The Effectiveness of E-Learning as Teaching Media in EFL Classroom

Desi Surayatika 1)

1) Program Studi Pendidikan Bahasa Inggris Universitas Indo Global Mandiri
Jl. Jend. Sudirman No. 629 KM.4 Palembang Kode Pos 30129
Email : desisurayatika@yahoo.com

ABSTRACT

This research was made based on an experimental design that was conducted at the University of Indo Global Mandiri, Palembang. The aim of this research was to find out the effectiveness of e-learning as teaching media in EFL classroom. In this research, there were two different samples to be judged their writing achievement. First is experimental group which was given a treatment and second is control group which was not given any treatment. As data source, a test in written test was used in this research. Before starting the research, a pre-test was taken from both groups and two raters scored the students’ written tests based on rubric score. After implementing the treatment, both groups were given a post-test and the same raters scored their tests to know the significant improvement and significant difference between the scores of both groups. The results indicated that by using this technique, the students’ writing achievement was improved. It was shown from the mean scores of pre-test in experimental group that increased from 43.30 to be 77.20 in post-test. The significant difference of the post-test scores between both of experimental and control groups could be seen from the results of the t-obtained of both groups. It was considered higher than the t-table. Accordingly, it could be claimed that teaching writing by using e-learning brought about an improvement in students’ writing achievement. This technique was good way to help students learning English.

Keywords: improving, e-learning

ABSTRAK


Kata kunci: peningkatan, e-learning
1. Introduction

Nowadays, English is used in establishing relationship to other nations. It is considered as one of the international languages that most widely used all over the world. Currently, English is viewed as a language which gives people access to the world. Some want to study at prestigious English-speaking universities; some want a better career with international connections. Science and technology have developed with English at the forefront. In addition, there is a need for a global language to make international communication smoother, and as the tools to connect with the worldwide web truly accessible around the world (Maxom, 2009 p. 10). In addition, Harmer (2007) points out that English is spoken by at least a quarter of the world’s population. It is important to realize that this means English is spoken by many people in the world.

English Proficiency Index (EPI) in 2012 explains that “English is the primary tool for international communication today. Every year, more and more speakers of other languages are learning English”. This increase is driven by many factors, such as in the school sector, English study is expanding through the introduction of English lessons for younger pupils, the extension of the number of years of required schooling, increasing school attendance rates, and the application of curriculum reform requiring all students to study English.

Based on the data of EPI (2012), the writer finds out the summary of International data about English which include: (1) English is a key component of economic well-being, both nationally and individually, (2) women speak English better than men worldwide and in almost every country, (3) young professionals, aged 25-35, speak the best English of any group. They need English to get along in a modern workplace, (4) Europe’s English is the best of any region, but some European countries need to get serious about teaching English to a high level if they are to keep up with their neighbors, (5) despite having some of the best-performing school systems in the world, Asian countries are not educating their children to a high level in English. Countries where English is an official language have only slightly higher proficiency than others in the region.

In addition to all the young people learning English at school, the private English instruction sector is booming. In many countries, working adults receive English language training either directly from their employers or through employer funding schemes for lessons they organize themselves.

In Indonesia, English is a foreign language. The students have been learning English since elementary school. Learning a foreign language is an integrated process that the learner should study the four basic skills: listening, speaking, reading and writing. The students use it to understand our world through listening and reading to communicate our feeling, need and desires through speaking and writing. Reading, Writing, Speaking, and listening standards describe what the students should know and be able to do with the English language to understanding what they want and need from these around us.

Based on English Proficiency Index (EPI, 2012), English Proficiency index divided in to five levels, those are very high proficiency, high proficiency, moderate proficiency, low proficiency and very low proficiency. Indonesia is in the 27 rank from 54 countries and in Asian, Indonesia is in the eight rank, Singapore is in the first and Thailand is in the last rank. It means Indonesia is in the low proficiency in learning English.

One of skills that should be mastered by the students is writing. Writing is a form of communication in which one expresses his or her ideas, feelings, and thoughts to convey a message to the reader via a text. In addition, Sharples (1999, p. 3) claimed that writing is a peculiar activity, both easy and difficult. The more we think about how we do it, the more difficult it becomes. Learning to write is not just a natural extension of learning to speak a language (Raimes, 1983, p. 4). Writing also involves the encoding of message that is a writer translates his or her thoughts into language. Teachers of writing have to make sure that students have frequent opportunities to work on authentic tasks.

