ความก้าวหน้าทางการเรียนคำศัพท์ภาษาอังกฤษและความคงทนในการจำคำศัพท์โดยใช้สื่อการสอนคอมพิวเตอร์ช่วยสอนภาษา[1]

Enhancing English Vocabulary Learning and Ability of Retention through the Use of CALL

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บทคัดย่อ

การวิจัยครั้งนี้ มีวัตถุประสงค์เพื่อ 1) ศึกษาความก้าวหน้าทางการเรียนรู้คำศัพท์ผ่านการใช้คอมพิวเตอร์ช่วยสอนภาษา 2) ศึกษาความคงทนและการจำคำศัพท์หลังจากการเรียนรู้คำศัพท์ผ่านคอมพิวเตอร์ช่วยสอนภาษา 3) ศึกษาความพึงพอใจในการเรียนรู้คำศัพท์ผ่านการใช้คอมพิวเตอร์ช่วยสอนภาษา เครื่องมือในการวิจัย คือ 1)   แบบเรียนสำเร็จรูปคอมพิวเตอร์ช่วยสอนภาษา 2)   แบบทดสอบคำศัพท์ก่อนและหลังเรียน 3)   แบบทดสอบความคงทนในการจำคำศัพท์ 4) แบบสอบถามความพึงพอใจ ผลการวิจัยพบว่า นักเรียนมีความก้าวหน้าทางการเรียนรู้คำศัพท์ภาษาอังกฤษ ร้อยละ 83.25   อีกทั้งนักเรียนมีความคงทนในการจำคำศัพท์ภาษาอังกฤษหลังจากการเรียนรู้บทเรียนคอมพิวเตอร์ช่วยสอนภาษา และนักเรียนมีความพึงพอใจต่อบทเรียนคอมพิวเตอร์ช่วยสอนภาษาอยู่ในเกณฑ์มากที่สุด

คำสำคัญ

คอมพิวเตอร์ช่วยสอนภาษา แบบเรียนคอมพิวเตอร์สำเร็จรูป ความพึงพอใจ

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Abstract

The purposes of this study were 1) to study enhancement in learning English vocabulary through the use of Computer Assisted Language Learning (CALL) 2) to study retention of the recall vocabulary after learning English vocabulary through CALL lesson 3) to study student's satisfaction towards the CALL lesson. The instruments consisted of 1) CALL lesson 2) Pre test and post test 3) The delayed vocabulary 4) Questionnaire. The finding revealed that the immediate vocabulary tests show enhancement in learning English vocabulary through the use of CALL was 83.25%. Retention of the recall vocabulary after learning English vocabulary through CALL was satisfactory. Students' satisfaction was strongly agree all aspects in CALL lesson.

Keywords :

Computer-Assisted Language Learning (CALL), CALL Lesson**,** Satisfaction

Introduction

In the present global society, learning a foreign language is very important and essential to daily life, as foreign languages serve as important tools for education (Office of Basic Education Commission. 2009 : 252). The teaching of English as a foreign language (EFL) is now one of the most important subject. English has become a global language in the new age of globalization and information technology. In Thailand, students are required to take English as a foreign language in primary and secondary school (Srijitra Navaruttanaporn. 2010). Several teachers of English as well as, researchers have made effects to explore strategies and techniques for teaching and learning English vocabulary. They became aware of the important of vocabulary learning and learning a language. Due to vocabulary is a basic component of language proficiency which provides the foundation for learner's performance in other skills (Alemi and Tayebi. 2011).

Inadequate vocabulary is one of the most important problems of foreign language learners at all levels ; it affects their language skill development and learning ability both at present and in the future. And also inadequate vocabulary is a main problem almost all teachers at

the primary level in Thailand have been facing. Inadequate vocabulary knowledge of students at primary level as in the result of National Test is a significant evidence of English proficiency problem.

Students may lack motivation, interest and exposure to the English language .Thinking that English is not necessary to learn because they do not prefer to use English in their community, the students do not pay attention to English language learning. Thai students, especially those in three border provinces in the south of Thailand have absolutely no exposure to English language use. They never communicate with foreigners and rarely encounter English language media. In order to solve inadequate vocabulary problem, learning a language through computer can be a solution.

