OPTIMIZING STUDENTS' READING COMPREHENSION OF DESCRIPTIVE TEXT THROUGH E-LEARNING METHOD WITH WHATSAPP APPLICATION

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Abstract:
This study aims to determine whether the E-learning method can be effective in optimizing students' reading comprehension of descriptive text with WhatsApp Application. This research was conducted in class X MIA 1 SMA Negeri 1 Buko in the academic year of 2020/2021. This study used one group-pretest-postest design of research with the data analysis were the frequency distribution of scores, mean and standard deviation. The questions from the pretest and posttest used the type of multiple choice questions with questions about the descriptive text. From this result, it was found that the mean of posttest $Y = 7.8$ with standard deviation $S_y = 0.79$ was higher than mean score at pretest $X = 5.33$ with standard deviation $S_x = 0.89$. It means that students' reading comprehension in descriptive text was higher after treatment at posttest than pretest. So the researcher concluded that the application of the E-learning method through WhatsApp application was effective in optimizing students' reading comprehension of descriptive text.

Keywords: Optimizing, Descriptive Text, E-learning Method.

INTRODUCTION

Corona disease (COVID-19) is an infectious disease caused by coronavirus. Most people infected with the COVID-19 virus will experience respiratory disease, the spread of this virus mainly through droplets of saliva that come out of the nose when an infected person coughs or sneezes (WHO, 2020). It is is established as a pandemic by WHO which was previously only designated as an endemic disease (Ghebreyesus, 2020). And Indonesia is included in one of the countries infected with the corona virus (covid-19) and not a few fatalities as a result of the covid-19 attack.

The impact has been felt by all levels of society in Indonesia. Not only that, covid-19 has changed the world order of life in the fields of health, economy, social, religion, transportation, even in the field of education. Policies emerged from the government, especially the minister of education in addressing the problems that arise, so that the learning process is not hampered. Among them is learning in the network (e-learning). Mousazadeh Somayeh et al said that e-learning is a learning process where students who conduct their own training to achieve educational goals based on their own talents, they learn how to learn, which is one of educational goals (Mouzasadeh Somaye, 2016).

In the current industrial era 4.0 which is all digital, it requires all humans to recognize and start using a smartphone, so that they can keep up with global competition, one of which we can read any information via smartphone, we are no longer focused on reading only from books or letters just news. Among them we can communicate with others quickly and practically through social media. One chat application that is currently widely used is WhatsApp. So many of the teachers and students including 7th grade students of SMA Negeri 1 Buko who use the WhatsApp application to support the learning process in e-learning.

Reading is an activity to understand text, reading is grouped into word processing and comprehension (Lambe, 2011). Also Nurmin, Aloysius and Gabriela in their research said that through reading we can develop communicative competence in English (Nurmin Samola, 2020). One of reading comprehension is understanding descriptive text. According to Bima and Kurniawan descriptive text is text that describes or explain text of a person or thing to provide as much detailed information as possible about the thing in question (Bima, 2017).

From these observations, encourage researcher to conduct research on Optimizing Students' Reading Comprehension of Descriptive Text Through E-Learning Method with WhatsApp Application, with the purpose of this research is to prove the effectiveness of e-learning method in reading comprehension of descriptive text with WhatsApp Application at ten grade students of SMA Negeri 1 Buko.

LITERATURE REVIEW
Optimizing

Optimizing means making the best or the highest. Optimization is the process of optimizing something, which means making something the best or the highest. In this study, the optimal meaning is a step or method used to optimizing student reading comprehension in descriptive text.

Reading

Reading is an activity, action, or practice in any verb that says a word or sentence that is arranged in a formal or informal text (Smith, 1998). According to Elizabeth S. Pang et al, reading is an activity that involves the reader's perceptions and thoughts to understanding the written texts. Background of knowledge, vocabulary, grammatical knowledge, and perception experience of the readers which will help them to better understand the written texts (Elizabeth S. Pang, 2003).

Comprehension

Comprehension is defined as the process of understanding the meaning or purpose of a language both written and oral (Nurainun, 2017).

