences of the program are good and simple, and the instructions are easy to follow. In terms of visual attractiveness, this program is quite attractive and interesting even though there are some parts that need revision. Fonts, pictures, and animations are considered appropriate but some pictures and background need to be adjusted so that they are more gender neutral. Concerning system functionality, the program functions well. Links that connect various pages in the program function quite perfectly. All systems are also integrated well enough that there is no apparent difficulty in operating the program.

In the tryout with a class of seventh grade students, 63.6% of the participants totally agree to consider this program as interesting to use, 54.5% of the participants really like learning to write descriptive paragraph using this program, while 42.4% others, even though they have a little bit qualm over this program, also like using this program. In addition, other comments from the students show that they like this program because it is modern, unique, and give other alternatives in learning that mark it as not boring.

Among all students participated in the tryout, 66.7% of them agree that the explanations are easy to understand. However, 12.1% others rather disagree about that, especially related to the explanations in unit 2. Several students state that due to the language, questions or instructions sometimes are hard to understand. On the other hand, according to questioner, 51.5% of the students totally agree that the level of English is appropriate for their grade, while 33.3% others just agree. It seems that the ones who disagree are the rest 15.2% of them. Related to the descriptive text used in the explanations and exercises, 48.5% of the students decide that the descriptive paragraphs used in the program are easy to understand and also quite interesting to read. The other 45.5% just agree about the statement but holding reserved judgment about it.

Concerning the quality of the product, 51.5% of the participating students agree with some reservation that they can use this program easily, with other 33.3% totally agree without hesitation. Related to the easiness in using the program, 54.5% of the students agrees that control buttons in the program is simple and easy to use.

Concerning instruction in the exercises, 54.5% of the respondents agree that they are easy to understand, though 9.1% others rather disagree about that. Students also express several complain about the exercises. First, they think that it will be better if after answering and getting some answers wrong, they do not need to repeat the exercise but can just move on to the next part. The second is about
the use of time limit, which they think is too short. Third, they want the answer keys shown separately after the exercises. And lastly, they want the score to have bigger font size.

Related to links and backgrounds, 57.6% of the entire respondents strongly agree that all links in the program work perfectly, so they do not come across many difficulties related to malfunctioning links. In addition, 60.6% of the students totally agree that the backgrounds used in the multimedia program are attractive and can make them eager to learn. However, there are some who think otherwise. 12.1% of the students think that the background is not that interesting. Some explain that there is too much color in a page, while the rest suggest adding more cartoon-based background.

Some students also give suggestion about elements to be added to the multimedia program. Some ask for music, while others want some videos for listening exercises. There are also students who want more animated pictures in the program to make it more attractive.

DISCUSSION

Based on the analysis of the data, several conclusions related to the comment are made, and suggestions from experts and students about the program are made. From those conclusions, revision will be made to the program. Conclusion about the content of multimedia program is mostly good. However, based on the data from expert and tryout, several components in the content like the theme, activities, and certain explanations and instructions need to be considered for revision to make the product better. For the quality of multimedia, backgrounds and music will be considered for revision. Not only those, but the exercises components like instruction, time limit, font, and key answers will be too.

About the addition of theme that includes not only about daily life but also about English across curriculum, animal kingdom is chosen as a theme for English across curriculum. This theme is believed to be interesting for students and it also can enrich their knowledge about animal kingdom. However, seeing that the level of this theme is a bit more difficult, only a couple of descriptive texts are added.

Related to the suggestion of Expert 1 about adding activities that lean towards “critical elaboration of ideas”, seeing that this material is a multimedia one and that the purpose is for independent/autonomous learning, also due to the limited skill in programming, those kinds of activities are hard to realize. Critical elaboration of ideas is done mainly by using the worksheet provided. Using the worksheet, students can jot down the descriptions that support the topic sentence and cross out ideas that are not relevant to the topic sentence.

In the matter of explanation and instruction, there are several components of the program that are in need of revision. Those components include language usage and level of difficulties in explanation and instruction. The first revision made is in the matter of language usage. Even though at first the language usage used to explain them is less appropriate, it has been corrected into a more
appropriate one with help of Expert 1, it has also been checked again to minimize language error, and it has been made it easier for students in junior high school to follow the steps in writing descriptive paragraph.