Based on the observation in teaching learning process in some schools in Palembang. The writer found there were some problems in the context of the English teaching and learning writing. It was just conducted in one or two times in a month. It made the students become lack of ideas and vocabulary in writing. To overcome those problems, it is important for the teacher to find a new strategy and treatment to improve their listening ability. The writer used a different strategy to increase the students’ listening achievement. The strategy would make the students excited in learn writing because the writer used e-learning that enable the students to get the good achievement in writing. According to Mayer (2003), multimedia instructional is a presentation consisting of words and pictures that is designed to foster meaningful learning. Thus, there are two parts to the definition: (a) the presentation contains words and pictures, and (b) the presentation is designed to foster meaningful learning.

Based on the background, the research problem was formulated as: “Was it effective to use online learning in improving the writing achievement of the students?”

A. Literature Review

Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization (Fry, 2001). There has been extensive debate about a common definition of the term e-learning. Existing definitions according to Dublin (2003) tend to reveal the specialization and interest of the researchers. E-learning as a concept covers a range of applications, learning methods and processes (Rossi, 2009). It is therefore difficult to find a commonly accepted definition for the term of online learning, and according to Oblinger and Hawkins (2005) and Dublin...
(2003), there is even no common definition for the term. Some of the definitions of the term e-learning as given by different researchers and institutions are reviewed below. In some definitions e-Learning encompasses more than just the offering of wholly on-line courses. For instance Oblinger and Hawkins (2005) noted that e-Learning has transformed from a fully-online course to using technology to deliver part or all of a course independent of permanent time and place. Also the European Commission (2001) describes, e-Learning as the use of new multimedia technologies and the Internet to increase learning quality by easing access to facilities and services as well as distant exchanges and collaboration.

E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources. In its broadest sense, Abbad et al (2009), defined E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based (LaRose et al. 1998; Keller and Cernerud, 2002). According to Maltz et al (2005), the term 'e-learning' is applied in different perspectives, including distributed learning, online-distance learning, as well as hybrid learning. E-learning, according to OECD (2005) is defined as the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education, and includes the usage of information and communication technology as a complement to traditional classrooms, online learning or mixing the two modes. Also according to Wentling et al (2000) the term e-learning refers to the attainment and use of knowledge that are predominantly facilitated and distributed by electronic means. To them, the e-learning depends on computers and networks, but it is likely it will progress into systems comprising of a variety of channels such as wireless and satellite, and technologies such as cellular phones (Wentling et al., 2000). In their literature review on definitions for e-learning, Liu and Wang (2009) found that the features of e-learning process are chiefly centered on the internet; global sharing and learning resources; information broadcasts and knowledge flow by way of network courses, and lastly flexibility of learning as computer-generated environment for learning is created to overcome issues of distance and time (Liu and Wang, 2009). Gotschall (2000) argues that the concept of e-learning is proposed based on distance learning, thus a transmission of lectures to distant locations by way of video presentations. Liu and Wang (2009) however claims that the progression of communications technologies, particularly the internet, did transform distance learning into e-learning. Other researchers also defined e-learning as a revolutionary approach (Jennex, 2005; Twigg, 2002) to enable a workforce with the knowledge and skills needed to turn change into benefit (Jennex, 2005). For instance Twigg (2002) described the e-learning approach as centered on the learner as well as its design as involving a system that is interactive, repetitious, self-paced, and customizable. Welsh et al. (2003) also referred to the term as the use of computer network technology, principally through the internet, to provide information and instruction to individuals. According to Tao et al (2006), the new environment for learning that is centered on electronic networks has allowed learners in universities to receive individualized support and also to have learning schedules that is more suitable to them as well as separate from other learners. This facilitates a high interaction and collaboration level between instructors or teachers and peers than traditional environment for learning.