Reading Comprehension

Reading comprehension is the process of addressing words, sentences and texts that are connected to one another. Readers often understand the contents and purpose of texts, they use background knowledge, vocabulary, grammatical knowledge, and experiences that are interrelated with the text being read (Elizabeth S. Pang, 2003).

Descriptive Text

Descriptive text is text written to describe or explain something like an object, place, or person, so descriptive writing is a type of writing consisting of descriptions, characteristics, and definitions of objects (Lailatul Husna, 2013).

E-Learning

E-learning is a generic and broad term that describes the use of various electronic technologies to convey learning. More precisely, not just to convey learning in distance, but rather to create an optimal learning experience. The electronic technology can be in the form of computers, internet or intranet as well as other electronic technologies such as audio / radio, and video / television (Chaeruman, 2017). Uwes also said that there are three categories of e-learning which are a continuum, namely:

1. Adjunct, teaching and learning activities which are usually done face-to-face (traditional) with a system of delivering material in the network as a support to the learning process. Examples of students looking for material or more specific explanations on the internet.
2. Mixed / Blended, in the delivery of learning material online as an inseparable part of the learning process.
3. Fully Online, all teaching and learning activities are carried out in full network with no face-to-face learning (Chaeruman, 2017).

WhatsApp Application

WhatsApp is a media application founded by Jan Koum and Brian Acton, which offers a simple, safe and reliable exchange and message exchange experience, and supports sending and receiving various types of media (text, photos, videos, documents, locations, voice recording, voice calls, and video calls). This application has been used by more than 2 billion people in more than 180 countries to stay connected with friends, family, anytime and anywhere. Another advantage of this application is the message and call we do using this application secured with end-to-end encryption, which means that no third party includes WhatsApp than can read messeages or hear our calls. WhatsApp also supports for chat groups, so we can share messages, photos and videos up to 256 people at once. In groups we can also make group video calls of 8 people so that video calls can be more fun and lively. We can also give group names, set up or adjust notifications. Also with WhatsApp on the web and desktop, we can smoothly synchronize all chat to computer. From the advantages of this application, so many of the teachers and students used this application to support the learning process in e-learning, especially for reading comprehension (understanding descriptive text).

The Advantages and Disadvantages of Using E-Learning Method

a. The advantages

E-learning method is flexible, able to provide opportunities for relationships between students by utilizing discussion forums, it cost effective for transportation in the sense that there is no need for students or learners to travel, and allows for self-pacing in the use of e-learning (Valentina Arkorful, 2014).

b. The disadvantages

The use of E-learning as an educational method makes students experience contemplation, isolation, and

lack of interaction or relationships, it may be less effective in clarifying, offering explanations, and interpretations, compared to traditional learning method. Existence of piracy and plagiarism caused by insufficient skills is found in e-learning and not all fields or discipline can employ the e-learning technique in education (Valentina Arkorful, 2014). While Liando said that attitude plays an important role in the success of learning English (Liando, 2012).

METHODOLOGY

This research conducted to describe a cause effect between the independent variables (optimizing students reading comprehension) and dependent variable (e-learning method). The variable visually presented in Figure 1 below:
Figure 1: Cause Effect between Independent and Dependent Variables.
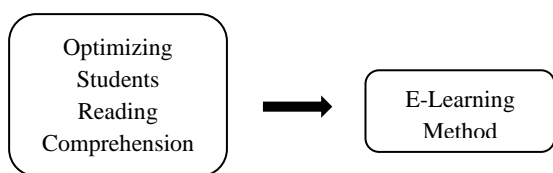
According to Tuckman, this research is belongs to the pre-experimental category using one group-pretest-postest design. The design is shown below:

Figure 2: One group pre –posttest design.

O$_1$ X   O$_2$ (Bruce, 1999)

Legend:
X   = Experimental treatment
O$_1$ = Observation$_1$ (pretest)
O$_2$ = Observation$_2$ (posttest)
This research conducted during the pandemic Covid-19, precisely at students

of SMA Negeri 1 Buko, at ten grades. They were 15 students in class.

