APPLYING INTEGRATED COMPUTER ASSISTED MEDIA (ICAM) IN TEACHING VOCABULARY

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Abstract

The objective of this research was to find out whether the use of integrated computer assisted media (ICAM) is effective to improve the vocabulary achievement of the second semester students of Cokroaminoto Palopo University. The population of this research was the second semester students of English department of Cokroaminoto Palopo University in academic year 2013/2014. The samples of this research were 60 students and they were placed into two groups: experimental and control group where each group consisted of 30 students. This research used cluster random sampling technique. The research data was collected by applying vocabulary test and it was analyzed by using descriptive and inferential statistics. The result of this research was integrated computer assisted media (ICAM) can improve vocabulary achievement of the students of English department of Cokroaminoto Palopo University. It can be concluded that the use of ICAM in the teaching vocabulary is effective to be implemented in improving the students' vocabulary achievement.

Keywords: *Integrated Computer Assisted Media (ICAM), vocabulary, unfamiliar words*

Abstrak

Tujuan penelitian ini adalah untuk mengetahui apakah penggunaan gabungan media dengan bantuan komputer (ICAM) efektif dalam meningkatkan penguasaan kosakata mahasiswa semester II jurusan Bahasa Inggris Universitas Cokroaminoto Palopo. Penelitian ini menggunakan metode quasi eksperimen. Populasi pada penelitian ini adalah Mahasiswa Semester II jurusan Bahasa Inggris Universitas Cokroaminoto Palopo tahun pelajaran 2013/2014. Sample penelitian ini terdiri dari 60 mahasiswa yang dibagi kedalam dua kelompok: kelompok eksperimen dan kontrol dimana tiap kelompok berjumlah 30 mahasiswa. Penelitian ini menggunakan teknik cluster random sampling. Data penelitian dikumpulkan dengan menggunakan tes kosakata dan dianalisis dengan menggunakan statistik deskriptif dan inferensial. Hasil dari penelitian ini adalah Media Gabungan dengan Bantuan Komputer (ICAM) dapat meningkatkan kemampuan kosakata mahasiswa semester II jurusan Bahasa Inggris Universitas

Cokroaminoto Palopo. Dapat dapat disimpulkan bahwa penggunaan ICAM dalam mengajarkan kosakata sangat efektif untuk diaplikasikan dalam meningkatkan kemampuan kosakata mahasiswa.

Kata kunci: *PENGGUNAAN Gabungan Media Dengan Bantuan Komputer (ICAM), kosakata, kata unfamiliar*

Introduction

Talking about English, it covers the four skills of language which should be mastered by the students namely speaking, reading, writing, and listening. Those four skills are closely related to some element such as structure, vocabulary, spelling, and pronunciation.

In EFL context, English is used to communicate with other people from abroad who have different language. It means by English, people can interact and build relationship to others from different country. In fact, many people feel difficult to use English especially for the students who study English.

There are many reasons why students feel difficult in studying English, one of them is poor of vocabulary mastery. Sjachrun (2010:1) states that the mastery of vocabulary is one of the important aspects in learning English especially for the students at senior high school. So, how the students can master the English if they are lack of vocabularies. It assumes that their vocabulary mastery is very poor and the impact is they will find more difficulties in spoken and written form especially for the students at the university who lack of vocabularies.

According to Rahayu (2008:1) building vocabulary words is a key to reading, writing, speaking and listening. A person's vocabulary mastery can be measured in terms of building receptive vocabulary (i.e. understanding) words and their expressive vocabulary words. She also argues that building vocabulary is far more than memorizing words.

Vocabulary is the knowledge of words. It also takes part for the students in mastery of English. That is why, the researcher in this research focused on the vocabulary on how to improve the students' vocabulary from poor English vocabulary become English vocabulary mastery, in order can reach the objective of teaching and learning. She decided to choose this term because the

phenomenons of the people who get some problems in vocabulary mastery also happen for her students. Based on her observation and experience in the field, the students of Cokroaminoto of Palopo especially for the second year students still lack of vocabulary.

