



Developing Digital Maze Literacy Game as Learning Media in Reading Instruction For Second Grade of MA Al-Muhajirin Peterongan

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ABSTRACT

The aim of this study is to develop 'Digital Maze Literacy' in reading skills for students of MA Al – Muhajirin Peterongan. This product focused on analytical exposition text. The researcher chooses the ADDIE model in developing the product. This model consists of five steps. Those are: (1) analyze, (2) design, (3) development, (4) implementation, and (5) evaluation. on develop phase, validation sheet was used to evaluate the quality of Digital Maze Literacy Game. The result of media validation is 80,00 % . Moreover the result of material validation is 81,3% , other word is very good category. Also, The result of the students responses on implementation phase is 82,3%. Based on the instrument, it can be concluded that Digital Maze Literacy game application for second grade of students has good quality and can be applied in real class.

Keywords: Reading Skill; Game; Analytical Exposition Text.

INTRODUCTION

Reading is very important for student, because by reading we can find out many things. It is in line with Patel and Jain (2008) who stated that reading is most useful and important skill for people. This skill is more important than speaking and writing, reading is a source of joys. Reading is not only a source of information and a pleasurable activity but it is also as a means of consolidating and extending one's knowledge of the language. Reading is one of the English skills that English learners must master. Reading is also considered an indicator of students success in learning English and their future professional careers.

According to Woolley (2011) reading is the process of making meaning from text. Therefore, the goal is to get an overall understanding what is stated in the text rather than to get meaning from isolated words or sentences. However, in reading comprehension, there is a deeper meaning in elaborating the text. Based on Klingner, Vaughn, & Boardman (2007) there is a highly complex process in reading comprehension which is called multi-component, it does not only involve some interactions which occur among the readers and what they have brought to the text, but also the variables which are related to the text. Comprehension in reading texts is a major achievement. The first indicator is the students low interest in reading compared to speaking. Most of the people prefer to read by expressing orally than read by understanding the text, the reason they are lazy and bored to read because seeing the writing, it makes students sleepy and dizzy. Another indicator is that most students have difficulty understanding the contents of the English text according to the text. At the High level most students are difficult to regulate, because there are adults and have a lot of comments when invited to read, understanding, analyze.

Based on the information obtained in the analyze phase on the English teaching and learning process conducted in MA AL-MUHAJIRIN, the researcher found similar problems discussed previously also happen in this school. The ability of the first year students of MA AL-MUHAJIRIN in reading English text has not been reached. This happens because most of the students difficulty understanding sentences according to the text. The text that is rarely glanced at by the learners is the analytical exposition text and hortatory exposition text, because the text is not interesting when taught. Unlike narrative and descriptive texts, we learn very often because the texts are engaging and can be taught through films or pictures. While, analytical exposition text and hortatory exposition text only write, so that students are not interested in studying the text.

The game was chosen as one of the most effective learning media used to overcome students' difficulties in understanding text by reading. Playing games is recommended because it has many benefits in the teaching and learning process (Carrier, 1985; Brewster, 2002). The benefit is that learning becomes more interesting, it can increase enthusiasm for learning. The learning process can be done anywhere or anytime without a teacher, because there is interactive media. In this digital era, it is very suitable for students to enjoy fun learning. Without us knowing it, everyday we have read a lot of information from technology. We no longer need books because we can get all the information quickly without reading books. Therefore this digital game is very interactive.

There is a previous study that has similarity to this research which was conducted by Damayanti (2004) found results based on the problem statement regarding the ability to read text, namely the application of reading learning media in descriptive text through the jeopardy game made students understand the text they can describe about someone correctly and then more actively expressing his opinion. Students become active and enthusiastic about learning activities. They are not bored and interested in learning to read again. The application of learning to read in descriptive texts through the jeopardy game can improve students' reading comprehension, especially in descriptive texts. Have evidenced by the results of the average score starting at the pre cycle 60.83, cycle 1 72,16 and second cycle 82,67.

Sari (2017) aimed at finding out whether gamebook mobile phone application is effective to be used in teaching narrative text. A further concern of this study is to investigate the significant difference of students' reading comprehension between the group that is taught using gamebook mobile phone application and another group that is taught using English textbook. The population of this study was the ninth grade students of SMPN 1 Wangon in the academic year of 2016/2017. Meanwhile, the sample consisted of 67 students from two classes. The study was started by giving pre-test, treatments, and post-test to both groups. The experimental group (VIII G) was taught using gamebook mobile phone application, while the control group (VIII F) was taught using English textbook. The data were gained by administering a pre-test and a post-test. In addition, the questionnaire was also given to the experimental group to obtain more data. In the pre-test, the mean score of the experimental group was 61.39 and the control group was 63.53. The result of post-test of the experimental group was 83.06, while the control group was 73.41. The result of the t-test also showed that there was a significant difference between the experimental group and the control group. It was proven by t-value (4.028) which was higher than t-table (1.66). It can be concluded that gamebook mobile phone application is effective to enhance students' reading comprehension in narrative text. It is suggested that the teacher should consider that gamebook mobile phone application is a good media in teaching reading narrative text.