DATA ANALYSIS

In the analysis, validity test and reliability test, the frequency distribution of scores, mean and standard deviation of the pretest and posttest calculated and then compared to see the effect of the e-learning method on optimizing students' reading comprehension skills.
Validity Test

In testing this validity used Microsoft Excel. The validity test was carried out on the test results of 25 multiple choice questions to the students of X MIA 1 SMA Negeri 1 Buko. Item analysis was performed by calculating the correlation between total scores. So that 20 valid questions are obtained (r$_{count}$ > r$_{table}$) dan 5 unvalid questions (r$_{count}$ < r$_{table}$).

Reliability Test

Reliability test is carried out to measure the level of accuracy and consistency of measuring instruments so that the results can be trusted. In this reliability test used Sperarman Brown technique, namely if the reliability coefficient r$_i$ > r$_{table}$. In this research obtained the value of the reliability coefficient from 20 valid questions r$_i$ is 0.94 referred to r$_{table}$s' value 0.44 so r$_i$ is bigger than r$_{table}$.

Statistical Analysis of the Data

In this part the data which obtained from the pretest and posttest in the form of scores are presented in table 1:

Table 1. The Participants' Raw Data.

No	Pretest (X)	Postest (Y)

1	5	9
2	5	6
3	6	9
4	7	9
5	5	9
6	4	6
7	5	6
8	7	7
9	4	9
10	5	9
11	5	9
12	6	7
13	6	8
14	5	7
15	5	6

Frequency Distribution

Table 3. Frequency distribution of pretest.

Score	Tally	f	Freq-%	Cumulative f	Cumulative %
7	II	2	13.33	15	100
6	III	3	20	13	86.67
5	IIIII III	8	53.33	10	66.67
4	II	2	13.33	2	13.33

The following is a visual of the frequency distribution of pretest in the form of the diagram:
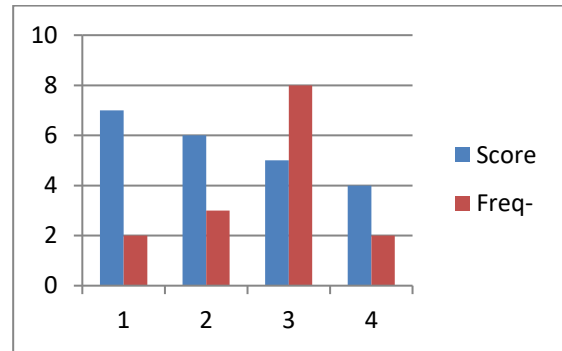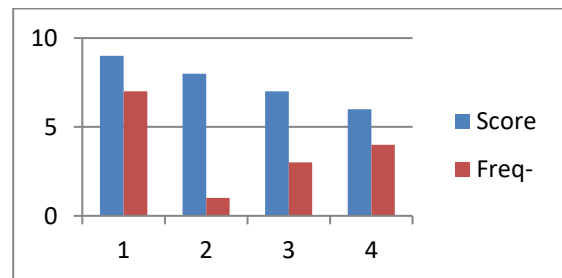
Diagram 1. Frequency distribution of pretest score.

Table 4. Frequency distribution of posttest.

Score	Tally	f	Freq-%	Cumulative f	Cumulative %
9	IIIII II	7	46.67	15	100
8	I	1	6.67	8	53.33
7	III	3	20	7	46.67
6	IIII	4	26.67	4	26.67

Here is a visual of the frequency distribution of posttest in the form of the diagram:

Diagram 2. Frequency distribution of posttest score.

Calculation of Mean

To calculate the calculation of the mean and standard deviation of the two tests, namely the pretest and posttest, one must first calculate the sum and total squares of the prestest (X) and posttest (Y) scores. The following is a table of the sum and total squared scores of the pretest and posttest:

Table 5. Sums of Pretest (X) and Posttest (Y) scores.