There is an Indonesian motto *"Tak kenal, maka tak sayang"* means not knowing, so not loving. The researcher relates this term with the vocabulary mastery. If someone does not know the English words (or they lack of vocabulary), he will not like or love English very much. Therefore, the teachers or lecturers should find out the best innovative way or strategy to solve this problem.

Teaching vocabulary is not easy and simple things to do. Good teachers and good lecturers must do the best strategy on how to teach English vocabulary. Besides, in presenting the material, they also need to be a creative person to choose and to use a media which is effective to improve students' vocabulary. Furthermore, applying media purposes to make the teaching and learning process become attractive, enjoyable, not bored or frustrated, effective and efficient. That is why creativity is needed when developing the basic game idea (in Crookall & Oxford, 1990:68).

There are some media such as: visual media, audio media, and audio-visual media. Picture is a kind of visual media, song or music is a kind of audio media and one kind of audio-visual is movie or film. These all can be used by the teachers or lecturers to teach vocabulary includes game which is a kind of kinesthetic media.

Many researches have been done applying those media and based on the result of data those all can improve the students' vocabulary. Besides, those media can also motivate the students to learn vocabulary because they can feel enjoyable and not bored. Some of the researchers who use one media in the previous research are Lan Tapi (2009) used song in teaching vocabulary of the students of senior high school, Pude (2010) used picture to develop students' vocabulary of junior high school and Sjachrun (2010) used game to improve students' vocabulary of senior high school. The results showed that their media were effective to improve students' vocabulary and also interested for the students in learning vocabulary.

Furthermore, intelligence is also very important to support the background of this research. A philosopher, Prof. Robert Ornstein of the University of California, in Setiawan (2013) examines the potential of the brain and its physical properties. The human brain consists of two hemispheres, the right and the left hemisphere. The left hemisphere controls the mental activities that include Math, Language, Logic, Analysis, Writing and similar activities. While the right hemisphere handles activities that include imagination, colors, music, rhythm/rhythms, dreamy and activity - other similar activities. He said that all human beings have all of these capabilities because every human being has an intact brain. According to Ornstein, the process of thinking is to present and capture a complex combination of information between the words, images, colors, sounds, other natural approaches and thinking operations.

There are eight distinct intelligences according to Gardner's theory namely: Linguistic Intelligence, Logical/Mathematical Intelligence, Spatial Intelligence, Musical Intelligence, Bodily-Kinesthetic Intelligence, Interpersonal, Intrapersonal and Naturalist Intelligence (in Armstrong 2003:12). Related to these multiple intelligences that have influenced in language teaching circles, teachers should recognize the multiple intelligences of their students where everyone might these differently. Therefore, some teachers feel and need to create activities which can draw on all eight, not only to facilitate them but also to help them in realizing their full potential with all eight.

By considering all the reasons and the quotations from some experts, the researcher also inspired to do the same research in teaching vocabulary. Differently, she did not use one media, but she designed a new strategy by applying some media such as picture, music and game. Therefore, there were three media that she applied in this research and she integrated those all in teaching English vocabulary. In integrating those media, she was assisted by a computer with applied a software program called Ulead Video Studio. Moreover, she also applied this strategy in the next level that was at the university where she taught and related to the theory of multiple intelligences, some activities in teaching and learning vocabulary applying integrated computer assisted media or

it is abbreviated ICAM can treat and make the students' brain on the left and right hemisphere become active at once.

Integrated Computer Assisted Media (ICAM)

Definition of Integrated Computer Assisted Media (ICAM)

Nowadays, technology cannot be separated from human life. One of the products of technology that can be used to assist them is computer. Here are some related definitions of computer assisted to support the core of the definition of ICAM.