Reading is a difficult skill to understand, there are several attempts that can be made to overcome the problem. Based on the researcher and teacher's discussion on how to solve the students problem in reading, the name is game was chosen as one of the effective efforts used to overcome the students difficulties in understanding text by reading. Playing games is recommended because it has many benefits in the teaching and learning process of reading. Yan (as cited in Arif and Syafi'i, 2018) revealed that there are several advantages of using games for learning as follows: they are less expensive, more flexible, they enhance motivation, they help setup engaging scenarios, they establish educational goals, they help evaluate your learners with many ways. In accordance with the formulation of the problem, the aim of this study is to develop 'Digital Maze Literacy' in reading skills for second grade students of MA Al – Muhajirin Peterongan.

METHOD

The type of this research was Research and Development method. Research and Development is a process to develop and validate products that will be used in education and learning. It is an effort to develop and produce a product in the form of materials, media, tools and learning strategies, which are used to solve learning problems in the classroom. According to Latief (2011) research and development method is a method used to produce a certain product, and test the effectiveness of the product. So, basically Research and Development has two main objectives, namely to develop the product and to test the effectiveness of the product. Research and Development is commonly found in learning design models, such as Dick & Carey, Borg & Gall Models, and ADDIE Models (Analysis, Design, Development, Implementation, Evaluation).

The researcher chooses the ADDIE models. This model consists of five steps is: (1) analyze, (2) design, (3) development, (4) implementation, (5) evaluation. In short, this study is measuring product quality to develop 'Digital Maze Literacy' in reading skill for students of MA Al – Muhajirin Peterongan.

RESULT AND DISCUSSION

The Result of Analyze

At this stage the researcher conducted observations with interviews to find out what students needed and the obstacles faced by students during the pandemic in the process of online learning activities, especially in terms of reading skills at MA Al – Muhajirin. Therefore, from the observations above, the researcher provided Digital Maze Literacy Game media in the English learning process to support innovative and interesting teaching and learning activities.

The researcher prepared several questions in the form of a questionnaire given to the eleventh grade student and the researcher also conducted interviews with the English teacher at MA Al – Muhajirin. Based on this, the researcher conducted a needs analysis. The questionnaire was created based on the following aspects:

Based on this observation, it showed that students need creative and innovative learning to support their process English teaching and learning activities, especially reading skills in this pandemic condition. In addition, Digital Maze Literacy Game is a good media in facilitating teachers and students in delivered and received learning materials very well.

The Result of Design

After the data analysis, the researcher planned a learning application product that contained text material for class XI in the second semester of high school which contained reading skills. The product planned by this researcher is made using Power Point software which is then hyperlinked. Therefore, this design step is carried out by determining the required material.

The material used in this application is in accordance with the 2013 Curriculum syllabus for the second semester of class XI at the high school level. In developing this application media, researchers used Power Point software to create application products which were then hyperlinked. Digital Literacy is an initial description of the product to be developed. The developing game was taking components of Digital Maze Literacy. The components consists of:

The Result of Development

After the researcher finished making the Digital Maze Literacy Game application, the researcher consulted the product to experts, namely material experts and media experts. Based on the result of the validation researcher were given product suggestions from material experts and media experts so that this product was better and more interesting. The result validation of this product as follows:

Material Validation

In this research, the researcher made an Digital Maze Literacy Game application which refers to the second semester of English reading text material for XI class of MA Al Muhajirin. The Material expert is Resmika Dwi Erlianti, S.Pd. as a English teacher in the MA Al – Muhajirin Peterongan Jombang. Validation sheet was used to evaluate the material of Digital Maze Literacy Game. The result of the material validation as follows:

Table 1. The Result of Material Validation

No.	Aspects	Score
1.	The relevancy of materials with SK, KD, and Indicator	5
2.	The conformity with learning objectives	4
3.	Student interactivity with media	4
4.	Learning motivation growth	4
5.	The actuality of the material presented	4
6.	Sufficient number of vocabulary	4
7.	Completeness of vocabulary coverage	4
8.	Vocabulary difficulty level according to the material	4
9.	The depth vocabulary according to the material	4
10.	Easy to learning to understand	4
11.	Easy to understand language	4
12.	The clarity of the study instructions	4
13.	Vocabulary correctness according to theory and concept	4

