ABSTRACT

This research is aimed at investigating whether the implementation of Duolingo Application can improve students’ English vocabulary achievement for the student at seventh grade of SMP. This research was conducted in one class and applied pre-experimental design that was one group pretest and posttest. The researcher found that Duolingo Application can be used in teaching English vocabulary. The result showed that students’ mean score improves from 61.15 up to 77.25. The hypothesis was analyzed at significant level of 0.05, and the result showed that t-value was 14.461 and the sig.2-tailed 0.000. It means that hypothesis was accepted and Duolingo Application can be used to improve students’ achievement in vocabulary. The researcher suggests the English teachers to use Duolingo Application as the media in teaching English vocabulary because it can make students more interested in the teaching and learning activity.

Key words: duolingo, computer-assisted language learning, learning vocabulary
INTRODUCTION

English plays an important role in the world because it is the most widely spoken language. English is a spoken for most international events and as a medium of information in science, culture, and technology. So we can call that English is the first (international) language. Besides, it must realize that most scientific books are written in English. Accordingly, in order to be able to comprehend the books for getting knowledge, everyone must be adequate mastery of English and so must the Indonesian students.

Furthermore, they have to acquire English that involves four language skills i.e. listening, speaking, reading, and writing. However, being able to master the skills, the students need vocabulary. McCarthy (1990) states no matter how well the students learn grammar, or how successful the sounds of the language are mastered, without words communication cannot occur in any meaningful way.

Based on information obtained from the English teacher at SMP Negeri 1 Bandar Lampung, it was found that there were many students who had very limited mastery of vocabulary. It was found that most of the students could not answer the question in English. They asked the teacher to translate the question into the Indonesian language. Besides that, the other reason that causes the problem was that the teacher did not use the media in learning vocabulary. The teacher just asked the students to read the material and to find the meaning from the dictionary. It made the students feel bored in learning vocabulary.
The teacher should provide the interesting media in order to develop the students’ activity in learning vocabulary. One of the media in teaching vocabulary is using application based on CALL (Computer Assisted Language Learning) with learning media that assisted by computer. CALL is another media of learning a language which incorporates computers as a tutor. Levy (1997:1) defined CALL as the search for and study of applications of the computer in language teaching and learning.

According to Grimes (1977), CALL gives students a platform to learn a new language independently with minimal guidance from the teacher. Previous researchers have shown that CALL programs bring many benefits to students, providing room for learners of English to learn the language themselves without much teacher interference. Students get to explore the language on their own and learn from their mistakes. This is different from the typical classroom situation where students will be dependent on the teachers. It is apparent that the roles of teachers and students have changed with the presence of technology assisted learning.

One of the CALL program is Duolingo Application. Jaskova (2014:15) defines Duolingo is seen as a future in learning languages and in global communication. Students work with the program and get a chance to explore all the skills in English. Although the content of the software is not suited to the students’ cultural background, it engages students in a very interesting way that can motivate them.
Based on the arguments above, this research is aimed at finding out whether the use of Duolingo Application can improve students’ vocabulary achievement. The use of Duolingo application is expected to overcome the problems and it can help students and teachers in the learning process, especially vocabulary. This research is also expected to find out how is the implementation of teaching vocabulary through Duolingo application.

METHODS

One group pretest-posttest design was used in order to find whether the use of Duolingo Application can improve students’ vocabulary achievement. This research was conducted in six meetings for three weeks. The design can be illustrated as follows:

\[ T_1 \times X \times T_2 \]

In Which:

\( X \) : Treatment Implementation

\( T_1 \) : Pretest (before treatment)

\( T_2 \) : Posttest (after treatment)

The population of this research was the first year students of SMP Negeri 1 Bandar Lampung, academic year of 2015/2016. The researcher used one class as the sample of this research, class was 7.1 that consisted of 32 students. The researcher used lottery technique to choose the treatment class. So that those all classes got same chance to be sample.
Before conducting the test, try out test was carried out. This test was administered in order to determine the quality of the test as the instrument of the research. In the second meeting the researcher conducted the pretest to know their basic ability in vocabulary. The test consisted of 30 items of multiple choices. The time for administering the pretest was 60 minutes. In the third meeting, the researcher conducted the first treatment by using Duolingo application. In the fourth and fifth meeting the researcher still conducted the treatment. In this meeting the researcher used Duolingo application and play the material as he game. The last meeting was used by the researcher to conduct posttest. It required 60 minutes for the posttest. The test was still same with pretest.

In order to collect the data, the researcher used several steps, i.e. determining the population and sample, finding and selecting the materials, administrating the pretest and getting the result, conducting treatment by using Duolingo application, administering the posttest, and the last was analyzing the data.

In analyzing the data, the researcher used repeated measure t-test. t-test was probably the most widely used statistical test for the comparison of two means because it can be used with very small sample sizes (Hatch and Farhady, 1982: 108). The instrument of this research was valid and reliable. The validity of this research was construct validity and the reliability was inter-rater reliability.
After collecting the data, the researcher analyzed them in order to find out whether there was an improvement in the students’ vocabulary achievement or not after the treatment. The researcher used repeated measure t-test to find out the improvement of the treatment effect. The criteria are shown as follow: H0: There is no significant difference in students’ vocabulary achievement before and after being taught through Duolingo application. The criteria is Ho (null hypothesis) is accepted if alpha level is higher than 0.05 (α> 0.05. H1: There is a significant difference in students’ vocabulary achievement after being taught through Duolingo application. The criteria H1 is accepted if alpha level is lower than 0.05 (α < 0.05).

