



## The Effect of E-Learning as Media in Teaching Reading: Quasi-Experimental Design at Wachid Hasyim Senior High School Pamekasan Regency, Indonesia

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### **Abstract**

Reading is a window to the world that can provide extensive information to increase knowledge in everything. Nowadays, the level of students interest in reading is still low. The problems are lack of interest on their reading, they consider long reading materials to be very boring, lack of important of reading enthusiasm and lack of media. The use of media is very important in teaching learning process. One of media is E-Learning. The increasing of high technology in this century gives an impact for humans' life. Not only in humans' life but that condition happened in education. This study is aimed to find the effect of E-Learning as media in teaching reading at the tenth grade of Wachid Hasyim Senior High School in Academic Year 2021/2022. The researcher used Quasi Experimental design. The population is the students of Wachid Hasyim Senior High School and the sample is the tenth grade students 2 classes at Wachid Hasyim Senior High School. A large number of subject as many as 60 students were the sample of this research. After they had given a pretest, they were divided into two groups based on the class that already existed, X A class and X B class. X A class consisted of 30 students, and it was the experiment group and X B class consisted of 30 students, and it was the control group. Based on the result of data analysis in this research, the researcher will describe the finding based on the hypothesis testing. The hypothesis testing showed that there is a significance difference between Reading Comprehension of students who are taught using E-Learning and Reading Comprehension of the students who are taught using Offline Learning. The students who taught using E-Learning have better achievement than the students taught using Offline Learning. It was proved from the computation where computed F-value (16.668) was higher than the F-critical value (4.00) in 0.05 level of significance. It meant that  $H_a$  was accepted so, it was clear that E-Learning gave a significant effect on the students' reading comprehension achievement.

**Keywords:** *E-Learning; Teaching Reading; Quasi Experimental Design*

### **Introduction**

English is one of the most spoken language throughout the world. It is used as a means of communication among different countries. Indonesia as the non-speaking English countries learn English. A lot of people in Indonesia try to acquire English where English is taught as foreign language. In order to increase the intensity and quality of the association, communication, interaction, business and trade transactions as well as the diplomacy with the nations of the world, English has been chosen and

designated as a foreign language that is mandatory to be taught in schools throughout Indonesia, starting at the school level. Elementary to College.

There are four skills in teaching and learning English: listening, speaking, reading and writing. Reading is one skill of language learning which also plays a very important role in transferring information. Reading is a window to the world that can provide extensive information to increase knowledge in everything. Reading is considered as the activities that it must be involved with academic activities. Unfortunately, in Wachid Hasyim Senior High School the level of students interest in reading is still low. The problems are lack of interest on their reading which consider their reading habit is not a part of their primary needs, they consider long reading materials to be very boring, lack of important of reading enthusiasm and lack of media.

The use of media is very important in teaching learning process. One of media is E-Learning. The increasing of high technology in this century gives an impact for humans' life. Not only in humans' life but that condition happened in education. Education for better life is very important to produce students with good quality. The use of high technology that explained before can support teaching learning process such as computer which can help students easier to get information related with their study especially reading. So far, the learning applied for learning reading in Wachid Hasyim Senior High School is conventional learning. Conventional learning is learning that is more teacher-centered and dependent learning process to take place and requires physical class facility.

In connection with the lack of reading interest, the researcher encourages students of Wachid Hasyim Senior High School Wachid Hasyim to utilize electronic media facilities or using of the internet in following the reading matter presented. The development of information technology, brings people to be able to find information around the world using the internet. This media cannot be separated from the developments in the world of computers that are so fast.

Computer as an additional tool in the learning process. The benefits of computers include the presentation of information, content of subject matter and exercises. This method is known as Computer-Based Learning. This innovation is now known as E-Learning. Sanjaya (2006) stated that E-Learning or the learning process with electronic media, especially the internet, is currently considered to be an educational solution for students who cannot physically attend each lecture/learning.