According to Wikipedia (2014), Computer-aided design (CAD) is the use of computer systems to assist in the creation, modification, analysis, or optimization of a design. CAD software is used to increase the productivity of the designer, improve the quality of design, improve communications through documentation, and to create a database for manufacturing. CAD output is often in the form of electronic files for print, machining, or other manufacturing operations.

According to Mwangi et al. in Wikipedia (2014), Computer Assisted Learning (CAL) is a hybrid term that uses ICT resources to achieve teaching and learning goals.

Levy in Davies (2014) defines Computer Assisted Language Learning (CALL) more succinctly and more broadly as the search for and study of applications of the computer in language teaching and learning.

According to Wikipedia (2014) Computer Aided Learning (CAL) or Computer Assisted learning can be defined as learning or teaching subjects like mathematics, Science, Geography, and etc., through computers with subject wise learning packages/materials. CAL also can be defined as a computer program or file developed specifically for educational purposes. The technique used throughout the world in a variety of contexts, from Primary school to University.

Based on the related definitions above the researcher defines ICAM, acronym for Integrated Computer Assisted Media as the use of computer program to assist someone in integrating some media of teaching English.

Procedures of Teaching Vocabulary applying ICAM

Here are some procedures that the researcher applied in this research:

1) The researcher asked the students to focus on LCD that showed the video contained pictures with the name of its unfamiliar word, the direction/instruction in doing exercises, time setting and music or song.

2) There were ten unfamiliar words. In finding the meaning they might see the slide of the pictures and guess it. To help them, there were three until six or seven pictures shown for one unfamiliar word. But, before they tried to guess the meaning, they should write the name of unfamiliar word in the blank (a) that had been available by the researcher and the important things for the students in guessing the meaning was about the word classification. They should guess and give the meaning which was suitable with the word class of an unfamiliar word itself.

3) After that, they wrote the meaning in the blank (b) and then they searched the antonym or the synonym in the word figure vertically or horizontally by circling or coloring. The last they wrote their word search in the blank (c) and also its meaning (if necessary).

4) Along doing the treatment/activities, music was on. The music that had been played was the instrument music or music such as pop and classic.

5) About the time, they were given one minute in guessing the meaning with the picture and two minutes in searching the synonym/antonym of one unfamiliar word. In short, time for doing these activities in sequence was thirty minutes.

6) About the vocabulary acquisition, in 30 minutes of one meeting they acquired 20 words at once. Thus, there were 180 words in nine meetings (90 words for unfamiliar words and 90 words for their antonym/synonym).

7) As practicing to use the words, they made a dialogue in pairs and they performed it in front of the class. 100 until 105 minutes for one meeting.

8) The researcher monitored the students' activity, checked the students' expression and corrected students' mistakes on errors.

9) In every meeting the time was 100 minutes, especially in the first meeting there was 105 minutes.

In this research, the researcher used computer software program called *Ulead Video Studio* to help her in integrating some media such as picture and music media. By applying this software, she designed a video to be a new model of teaching which includes the directions or the instructions of both activities/exercises, the pictures with their name and its word class, the duration of time in doing the activities and also the music which was aimed to make the students felt enjoyable and not bored.

The advantages of ICAM

Whitrow in Mesfin (2004) explains that people understand computers more while doing useful things. In other words, the integration of computers in the actual teaching and learning processes of all subject areas has two fold advantages: primarily it facilitates the teaching and learning process and furthermore the technology can be understood more. Hence, schools that have already acquired the technology (computers, connectivity, and digital contents) can be better achievers in their learning outcome through student-centered learning by the assistance of technology.