No.	Aspects	Score
14.	Vocabulary usage accuracy	4
15.	The providing feedback on evaluation results	4

From the result of the above calculations, it can be concluded that the material in the Digital Maze Literacy Game application is very good and creative. However, the material expert still provided some suggestions to researcher to improve the material. The material expert suggested that the learning instructions should be more clarified because it involves students understanding of the material. The researcher revised to improve audio to giving explanation and instruction clearly.

Moreover, the media expert is Ulfa Wulan Agustina, M.Pd. She is a lecture in the Departement of English Education at University of KH. A. Wahab Hasbullah Tambakberas Jombang. validation sheet was used by researcher to evaluate Digital Maze Literacy Game application. The result of the media validation as follows:

Table 2. The Result of Media Validation

No.	Aspects	Score
1.	The interesting of media display	4
2.	The regularity and consistency of button display	4
3.	The text, image, and animation layout	4
4.	The suitability of font selection	4
5.	The suitability of background	3
6.	The suitability of backsound / soundtrack	3
7.	The suitability of transition	4
8.	The clarity of instruction text on media	4
9.	Use the button according to the instructions	3
10.	The level of complicated of the game	4
11.	The media able to encourage students to learn independently	4

From the result of the above calculations, it can be concluded the media Digital Maze Literacy Game application is good and creative. However, the media expert still gave some suggestions to the researcher to revise the product in several parts. The media expert suggested to add objective and goal from media, font, color, and button.

The Result of Implementation

After the Digital Maze Literacy product is designed, validated, and revised, the next step for researcher is implementation. Researcher tested the application product to 18 students of class XI MA Al – Muhjairin Peterongan Jombang. Researcher used laptops to implement product to students. The researcher implemented the product by explaining the steps for using the product and explaining the material contained in the product. Next, the researcher tested the students by using their exercise and discussions provided in the product.

The strength of this product is that students can learn on their own even though they are not face to face with the teacher. This product can help students understand the material during online learning. Learning by using games can increase the feeling to wants to know of high learning. With this product we can understand the types of text that students sometime know the difference between because they think this material is difficult to understand. With this product we can learn and play whenever and wherever students are. This product can be used on android and laptops. And then, the weakness of this product is that not all students in private schools have laptops or androids to be able to apply these products. This product did not cover all types of text. This product only contains exposition text learning.

After testing the product, the researcher gave a questionnaire to the students which aimed to measure how effective the product is for the process of learning activities. Therefore, the results of the questionnaire can be used as a reference for the effectiveness of the Digital Maze Literacy application in learning English in the field of reading skills. The results of students' responses were calculated using a Likert scale. From the results of the student response questionnaire, the researchers obtained the following data:

Table 3. The Result of The Students Responses

Student	Question									
	1	2	3	4	5	6	7	8	9	10
1	4	5	5	5	4	4	4	3	4	5
2	5	4	4	4	3	3	4	4	4	5

Student	Question									
	1	2	3	4	5	6	7	8	9	10
3	4	4	4	4	4	4	3	4	4	5
4	5	5	5	4	4	4	4	4	4	5
5	3	4	4	4	4	4	4	4	3	4
6	3	4	4	4	4	4	4	4	3	4
7	4	5	5	4	4	4	4	4	4	4
8	4	4	4	5	4	4	4	5	5	5
9	3	4	4	4	4	4	4	4	4	5
10	4	4	4	4	4	4	4	4	4	4
11	4	4	4	3	4	4	4	4	4	5
12	3	4	4	4	4	4	4	4	4	4
13	3	4	4	4	4	4	4	4	4	5
14	3	4	4	4	4	4	4	4	5	5
15	4	4	4	5	4	4	4	5	5	5
16	3	4	4	4	5	4	4	5	5	5
17	4	4	4	4	5	5	4	5	5	5
18	3	4	4	4	4	4	4	4	4	5

In the last part, the researcher discusses an explanation of how the application product can help the learning process of second grade Senior High School students, especially learning English. From the results of the data obtained through a student response questionnaire, it shows that the product is suitable to be used as a media to support English learning activities in eleventh grade Senior High School.

The Result of Evaluation

After the Digital Maze Literacy Game is revised according to the expert advice, then below are the samples of final product.