Currently, the concept of E-Learning has been widely accepted and implemented in educational institutions. In today's world of teaching and education, there are many practices called E-Learning. E-learning has become the choice of education providers, because of the advantages of E-learning. E-learning is a learning process that produces or presents material using computer-based resources. In this case the task of a teacher is to design learning so that it can be presented using a computer. The main activity of students as users in computer-based learning is accessing information from information sources, namely computers. In addition to accessing information, students are also required to respond to questions posed by the computer, or do assignments and submit the answers back through the computer.

Candiasa (2005) stated that some of the advantages of learning using computer media such as: context free, free of social conventions, personal, can increase students' interest and motivation to learn, can increase creativity and curiosity, are easily adapted to individual students, can be equipped with other management systems. Although E-Learning has considerable potential to be used to improve the quality of learning, learning using computer media also cannot completely replace the role of the teacher. Therefore, the use of learning media using computer media needs to be combined with other learning media so that learning using computer media really gives positive results.

Relating to reading, the students are expected to read and understand reading text. It is because some today's information is written in English. In addition, reading process especially for foreign

language, there will often be gap in understanding the message which happened to the reader. In some cases, the gaps will be just Senior High School parts of what they read, in some text which include several difficult words or vocabulary, but in other cases the gaps will from a significant proportion of their knowledge, and in more extreme cases, the reader have no idea and have big misunderstanding about the content of the text. Those problems of course give an impact on the reading process.

The process of constructing meaning while transacting with text can run well if the reader have a good skill. It means that the reader rich of vocabulary, have a good background knowledge, have alot of information and experience. As a result, the reader also need to develop their skill. It is important for reader to help them to understand the message of the text and also to get the meaning.

The increasing of high technology in this century gives an impact for humans' life. Not only in humans' life but that condition happened in education. Education for better life is very important to produce students with good quality. The use of high technology that explained before can support teaching learning process such as E-Learning which can help students easier to get information related with their study. Nowadays, there are many reading material try to serve in electronic form as part of newest service system in anticipating global information. Moving from a hands-on, real-life learning experience of substance to a digital version of it presents many interesting challenges. Depending on what the goals are, several models are possible. For example, one goal might be to replicate the learning process with the aid of technology, recreating the learning experience using a computer. A very different goal might deal with capturing knowledge about the experience itself, so that it can be replicated either in its real-life form or using technology. In both cases, the suggestion is that there are ways of moving knowledge, experience, information and content from conceptual and physical forms to digital representations.

Based on the phenomena above, the researcher is interested in conducting a research at Wachid Hasyim Senior High School at Pamekasan. The study concerns with designing E-Learning for Wachid Hasyim Senior High School at Pamekasan students especially at the tenth grade to improve their reading comprehension. Do students who are taught using E-Learning in reading comprehension have better achievement than those who are taught using Offline Learning?"

### ***Theoretical Review***

#### Reading Comprehension

Nuttal (2003) stated that reading is getting messages from a text. The message, here, is what the writer communicate within the text. To get the message, the readers should comprehend the text well in order to obtain the messages which are communicated in the text explicitly and implicitly. The message should be or nearly same with the writer means. however, Richard & Renandya (2002) insisted that the main purpose of reading is to understand what a text contains or to gain the specific information one intends to gain from the text. More concretely, undstanding a text means:

- a. To gain the main ideas of a text
- b. To be able to fox on specific direct statement in a text
- c. To infer of draw the general idea from a text.

From the explanation above, it may be said that knowing the purpose of reading before reading will motivate a reader. It also helps a reader understands the text easily. Moreover, the reader will enjoy her or his reading.

Rosenshine (1980) states that reading comprehension commonly entails seven skills, namely recognizing the sequence, recognizing words in context, identifying main ideas, decoding details, drawing references, recognizing cause and effect, and comparing and contrasting.

Brown (2005) proposed principles in designing interactive reading by subdividing the teaching techniques into three phases, (1) pre-reading; (2) during-reading; (3) post-reading. The following is the description of each phase which also highlights the importance of employing them in developing reading competence.

### Pre-Reading Activity

According to Williamson (1988) pre-reading activity can be done by posing questions both in oral and written forms the students will look for during reading. Or it can also be done by writing students' own experience containing their knowledge about the topic. Pre-reading activity is an activity that can arouse interest and reason to read.