According to Torat in Wikipedia (2014) states the reasons why ELT teachers use CALL such as:

a) Computers can do some of the work of the teacher and provide great assistance to the learner even without the presence of the teacher (Pennington and Steven, 1992).

b) New technologies have seen computers become smaller, faster, and easier for the teacher to use (Evy, 1997). At present, well-designed CALL software is readily available to the teacher.

c) Technologies allow computers to do multimedia applications, incorporating video, sound, and text, and this capacity allows the learner to interact with both the program and other learners. (Felix, 1998).

d) The computer offers great flexibility for class scheduling and pacing of individual learning, choosing activities and content to suit individual learning styles. (Oxford and others, 1998)

e) The computer can provide a meaning-focused, communicative learning environment, which serves the purposes of communicative language teaching.

Based on the explanations above, the researcher argues some advantages of ICAM namely:

1) ICAM is a new strategy in teaching English vocabulary which can solve the problems of the English teacher in conducting and presenting the material.

2) Applying ICAM is more effective and efficient for the English teaching and learning process because there are three items of media at once to present the material or it can be said three in one.

3) In conducting and presenting the material uses ICAM, it is not difficult to do because the procedures of that software program in the computer have clear instruction, so it can make the teachers be easier in operating the computer.

4) ICAM can give good contribution for the students because they can feel excited, enjoyable, comfortable, not bored and also they can relax in following the material, in order they can improve or master their material especially English vocabulary, the unfamiliar words.

Research Method

The research had been conducted by using quasi-experimental method in which two groups of the students were involved. Both of the groups were experimental and control group. Experimental group received integrated computer assisted media (ICAM) as treatment, while control group received only one media as treatment in each meeting. As example, in control group, first meeting was picture, second meeting was game, and third meeting was song. The steps were done repeatedly until nine meetings. The result of each media in each meeting was aimed to answer the research question number two. The research had been done in nine meetings for both groups. Both groups were given pre-test and post-test. The pre-test was given to find out the prior knowledge of the students, while post-test was given to find out the effectiveness of the use of ICAM to improve the vocabulary achievement of the second semester students at Cokroaminoto Palopo University.

The population of the researcher was the second semester students of Cokroaminoto Palopo University, which consisted of seven classes in the 2013/2014 academic year. Every class consisted of 30 until 40 students. The total number of population was about 300 students. The researcher applied cluster

random sampling technique and took two classes as the samples of the research. Both classes were experimental group and control group which each class was 30 students as samples.

The researcher calculated the mean score, standard deviation of the students' pre-test and post-test scores by T-test independent using SPSS program version 20.0.

Findings and Discussion

Based on the findings of the research, the comparison of the improvement of students' achievement of experimental and control group can be proved by analyzing the post-test result. The result showed that the mean score of the students' post-test both the groups increased after giving the treatment. It can be seen through the mean score of the students' pre-test was 20.22 (very poor classification) becoming 88.66 (very good classification) in the post-test for the experimental group, while the students' pre-test for control group was 19.03 (very poor classification) becoming 83.55 (good classification) in the post-test. In this case, both of the groups improved after giving a treatment, but experimental group was higher than the control group (88.66>83.55). The result of post-test indicated that the use of ICAM gave significant progress toward students' achievement.

Comparing with the students pre-test and post-test, the result of the pre-test for both of the groups, experimental and control group were almost the same level. Meanwhile, in the post-test were significantly different.

The differences between the two groups can be seen from the mean score of pre-test and post-test. The mean score of pre-test and post-test which was obtained from experimental group were 20.22 and 88.66; the students' vocabulary achievement increased about 68.44. While, the mean scores of pre-test and post-test for the control group were 19.03 and 83.55; the students' vocabulary achievement increased about 64.52. It means that students' pre-test and post-test scores for both groups were statistically different, where the mean score of pre-test for both groups were in the same level before being given a treatment. However, after treatment, there was a significant difference.