The second revision is related to the level of difficulties in explanations and instructions. From the questionnaire, students express two different opinions. Some claim that the materials and explanations are easy to understand, while the others state that some explanations and instructions are hard to understand, especially in Unit 2. In Unit 2, the part which students seemingly find difficult is the first part. This is because not only the explanation is one of the longest among other units, but it also requires students to read the example paragraph carefully in order to understand about space order. The exercises that followed the explanation also require students to read carefully to determine which space ordering are used in the paragraphs. To help students who find the explanation and instruction for the exercises a bit difficult, both explanation and instruction have been revised. After revision, it is hoped that understanding the explanation and instruction will be easier.

Not only in the explanation and exercises in Unit 2 part 1 that undergo revision, but also several other exercises. For example, the instruction for crossword puzzle is made clearer so that students will not be confused anymore when doing the exercise. The instruction before starting Unit 4 is also added, so that students will not be confused about what they should do in Unit 4. This is done because due to the fully multimedia exercises in Unit 1, 2, and 3, some students think that Unit 4 is fully multimedia too. Because of that, they think that the prompts for writing steps provided are just a type of exercise. Therefore, they do not write their paragraph. That is why, the revised instruction is needed. Instruction related to the checklist is also added. This is done because most students seem unfamiliar with the concept of self assessment using assessment checklist. Because of the unfamiliarity, they do not use the checklist as it should be. By adding explanation about the checklist, it is hoped that students can use it properly.

According to the experts, the backgrounds for the multimedia program will be better if soft colors that can encourage learning are used and the backgrounds that match with activities or texts are chosen. In addition, one of the experts remarks that the backgrounds are too girly, so that boys probably will not like them.

In responding to the experts’ suggestion about using soft colors, most backgrounds are now not in pictures but only in combination of abstract colors. By using abstract colors, the researcher hopes that students will not be distracted by pictures when learning using this program. In addition, the pages, that use pictures as backgrounds, are now using pictures that match the contents. For example, the exercise page about harvest painting is now using cartoonish farmer with his crops as background. Furthermore, after looking at the program again, the researcher agrees that this program is, indeed, in need of a bit more masculine touch, or at least more gender neutral pictures as background. Thus, several overly feminine backgrounds are changed into animal theme, nature, or abstract pictures. Those are used so that the program looks more gender-neutral.
Related to the background, some students also suggested that animated pictures in the program be added. However, the animated pictures will not be added more in number because of two reasons. First, it is quite hard to find animated pictures that are suitable with the topics in the multimedia program, match the backgrounds, and look good in it. Second, too many animated pictures will make webpage in the program looks full. It will, then, decrease the aesthetic level of the page and will just serve as distraction for students. In addition, Allessi and Trollip (1991) explain that in terms of animation and graphic, one should consider “whether they (animation and graphic) reinforce the lesson objectives.” The animated pictures in the multimedia program are only there for decorative purpose, not as visual aids for the lesson in the multimedia. Therefore, the animated pictures are only put in transitional pages like opening page, content page, unit pages, and closing page.

The request of adding music from the students is still not included in the revision due to several reasons. The first reason is because integrating sound to webpage is quite tricky to do if based on the researcher ability. Therefore, instead of forcing to add sound and risking jeopardize the entire program, it is better to forego the sound altogether. The second is because each student has different taste in music, choosing single type of music for the program may make others like the program less. It is suggested that students can just put on their favourite songs themselves using program like Winamp or Windows Media Player. This way, they can listen to their favourite songs while using the program.

Similar with music, video for listening activity is also not added due to the lack of skill. Not only that, since this program focuses on writing, reading activity is preferred in the program, more than listening, to help improve students’ writing skill. It is because “reading texts also provide good models for English writing” (Harmer, 2007: 99) Therefore, it can be used “to demonstrate the way we construct sentences, paragraphs and whole texts” (Harmer, 2007: 99)." Therefore, this multimedia program focuses more on writing with the help of reading activity. Listening activity related to descriptive writing can be done at school or using other multimedia programs which focuses more in listening.