### During-Reading Activity

During-reading activity is an activity that develops reading skill. The main purpose of during-reading is construct students' reading competency, not only comprehending, capturing, but also building information within the text.

### Post-Reading Activity

Post-reading is the last phase in the learning of reading. William (2003) pointed out that this activity is meant to improve students' comprehension and interest towards reading. This activity can be done by connecting what students have read with their real experience. It can also be done by asking students their opinion about the passage whether they agree or disagree, happy or unhappy, and by giving the reason. The main purpose of post-reading is relating the reading contents with students' everyday activities.

### E-Learning

E-Learning can be defined as the use of electronic media, including the internet, intranet, extranet, satellite broadcast, audio/video taper, interactive TV and CD-ROM to deliver the teaching material, which involves a number of applications and process (Urdan & Weggen 2000; Clarck & Mayer 2008). While according to Fee (2009), E-Learning is approach to learning and development, a collection of learning method using digital technologies, which enable, distribute and enhance learning. From those definitions, it can be understood that E-Learning deals with the use of electronic media in transferring or supporting teaching and learning process

### **Research Methods**

This study is intended to answer the main problem the study, namely do students who are taught using E-Learning in reading comprehension have better achievement than those who are taught using Offline Learning?

In this research, the researcher used Experimental Design. This experiment used Experimental Design because there were two student groups. There are two kinds of variable in experiment design. The independent variable is manipulated by the experimenter and the dependent variable is measured. This research is educational research in which it is not possible to conduct a true experiment.

Based on the explanation above, the researcher used Quasi Experimental design. Because the research conducted in a school situation, it is necessary to use groups as they were already organized into classes. Furthermore, both of the student groups are determined as Experiment Group and Control Group. Experiment group is a which is given E-Learning, while control group is a group which is given Offline Learning.

In this research, the researcher was not permitted to choose the students randomly into a group, but the researcher randomly selected one of the classes to be an experimental group and the other to be the control group. The researcher would give a pretest to the subject. Pretest has an important role in this research, it use to make the group are equivalent in capability before the researcher gave the treatment to the experimental group.

The researcher used the method above to assign the subjects of this research. The population is the students of Wachid Hasyim Senior High School and the sample is the tenth grade students 2 classes at Wachid Hasyim Senior High School. A large number of subject as many as 60 students were the sample of this research. After they had given a pretest, they were divided into two groups based on the class that already existed, X A class and X B class. X A class consisted of 30 students, and it was the experiment group and X B class consisted of 30 students, and it was the control group.

### ***Finding and Discussion***

After collecting the data needed by using test, the next step in conducted this research is analysis the data by using ANCOVA. ANCOVA is general linear model which ANOVA and regression. Based on the research, the researcher used three phases in analyzing the obtained data:

#### **Tests of Between-Subjects Effects**

Dependent Variable: posttest

| Source          | Type III Sum of Squares | df | Mean Square | F       | Sig. | Partial Eta Squared |
|-----------------|-------------------------|----|-------------|---------|------|---------------------|
| Corrected Model | 2656,546 <sup>a</sup>   | 2  | 1328,273    | 32,489  | ,000 | ,533                |
| Intercept       | 4666,549                | 1  | 4666,549    | 114,141 | ,000 | ,667                |
| Pretest         | 1598,146                | 1  | 1598,146    | 39,090  | ,000 | ,407                |
| Class           | 681,457                 | 1  | 681,457     | 16,668  | ,000 | ,226                |
| Error           | 2330,387                | 57 | 40,884      |         |      |                     |
| Total           | 323560,000              | 60 |             |         |      |                     |
| Corrected Total | 4986,933                | 59 |             |         |      |                     |

a. R Squared = ,533 (Adjusted R Squared = ,516)

Calculating the data for reading comprehension. To make it easier, the researcher summarized the computation for student's reading achievement. After getting the result, the researcher used ANCOVA to calculated the data, the result of computed F value. The researcher used 0.05 level of significance. After calculating the data it was found that computed F value is 16.668 while critical F value is 4.00. It is mean that computed F value is higher than critical F value.