Figure 1. Home Page

The home page is the first page in Digital Maze Literacy Game application view. If the users want to continue to the next page, the user can click the arrow icon.

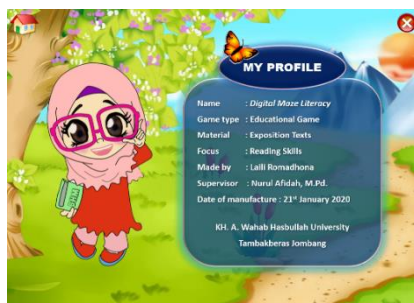


Figure 2. Profile Page

The profil page is the author profile of the Digital Maze Literacy application.

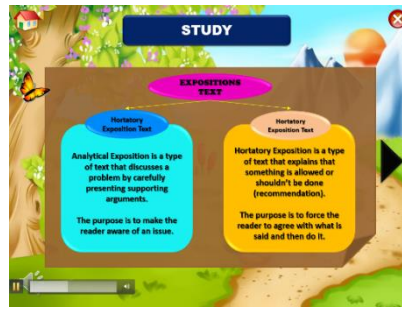


Figure 3. Material Page

The material page is the difference of analytical exposition text and hortatory exposition text that consists of the meaning, the purpose, generic structure, and language future of the analytical exposition text and hortatory exposition text. Below is a picture of the material page:



Figure 4. Example Page

The examples page were some examples of text. The researcher provided a picture that related to the text. The example also explained the generic structure of the text.

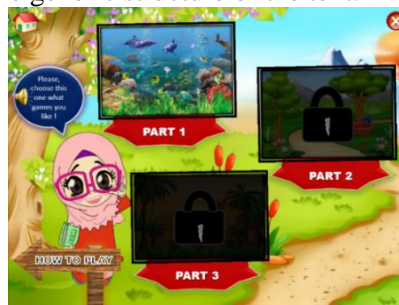


Figure 5. Menu Game Page

The menu game page is part to play the maze game before exercise.



Figure 6. How to play Page

How to play page is part to see the tutorial how to play this game. In this page, there are 4 steps to play the game. The steps are (1) Find the path to the question mark icon. (2) Play with your cursor. (3) Avoid the pool and monsters. (4) Click the question mark icon and then answer the quiz until finish. Below is a picture of how to play page:



Figure 7. Game Page

In this page, the players should play the game to get a question icon. Play with cursor of the computer or laptop.

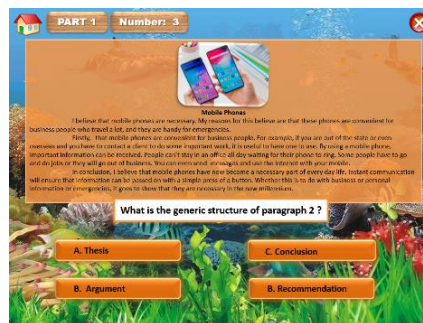


Figure 8. Exercise Of Generic Structure

There are 3 different exercise on the Digital Maze Literacy .The exercise of part 1 is identification of the generic structure from the text in form of multiple choice.



Figure 9. Exercise of Reading Comprehension

The exercise of part 2 is answer questions based on text by multiple choice. This exercises is provided to test students comprehension.



Figure 10. Exercise Page

The exercise of part 3 is true or false exercise based on the statement sentence.

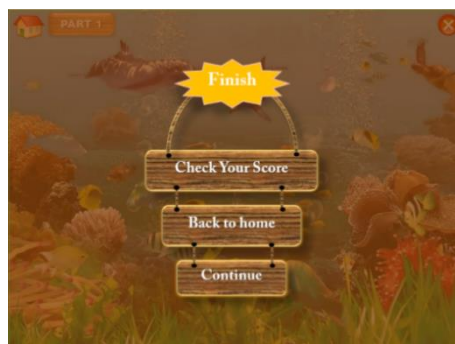


Figure 11. Scoring Page

Scoring Page is last page after doing exercise. The score was same as each part. There were three icons on this page that is Check your score, Back to menu, and Continue.

CONCLUSION

Based on the results of the research and discussion that has been presented in the previous chapter, it can be concluded that Digital Maze Literacy game application for second grade of students has good quality and can be applied in real class. The researcher concluded based on the score from the experts. The result of media validation is 80 % , other word is good category. The result of material validation is 81,3% , other word is very good category. The result of the students responses is 82,3%, other word it is good category. Based on those score, it can be cocluded that Digital Maze is ready to use in the real class and meet with the need of students of second grade of MA Al – Muhjairin Peterongan Jombang.

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