The first part of exercise components to be revised is time limit. Observation in the tryout and students’ critiques show that the time limit in most exercises are too short. Most students admit that when the time is so short, they have to forego reading the text carefully and just jump to the exercise. This makes them prone to make mistakes in the exercises. Because of that, the time limit is extended, depends on the type of exercise and its difficulty. For exercises that require students to read a complete paragraph before answering questions, the time is extended up to three minutes. The length of time is given to accommodate students should they need to check their dictionary to understand a word or phrase. For “complete the gaps in a paragraph” type, students are given up to five minutes. And for matching exercises, the time limit is now around two or three minutes, depending on the number of questions and the difficulty. The time limit will not be longer than the explained length. For any longer than that, the exercises will not be interesting and challenging anymore.
Another problem seems to occur around the technicality of the exercises and their key answers. Some students protest that they do not want to repeat an exercise if they answer wrong. They also want the key answers to be provided separately after each exercise. To answer those, it must be pointed out beforehand that the aim of the lesson is to learn. If in learning students encounter some difficulties, which in turn, make them commit mistake, it will be better if they learn from their mistakes. One way to do it is to repeat the exercise and learn. The exercise does not actually demand students to repeat the whole exercise. After clicking ‘Check’, the exercise program will show students’ score and reveals the wrong answers by turning them black, erasing the wrong answer, etc. Students, then, can correct the answer. If after that they answer right, they will get better score, even though the score will not be 100. This way, separated key answer will not be needed.

As for making the font for the score bigger, this revision cannot be done unless the font of the entire exercise is increased too. The problem with HotPotatoes is that the font size is not in number (e.g. 12, 20, 72) but in actual size (e.g. small, medium, big). Increasing one size means increasing all. The researcher has already tried to change the size of most exercises into medium, but the size is not quite appropriate for small-sized laptop. In that case, the text will be too big that it covers most of the background. Certain exercises will also turn up weird if exercises with medium font are used in small laptop. Hence, the small font size of the score.

CONCLUSIONS AND SUGGESTIONS

Based on the expert validation and empirical validation or tryout, this program is quite interesting for seventh grade students. Both experts and students participated in the try-out like the visual attractiveness of the multimedia program and think that the method in delivering material quite interesting. They also consider this program appropriate for independent study. The materials and exercises in the program are also easy to understand with the help of scaffolding techniques. The scaffolding techniques, which appear in the multimedia program in the forms of instructions, guides, feedbacks, and steps, greatly help in explaining the concept and theory related to the material of the product and also in showing the steps in writing a good descriptive paragraph. Therefore, students will not encounter too many difficulties when using it independently.

This multimedia program for descriptive paragraph writing is not perfect. It has its own strengths and weaknesses. The strengths or plus points for this program is that it is easy to use; it has relatively small size (only about 43MB); it has attractive appearance and is using interesting method for the exercises, like matching, crossword puzzle, and multiple choices; it is intended to support independent/autonomous learning; students can learn many things in one go by using the program; the steps used in the program are easy to follow and understand; and this program is easy to modify. The weaknesses or minus points of this program are that this program still has not come up with appropriate activities that can support activities for “critical elaboration of ideas”; it still
requires students to use pencil and paper in certain unit; it does not provide students with music or video; and it is still susceptible to cheat attempt.

Based on the discussion of the product and the strengths and weaknesses of the multimedia product, there are several suggestions related to product application and further development of the product.

For English teachers, especially English teachers for seventh grade, multimedia program for descriptive paragraph writing can be used as an alternative in teaching students descriptive paragraph writing. For students, this program should be used as learning alternatives. This program is easy to operate and can be used anytime. This multimedia program is also interesting for learning. Using this program will teach students how to wisely manage their time in learning and how to independently assess their learning growth. Students can also learn how to depend on themselves by using this program without needing much help from others.

For the further development of the multimedia product, the first thing that needs to be done is improving the product by reducing its weaknesses. As stated earlier, this program still has several weaknesses. Therefore, the next development for this program should be done by improving the quality of the program, making it more interesting by adding more features like music or video, and preventing cheating. Second, the next development should be to create more similar programs using different text types. Lastly, performing experimental research in order to find out whether this product really effective in improving students’ writing skill is recommended.

REFERENCES