E-learning in academics which is characterized by the use of multimedia constructs made the process of learning more active, interesting and enjoyable (Liaw et al., 2007). The main constructs that have made e-learning the most promising educational technology according to Hammer and Champy (2001) and Liaw et al (2007) include service, cost, quality, and speed. It is apparent that e-learning can empower students at higher educational levels to acquire their education in while at the same time perusing their personal objectives as well as maintaining their own careers, with no need to attend be subjected to rigid schedule (Borstorff and Lowe. 2007). Kartha (2006) in support of this thought reported that the number of courses online has vividly increased as a result of the attained benefits for both learners and universities. Algahtani (2011) in his evaluation of the effectiveness of the e-learning experience in Saudi Arabia categorized the definitions of e-learning from three different perspectives: the distance learning perspective (Perraton, 2002; Alarifi, 2003; Holmes and Gardner, 2006), the technological perspective (Wentling et al. 2000; Nichols, 2003) and also from the perspective of e-learning as pedagogy (Khan, 2005; Schank, 2000). It can therefore be concluded from the above that it is difficult to identify a common definition for e-learning. Some of the authors refer to e-learning as providing complete on-line courses only whereas comprise web-supplemented and web-dependent services for the provision of educational and support processes.

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang et al. 2007). Development in information technology, According to Yang and Arjomand (1999), has generated more choices for today’s education. Agendas of schools and educational institutions have recognized e-Learning as having the prospect to transform people, knowledge, skills and performance (Henry, 2001). Also according to Love and Fry (2006), colleges, universities, and other institutions of higher learning race to advance online course capability in a speedily developing cyber education market. E-learning, has come to be more and more important in institutions of higher education. The introduction and expansion of a range of e-Learning tools has been initiating several changes in higher
education institutions, particularly when it comes to their educational delivery and support processes (Dublin, 2003). Just as there are different types of e-Learning, there are also different ways of employing the technique in education. Algahtani, (2011), in his evaluation of E-learning effectiveness and experience in Saudi Arabia, discovered three distinct models of using e-learning in education including the “adjunct, blended e-Learning and online”. The three ways of using e-learning technologies as discovered by Algahtani (2011) are described below. The “adjunct Online Learning is the situation which e-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011). In the blended e-Learning, Algahtani (2011) and Zeitoun (2008) explained that, in this way of using e-Learning, the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting. The third one which is the online is devoid of the traditional learning participation or classroom participation. In this form of usage, the e-Learning is total so that there is maximum independence of the learners or students (Algahtani, 2011; Zeitoun, 2008). Zeitoun (2008) has gone further to explain that the online model is divided International Journal of Education and Research Vol. 2 No. 12 December 2014 401 into the individual and collaborative learning, where the collaborative learning also consist of the synchronous and asynchronous learning (Zeitoun, 2008).

From the advantages, the researcher can conclude that using e-learning as teaching media had several benefits. E-learning can encourage the students to express their opinions and feelings freely in a joyful activity in which the students interact with others to practice more their English through games activities.

B. Methodology

In this research the writer involved two groups: one experimental and the other one is control group. While the experimental group received the treatment and the control group did not. In conducting the research, the writer used non-equivalent control group design as suggested by Creswell. In this design, Creswell (2008, p. 160) describes a popular approach to quasi-experiments, the experimental group A, and the control group B are selected without random assignment. Both groups take a pre-test and post-test. The writer only gave the treatment to the experimental group.

1. Population and Sample

Population is the group of individuals having one characteristic that distinguishes them from other group (Creswell, 2012, p. 381). According to Fraenkel, Wallen and Hyun (2010, p. 91-92), population is the “larger group to which one hopes to apply the results”. The population of this study involves the students at University of Indo Global Mandiri.

Creswell (2010, p. 381) states that sample is “the group of participants in a study selected from the target population from which the researcher generalizes to the target population”. The subject in this research is the students of English Study Program at University of Indo Global Mandiri Palembang. In this case, the writer used purposive sampling. According to Arikunto (2010 p. 183) purposive sampling is the sampling used by the researcher based on some considerations.

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Control Group</td>
<td>15</td>
</tr>
</tbody>
</table>

(Source: Universitas IGM Palembang)

2. Instrument

In collecting the data, the researcher used test as the only instrument. It was used to see and measure the improvement of students’ writing achievement after implementing the technique. The test was conducted twice and was in the form of written test. A pre-test was given to the participants of both experimental and control groups to diagnose students’ achievement or basic competence and existing knowledge in writing class before implementing the treatment by using e-learning. Meanwhile, a post-test was accomplished to evaluate and measure students’ writing achievement after implementing the treatment.