By seeing the result of students' pre-test, the researcher assumed that the prior knowledge of the students in mastering unfamiliar words seemed lack because they were in the poor and very poor category. As Sjachrun (2010:1) states that the mastery of vocabulary is one of the important aspects in learning English especially for the students at senior high school. So, how the students can master the English if they are lack of vocabularies. It means that they felt difficult in facing the test because they were lack of vocabulary especially unfamiliar words. Therefore, as good teachers or lecturers, they must do the best strategy on how to teach English vocabulary. Besides, they also need to be a creative person to choose and to use a media as an aid in teaching vocabulary which can be effective to improve students' vocabulary. Furthermore, using media purposes to make the teaching and learning process become fun, attractive, enjoyable, not bored or frustrated, effective and efficient. Some media can be used such as: picture (visual media), song or music (audio media), video and movie or film (audio-visual).

According to Ornstein in Setiawan (2013), the process of thinking is present and captures a complex combination of information between the words, images, colors, sounds, and other natural approaches and thinking operations. These all are controlled by the brain which has two hemispheres; the left and the right hemisphere. The left hemisphere controls the mental activities that include Math, Language, Logic, Analysis, Writing, and similar activities while the right hemisphere handles activities that include imagination, colors, music, rhythm/rhythms, dreamy, and activity-other similar activities. Moreover, he said that all human beings have all these capabilities because every human being has an intact brain. Related to these theories, the researcher tried to design a method in teaching vocabulary. She integrated some media such as picture, game and music or song media became a video as her treatment. It aimed to treat and make the students; brain on the left and also the right hemisphere became active at once. In the application, the students did in sequences, using picture to find out the meaning of an unfamiliar word, using game to the synonym/antonym in the word figure and using music or song to make them felt comfortable, relaxed, not bored, and enjoyable. In integrating these media became a video and showed in front of

the class by LCD, the researcher used software program of computer called Ulead Video Studio.

After seeing the result post-test of the data analysis, the researcher found that p-value was lower than α (0.01<0.05), where the p-value (0.00) at the level of significance (0.05) and the degree of freedom 58. It indicated that the alternative hypothesis (H_1) was accepted and, of course, the null hypothesis (H_0) was rejected. More explanation, there were two methods in this research namely single media and ICAM were significantly different of the students' result in teaching vocabulary especially unfamiliar words. Even though both of groups were given same material, but the result of experimental group that applying ICAM was higher than control group that applying single media. It showed that the use of ICAM significantly affected in improving students' achievement. It was concluded that the use of ICAM was able to give greater contribution in teaching and learning process and ICAM is more fun, enjoyable, effective and efficient to improve students' vocabulary than single media.

Conclusion

The use of integrated computer assisted media (ICAM) was effective to improve the students' achievement. It is proved by the mean scores of the students' posttest in the experimental and the control groups were significantly different. The mean score of the posttest in the experimental group was higher than control group. It can be seen from the students' mean score of posttest was 88.66 for experimental group, while for control group the students' mean score of posttest was 83.55. The t-Test of the students' reading achievement in experimental and control group in posttest was smaller than α (0.01 < 0.05). It assumed that use of ICAM is more fun, enjoyable, effective and efficient in teaching English vocabulary especially unfamiliar words than single media.

Suggestion

1. It is strongly suggested that teaching English vocabulary applying integrated computer assisted media should be continually implemented not only in English Department of Cokroaminoto Palopo University but also in other Universities. Besides, it also can be implemented in schools level.

2. The researcher suggests to the lecturers or teachers to use and give various techniques in teaching English especially English vocabulary. In this case, they should be more creative to design a new way or method in teaching of English vocabulary, in order the students can feel excited, enjoyable and not bored when they follow the teaching and learning process. Integrated computer assisted media is a new method that is effective to teach English vocabulary.

3. For the next researchers, the word classes to be given are balanced as hope the students' vocabulary acquisition have balance of word classes.

4. The researcher also suggests for the next researchers, they can use Cambridge Academic Words List to find out and to list or take some words as unfamiliar vocabularies.

5. Ulead Video Studio is good to use in completing or making teaching materials especially in teaching vocabulary and this computer application can be used in all levels not only for the teachers or lecturers, but also for the students because it is easy to do or to operate it.

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