Computers are used widely in schools. Schools take advantage of information and communication technology in order to facilitate a rich teaching and learning environment. (Hemard. 2006; White. 2006). The role of computer is increasingly growing in the field of education (Wang and Reeves. 2007). There are many research studies conducted to explore the use of computer in English classroom. Many studies have focused on investigating the effectiveness of Computer Assisted Language Learning (CALL) to enhance student's language learning proficiency in Thailand and other countries, the finding have revealed a positive effect and enhance students' language learning skills. One pedagogical method that several researchers are interested in is teaching vocabulary through Computer Assisted Language Learning (CALL) lesson. Advancement in computer technology has stimulated the multimedia CALL and this is a reason to motivate a vocabulary language environment.

Computer Assisted Language Learning (CALL) has played an important role in language teaching and learning. Vocabulary learning, in particular, is facilitated by CALL technology. Several studies have shown that learning vocabulary by CALL was helpful for learning foreign language vocabulary. CALL lessons can also motivate learners in learning vocabulary by providing immediate feedback, positive reinforcement and presenting information in different formats such as using attractive pictures. In order to help learners develop and extend their

vocabulary knowledge, the researcher has designed exercises for learning vocabulary through Computer Assisted Language Learning (CALL) for grade four students (Pratomsuksa 4) in Banbon School. Banbon School is a small school in Thailand and has been supported complete computer hardware and computer software. The software program is called "Multipoint Mouse" it gives ability to build interactive applications that allow up to students, each with their own mouse, to simultaneously engage on a single personal computer.

Purposes of the Study

1) To study enhancement in learning English vocabulary through the use of Computer Assisted Language Learning (CALL). 2) To study retention of the recall vocabulary after learning English vocabulary through Computer Assisted Language Learning CALL lesson. 3) To study student's satisfaction towards the Computer Assisted Language Learning CALL lesson.

Statements of Hypothesis

1) Students' English vocabulary acquisition through the use of CALL between vocabulary tests, post test are higher than pre test. 2) Students' English vocabulary retention through the use of CALL between post test and delayed test are not different.3) Students are positively satisfied with the CALL lesson towards English vocabulary learning after having been engaging in CALL learning activities in agree level.

Research Questions of the Study

1) Does the computer assisted language learning (CALL) lesson play an important role in enhancing English vocabulary learning of Banbon school grade four students? 2) Does the use of Computer Assisted Language Learning (CALL) lesson contribute to efficient English vocabulary retention of Banbon school grade four students? 3) What is students' satisfaction towards the Computer Assisted Language Learning (CALL) lesson in enhancing and retention of their vocabulary acquisition?

Scope of the Study

1) The study focuses on enhancing students' English vocabulary acquisition after learning through CALL lesson. 2) The study is designed to investigate student's English vocabulary retention after learning through CALL lesson. 3) The study is designed to gather data on satisfaction with CALL lesson.

The Subject of the Students :

The subjects of the study are ninety-five grade four students from four small sized schools consist of Bantungket, Banbaloh, Banjakong and Banbon Schoolin located in Saishon Quality Network, Saiburi District under Pattani Primary Education Service Area Office 3.

The Target Sample Students :

The target sample students are twenty grade four students from Banbon school who learn English during the 2011 academic year. The target group was selected from using cluster random sampling without special needs students. The students were conducted by CALL lesson. Before and after learning through CALL and two weeks later, the students were tested with a type of parallel test form.

Variables employed for the study were as follows:

The variables :

- **Independent variable** is the use of Computer Assisted Language Learning (CALL) lesson in English language learning .

- **Dependent variable** is student's enhancement and retention of English vocabulary after learning through Computer Assisted Language Learning (CALL) lesson in during students' satisfaction towards CALL.

The Experimentation time:

The experimentation time is one and a half hour after class each day. The duration of the teaching covered a period of 10 weeks.