The researcher collected data which were derived from the students’ pre and post test by using speaking rubric and it was rated by two different raters. Then, the results of the test were analyzed by comparing the data before and after the treatment by using SPSS 22 (Statistical Package for Social Sciences) program. In analysing the obtained data, the researcher used paired sample t-test to know the significant improvement between both groups from their pre-test and post-test score. Meanwhile, independent sample t-test was also used to know the significant difference of the post-test scores between both groups.

3. Procedures

In implementing communication game, the researcher used three-phase technique based on the curriculum 2013 namely: (1) Opening Phase, (2) Core Phase and (3) Closing Phase.

First of all, the researcher planned what action will be done in applying the communication games in teaching speaking. The researcher prepared everything that was needed in doing the research. For instance, she prepared the lesson plan that will be used in teaching speaking class, the material that was used in implementing the action and she also prepared the teaching instrument such as sets of pictures, some useful expressions and vocabulary and other media which are enable learners to expose their English through the activities.

After forming the lesson plan and teaching instruments, the researcher as teacher together with
students discussed about material that will be studied today. She gave some useful vocabularies and also expressions needed to students and explained how to use it correctly related to the material today.

After explaining the material, the researcher applied game to stimulate students to speak. She gave the instructions about the rules of playing the game and also gave example to play it. By using the target language but in the simple form of sentence with the correct structure, they learned and tried to practice their English in speaking class without anxious or any force but in a joyful and comfortable way.

At last, the teacher together with the students reviewed and concluded the material today as whole. Here, the teacher asked students concerning materials they had been learning during the learning process. If there were problems, the teacher would give little bit time and opportunities to share and solve the problem. Sometimes she gave some advices to students.

2. Findings and Interpretations

A. The Findings of Study

In these findings, the writer presents the result of research and the analysis of the data that were collected through pre-test and post-test of experimental and control group. Pre-test was conducted at the beginning of the research and the post-test at the end of the research. In conducting the result of the research, the writer used t-test, paired sample t-test and independent sample t-test.

From the t-test, the writer analyzed the frequencies of pre-test and post-test in experimental group. The mean score of pre-test in experimental was 43,30, where 24 as the lowest score which was achieved by one student and the highest score was 56 which was achieved by 6 students. In the post-test of experimental group, the writer interpreted that the mean score was 77, 20, where 64 as the lowest score which was achieved by one student and 96 as the highest score which was achieved by one student. Here, the writer could say that there was significant result between pre-test and post-test of the experimental group.

In paired sample t-test, the writer compared the result of pre-test and post-test of experimental and control group to know the result of each group. The mean score of pre-test in experimental group was 43,30 and the mean score of post-test in the experimental group was 77,20. Based on the paired sample t-test of experimental group, the writer found that there was significant improvement between the mean score of pre-test and post-test. In the control group, the mean score of pre-test was 36,40 and the mean score of post-test was 51,10. Based on the paired sample t-test of control group.

In control group, the writer interpreted that there was an improvement too in control group but the improvement of control group is not significant as experimental group. In independent sample t-test, the writer compared the result of post-test in the experimental and control group. Independent sample t-test was used to know the mean difference of post-test between experimental and control group. The mean score of post-test experimental group was 77,20 and in the control group was 51,10. The mean difference of experimental group and control group was 26,1. From the mean difference, the writer could say that there was significant different between the result of post-test in the experimental and control group.

From the paired sample statistic of the experimental group, the writer found the mean score of the pre-test was 43,30 the standard deviation was 8,096, and the standard error mean was 1,280. On the other hand, the mean of post-test was 77,20, the standard deviation was 6,090 and the standard error mean was 0,963. The result of paired sample t-test in experimental group shows that the significant level of −tobtained < -ttable (−24,546 < -2,023) dan P value (0,000 < 0,05) for 2-tailed test and degree of freedom (df) 39. It means that the t-obtained was higher than t-table. So, the null hypothesis (H0) was rejected and the research hypothesis (H1) was accepted. If the result of t obtained is higher than t-table (to>t), the null hypothesis (H0) is rejected and alternative hypothesis (Ha) is accepted. It means that there is a significant difference between variable X and variable Y. If the result of t obtained is lower than t-table (to<t), the null hypothesis (H0) is accepted and alternative hypothesis (Ha) is rejected. It means that there is no significance between variable X and variable Y.