The hypothesis in this research is (Ha) the students who are taught using E-Learning in reading comprehension have better achievement than the students who are taught using Offline Learning. To test the hypothesis, there were some steps :

1. Determine the level of significance, here is 0.05
2. Determine the degree of freedom (df)
3. Determine the F critical value

|    |      |
|----|------|
| Df | 0.05 |
|----|------|

|    |      |
|----|------|
| 60 | 4.00 |
|----|------|

The critical F value is 4.00 while the computed F value is 16.668. The computed F value is higher than critical F value, so it can be concluded that there is a significance difference between Reading Comprehension of the student taught using E-Learning and Reading Comprehension of the students taught using Offline Learning. It was proved by computed F value is higher than critical F value. From the result above, it can be concluded that Alternative Hypothesis ( $H_a$ ) is accepted.

Based on the result of data analysis in this research, the researcher will describe the finding based on the hypothesis testing. The hypothesis testing showed that there is a significance difference between Reading Comprehension of students who are taught using E-Learning and Reading Comprehension of the students who are taught using Offline Learning. The students who taught using E-Learning have better achievement than the students taught using Offline Learning. It was proved from the computation where computed F-value (16.668) was higher than the F-critical value (4.00) in 0.05 level of significance. It meant that  $H_a$  was accepted, so, it was clear that E-Learning gave a significant effect on the students' reading comprehension achievement.

Based on the explanation above, it can be concluded that a reader has a good comprehension if she or he is able to perform the comprehension of reading skills well either orally or in written form. The test instrument covered all the skills that required above, and the posttest result showed that students who are taught using E-Learning have better achievement than the students who are taught using Offline Learning. It might be conclude that E-Learning was a good way for the students in supporting learning reading.

According to Pallof and Pratt (2007), E- Learning is a general term used to refer to computer based learning. The application of E-Learning trains the students to be good readers. This media has some advantages such as make students more interest to study because the materials in this media are presented in digital form, E-Learning is suitable with the development of high technology to support teaching learning activities. The use of E-Learning can make the students more excited in study and make them interested in the subject that the teacher give because this media can make the situation of study some materials different than class which is not use E-Learning.

### ***Conclusion and Suggestion***

After doing the research, in accordance with the using of E-Learning on the learners' reading comprehension achievement, the researcher conclude that:

E-Learning is one of the alternative solutions that the teacher can use to teach reading to their students. It makes students have a responsibility to mastery their reading material. According to statistical calculation which has been analyzed the research finding, it can be concluded that the learners who are taught using E-Learning have better achievement on the learners' reading comprehension achievement in the posttest than the pretest at the tenth grade class A at Wachid Hasyim Senior High School. Actually, the use of E-Learning was useful for the learners, especially in reading process. By using it, the learners had new media and new concept on learning. They will be more interested in learning reading because the materials given are in digital form. It is different from students who are taught using Offline Learning which is more traditional way in teaching reading.

The hypothesis testing stated that E-Learning gave a significant effect on the students' reading comprehension achievement at the tenth grade of class A in Wachid Hasyim Senior High School. It was proved in computed F value was higher than F-critical on level significance 0.05. Based on this result, it

meant that E-Learning gave any significant effect on the students' reading comprehension achievement at the tenth grade of class A in Wachid Hasyim Senior High School.

In accordance with the result that researcher got of this research, the researcher have suggestions for the teacher and the students. The teacher should prepare the Electronic materials as well as possible to make the students easy to use it. Besides, the teacher should accustom to use E-Learning to make the students become accustomed with the new concept of E-Learning itself. For students, studying foreign language is not simple because probably, the language is rarely used in our daily activity especially in listening process. Thus, the students should pay attention more to this case to prevent misunderstanding in this process. Therefore, they have to be truly serious in reading in order to be good readers. To solve this problem, they should make reading as a habit. It will be supported by using the E-Learning, and the students should support the use of E-Learning by taking care of its.

Complete facilities can support students' success because they will have more chance to develop what they want and need. It will be better to make the facilities, thus the use of the E-Learning has benefit to the learners.

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