RESULTS AND DISCUSSION

RESULT
The researcher conducted six meetings. In the first meeting, the researcher gave try out test in order to determine the quality of the test as the instrument of the research. In the second meeting the researcher conducted the pretest to know their basic ability in vocabulary. In the third meeting, the researcher conducted the first treatment by using Duolingo application. In the fourth and fifth meeting the researcher still conducted the treatment. The last meeting was used by the researcher to conduct posttest.

The statistical computation using independent t-test showed that there was improvement of students’ vocabulary achievement. We could see that from the mean in pretest was 61.15 up to 77.25 in posttest. The improvement was 16.10.
DISCUSSION

This research needs more than three-time treatments in order that the increase of the students’ vocabulary achievement will be more significant and the students can get much vocabulary. Try out was conducted in order to measure the quality of the test used as the instrument and to determine which items should be revised for the pretest and posttest. After administering the pretest, the treatments were conducted for three times. When the teacher gave the treatment to the students, it seemed that they were interested in the materials. Duolingo application was presented with clear procedures.

At the first treatment, the students were told first what the Duolingo application is. The teacher introduced the rules in doing the application and demonstrated the application by giving the example. The teacher gave an example by the LCD screen and played Duolingo application, and then the teacher asked the students to answer the questions. The teacher and the students explained or translated the unknown words together. After that, the students have to work with the laptop or the gadget device. For the student that did not bring the gadget can work together with their chair mate. Then the teacher explained the rule of Duolingo application.

Then the teacher makes sure that the students had understood the game and the procedures involved the rules. The teacher commands the students to begin the application. The students try to find new words. They should also complete each level less than 7 minutes, in order to the students focused at their level. The teacher announces the winner which has the highest points on Duolingo.
application, after that the teacher gives the evaluation. When teaching in the classroom, the researcher found that the students were enthusiastic in following the teaching learning process because they were not aware that they were studying.

In the second meeting, the teacher did the same thing as the first treatment for the second treatment. The teacher told the students that they were going study about the vocabulary through Duolingo application. The teacher told the students to log in with their own account, and then continued their last level and tried to get the higher points than before. On this meeting, the teacher asked the students to only used one gadget for two students, so they played Duolingo application in a pair. The students felt more enjoy and more interesting with the game, they were more active than before. They discussed together to find new words, they were more competitive and motivated.

In the third meeting, the teacher did the same thing as usual from beginning until closing. The students had to log in with their own account and then continued their game level. The teacher gave the level target of the student and showed their score on the LCD screen, so they competed to get the highest point with their friends. The teacher watched their progress and walked around the class to see the activity of the students. The teacher also supported the students that had problems with the application.

Then, the researcher analyzed the result and it was found that there was an
improvement in aspect of vocabulary. It could be seen from the mean score in pretest was 61.15 up to 77.25 in posttest. The improvement was 16.10. The researcher found that there was a difference of students’ vocabulary achievement in class 7.1 after being taught through Duolingo application was significant. In other words, Duolingo application can be used to increase the students’ vocabulary achievement. It can be concluded that there was a significant increase in students’ vocabulary achievement after being taught Duolingo application.

From the result of this research, the researcher found that the students who were taught through Duolingo application could achieve a better result in learning English vocabulary. The research had shown that Duolingo application could make the student more active and motivated in the process of learning. It is supported by Clark (2013) who states that technology can increase the effectiveness of vocabularies teaching efforts. They also stated that technology can be useful, challenging, creative tool and resources in and around the classroom.

It also supported by Rodger (2010:1) who states that the use of game could develop activities to make students forget that they are in the class that is to relax the students by engaging them in stress. It means games offer a variety of interesting activities in which the students may explore many enjoyable aspects of learning. Games help the students keep on concentrating to what have been discussed during the hours. This statement is supported by Wright (2006:1) who says that games help and encourage learners to sustain their interest and work. In
this case, the students learn the vocabularies through the activities that they play in the games. This technique will make the students learn the vocabularies without realizing that they are learning.

So by applying Duolingo application, students will be more interested and challenged since they have to compete with each other. Besides, the students’ scores in the posttest were higher than the students’ score in the pretest. This means that Duolingo application gave a good contribution to the attainment of teaching learning English vocabulary. Although the master learning in this research was not too successful, the students’ vocabulary achievement increased significantly after being taught through Duolingo application and it helped English teacher to raise the students’ interest and motivation in learning English vocabulary.

Finally, it can be concluded that was a significant difference in the student’s vocabulary achievement at the seventh grade of Junior High School 1 Bandar Lampung after being taught through Duolingo application.

CONCLUSION

Seeing the teaching-learning process class 7.1, it was noted that learning vocabulary through Duolingo application could motivate and challenge the students. It can be seen from their enthusiasm and participations in doing the application. There was also an increase of students’ vocabulary after being taught through Duolingo application. It can be seen from the score of students. The result
of the posttest was higher than the result of the pretest. The highest score of the pretest was 75 and the highest score of the posttest was 92. The gain score was 17.

The researcher found that there were some students did not know the meaning of some English words used as vocabulary target. Therefore, the English teacher should observe or review whether all the students in the class give an appropriate response or comprehend the vocabulary meaning which has been learned. It is needed to avoid the students’ misconception of the vocabulary meaning.

Since teaching by using Duolingo Application in learning vocabulary can give better result for the students in teaching and learning process, the researcher suggests to the teacher to use Duolingo Application as the media in teaching vocabulary.

REFERENCES

Clark, M. 2013. *The Use of Technology to Support Vocabulary Development of English Language Learners.* Education Masters.