Therefore, there was a difference between the result of pre-test and post-test in the experimental group. We can see it from the paired sample t-test where the means score of pre-test in experimental group was 43,30 and for the mean score of post-test in experimental group was 77,20. It can be stated that there was a significant difference in listening comprehension achievement between pre-test and post-test through online learning in the experimental group.

Based on the paired sample t-test of the control group, the mean of pre-test was 36,40, the standard deviation was 7,51, and the standard error mean was 1,18. However, the mean of post-test was 51,10, the standard deviation was 8,42, and the standard error was 1,33. The result of paired sample t-test in experimental group shows that the significant level of −tobtained < -ttable (-11,519 < -2,023) dan P value (0,000 < 0,05) for 2-tailed test and degree of freedom (df) 39. It means that the t-obtained was higher than t-table, the null hypothesis (H0) was rejected and the research hypothesis (H1) was accepted. There was a difference in the results of pre-test and post-test in the experimental group. We can see it from the paired sample t-test where the means score of pre-test in experimental group was 43,30 and for the mean score of post-test in experimental group was 77,20. It can be stated that there was a significant difference in improving the writing achievement in pre-test and post-test in control group without the treatment.

B. Interpretations

Based on the statistical analyses, the writer interpreted the findings mentioned earlier in this section.
First, statistically the students in the experimental group showed progress in their listening achievement after the treatment. It could be seen that the value of the experimental group with treatment was higher than the control group without treatment. It was proven by the result that there was a significant difference in writing achievement before and after they were taught by using online learning. The result of statistical differences of t-obtained was (15.880) at the significant level of p<0.05 in 2-tailed and degree of freedom (df) was 78 and t-table was 1.990. Since the value of t-obtained was higher than t-table, so that the null hypothesis (H₀) was rejected and alternative hypothesis (H₁) was accepted.

Based on the explanation above, there were some factors that influenced the students to achieve good improvement in teaching learning process. The improvement could be influenced by the method or media that teacher used to present the material. In this study, the writer also gave the treatment through online learning to increase the students’ writing achievement. The treatment was successful to increase the writing achievement of the students in the experimental group.

For other researchers in the future who want to apply this media in listening comprehension, it is better to prepare what they need for research before the research will be held. The researcher should avoid the factors that can give the limitation or weaknesses of the study, such as the length of time of research, the sample, the material and method that will be used. If the researcher cannot handle the limitation of the study, the writer may get the difficulties in doing the research.

In conclusion, the writer found that there was a significant difference in students’ score between the students who were taught through online learning and those who were not. There was a progress in the pre-test and post-test of control group but the progress was not significant as in the experimental group. It occurred because of some factors such as (1) the students in the control group had better prior knowledge than the experimental group, (2) the students of control group also received the material from their teacher. Although the control group received the progress but the progress was not significant as in the experimental group. Therefore, teaching writing through online learning was effective to improve the writing achievement.

### 3. Conclusions

Based on the findings and interpretations presented in the previous chapter, the writer concluded that there was significant improvement on students’ writing achievement taught through e-learning.

In conclusion, it could be assumed that the online learning was effective to increase the writing achievement. The students got the enhancement or advantages from the implementation of online learning. It was supported by the result of the test, it is implied that online learning could be used as an effective media in teaching writing achievement.

### Suggestions

The writer of the research suggests that the teachers to use online learning as the media in teaching writing achievement because it is better for the teachers to use media to support. Media can be a great and fun way to build the students’ motivation and increase the better ability in learning English. The teacher of English should have some various innovative method, technique or media for teaching English in order to make the students have interest in learning English. English teacher should shift from the traditional method, technique or media in to the latest innovative and interactive method, technique or media. Therefore, this strategy is one of e-learning that be used and applied by the teacher of English in teaching writing. This media was successful to make the students more excited, active and as an effective media to increase the students writing achievement and even to improve the students’ achievement in the other skills such as reading, speaking and writing.

### References