No.	Prestest Data (X)	X²	Posttest Data (Y)	Y²
1	5	25	9	81
2	5	25	6	36
3	6	36	9	81
4	7	49	9	81
5	5	25	9	81
6	4	16	6	36
7	5	25	6	36
8	7	49	7	49
9	4	16	9	81
10	5	25	9	81
11	5	25	9	81
12	6	36	7	49
13	6	36	8	64
14	5	25	7	49
15	5	25	6	36
N = 15	$\sum X = 80$	$\sum X^2 = 438$	$\sum Y = 116$	$\sum Y^2 = 922$

- The mean of prestest ($\overline{X}$) :
  $\overline{X} = \frac{80}{15} = 5.33$
- The mean of posttest ($\overline{Y}$) :
  $\overline{Y} = \frac{117}{15} = 7.8$

Calculation of Standard Deviation

Through the calculation of standard deviation, it can provide an overview of the distribution of data against the average data as well as an overview of the minimum and maximum value ranges in the data obtained on the development of reading comprehension knowledge before and after the experiment. In this study using the raw score method calculation. Here is a calculation of the standard deviation of the two tests:

- Standard deviation of pretest

$$S_{(X)} = \frac{\sqrt{438}}{15} - 5.33^2$$

$$S_{(X)} = \frac{\sqrt{438}}{15} - 28.4$$

$$S_{(X)} = \sqrt{29.2 - 28.4}$$

$$S_{(X)} = \sqrt{0.8}$$

$$S_{(X)} = 0.89$$

- Standard deviation of posttest

$$S_{(Y)} = \frac{\sqrt{922}}{15} - 7.8^2$$

$$S_{(Y)} = \frac{\sqrt{922}}{15} - 60.84$$

$$S_{(Y)} = \sqrt{61.47 - 60.84}$$

$$S_{(Y)} = \sqrt{0.63}$$

$$S_{(Y)} = 0.79$$

From the calculation of standard deviation, it was founded that the standard deviation of prestest (S_x) was 0.89 while the standard deviation of the posttest (S_y) was 0.79, so $S_x > S_y$ (S_x is greater than S_y). So it can be said that before being given treatment, the participants' reading comprehension knowledge or ability was less than after giving the treatment.

DISCUSSION of the FINDING

From the data analysis that had been done, it was found that: (1.) The validity test was carried out on the test results of 25 multiple choice questions, 20 valid questions are obtained ($r_{count} > r_{table}$) dan 5 unvalid questions ($r_{count} < r_{table}$); (2.)

Reliability coefficient from 20 valid questions r_i is 0.94 referred to r_{table}s' value 0.44 so r_i is bigger than r_{table}; (3.) The highest score on prestest was 7 and the lowest score was 4. Meanwhile, in the posttest the highest score was 9 and the lowest score was 6; (4.) the mean of the pretest was 5.33 and the mean of the posttest was 7.8; (5.) standard deviation $S_{(X)} = 0.89$ from pretest and $S_{(Y)} = 0.79$ from posttest.

English teachers must apply appropriate teaching techniques in reading comprehension such as browsing on internet, so that they can motivate and stimulate students to be more active and live in the teaching and learning process (Nihta V.F. Liando, 2019).

Also using WhatsApp in the learning process can help the object of research (students) to relax and communicate more easily with the teacher when they experience difficulties in learning. In this research, researcher provided the widest possible opportunity for students to contact her in personal chat when they experienced difficulties in understanding descriptive texts, so that students understood the material being taught, and had an impact on student learning outcomes at the posttest.

CONCLUSION

1. The score on the posttest was higher than the score at the pretest; 2. The mean at posttest was higher than the mean at pretest; 3. The distribution of data on the reading comprehension of the object of research on the descriptive text was less heterogeneous after the experimental practice, so the smaller the average distance of each data unit to the mean. So that researcher can conclude in this research that the application of the E-learning method using WhatsApp application can optimize students' reading comprehension skills in descriptive text.

SUGGESTION

1. The next researchers uses this research by using another research design that use two research classes, namely the control class and the experimental class, so that research can be carried out better, especially in analyzing data. 2. For further researchers to further develop this research by using other supporting application according to the circumstances and abilities of the research object, so the object of research becomes more interested in learning descriptive text even in conditions that are not conducive to carrying out face-to-face learning such as the current pandemic.

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