The use of Program

The used program to create the Computer Assisted Language Learning (CALL) lesson is a new software program provided for a school that lacks of computer equipments or computer laboratory or small schools that have limited budgets. The program is called "MultiPoint Mouse". The provided application in the program is "Mouse Mischief". The application consists of five provided tools ; 1. true-false 2. multiple choice 3. short answer 4. dragging and 5.drawing. The application can develop interactive lessons in which up to fifty students-each with his or her mouse (It means more than fifty used mouse in the class) can simultaneously engage in a single computer display controlled by only one teacher's personal computer or laptop (Microsoft. 2010).

Limitation of the Study

1) The unrest situation causes the students and researcher can not spend more time while learning and teaching through CALL each day after class. 2) The different background knowledge of students is uncontrolled factor.

Methods

Research Design

This study was one group pretest-posttest design using intentional vocabulary learning approach (Hulstijn. 2003). In this research design, the subjects were selected by cluster sampling technique. The target sample (experimental group or X) was selected from grade four (Pratomsuksa 4) Banbon School students who studied the target words through the Computer Assisted Language Learning (CALL) lessons. The English vocabulary tests as pre test (T_1) and post test (T_2) which were administered to students before and after the treatment. Since the study was to assess student's level of vocabulary acquisition. The delayed English vocabulary test (T_3) was administered two weeks after the post test to assess student's result of vocabulary retention. The design was as follow:

$$T_1 \qquad X \qquad T_2 \qquad \longrightarrow \qquad T_3$$

T_1 refers to the first English vocabulary test (pre test)

X   refers to the use of innovation (treatment through CALL lesson)

T_2 refers to the second English vocabulary test (post test)

T_3 refers to delayed English vocabulary test

Research Subjects

The subjects of this study were ninety-five grade four students (Pratomsuksa 4) from four small size schools in Saishon Quality Network, Saiburi District under Pattani Primary Education Service Area Office 3, who studied English subject in the first semester of academic year 2011. They were from four small size schools : Banbon School, Banbaloh School, Bantungket School and Banjakong School. The students were selected to participate to be representative of the subject. The researcher chose cluster sampling technique. Students who were special need children were not selected to participate in the study. The experimental group of students consisted of twenty students from Banbon School, they were conducted by computer based learning. Participants learned target words through Computer Assisted Language Learning (CALL) lesson.

Research Instruments

The research instruments of the study consist of : 1) Computer Assisted Language Learning (CALL) lesson. 2) The English vocabulary tests (pre test and post test) 3) The delayed vocabulary test, and 4. Questionnaire

Data Collection

This study was conducted over a period of four weeks. The collecting data is done in five phases as preparation and training phase, English vocabulary test phase, learning phase, delayed test phase, data presentation phase.

Preparation and Training Phase

To ask for permission and cooperation in using the place to tryout from directors of Bantungket School and Banbon School. To inform twenty experimental group students to understand the purpose of the study, all detail and try to use hardware instrument (own mouse).

English Vocabulary Test   Phase

First English vocabulary test phase (pre test), the purpose of this pre test was for the students to know their initial knowledge of the target words. Students spent approximately twenty minutes doing the test.

Second English vocabulary test phase (post test), after the students finished studying target words in each exercise. They are required to take the test. They spent approximately twenty minutes doing the test.

Learning Phase

Five Computer Assisted Language Learning (CALL) Lessons were arranged during the learning week (ten days : Monday - Friday). The students learned one of the five exercises within one and a half hour periods a day.

Delayed Test Phase

Two weeks after taking post test, the delayed English vocabulary was administered to the students. They spent approximately twenty minutes doing the test.

Data Presentation Phase

The detail was reported in the Data Analysis part.

Data Analysis

The collected data from the English vocabulary tests and the delayed English vocabulary test were analyzed by using software program. In analyzing the data to answer three research questions, the following statistical techniques were used**.**

To answer the first research question, the English vocabulary tests are scored. Percentages (%), Mean Scores ($\overline{X}$), and Standard Deviation (S.D.) were calculated to identify

the extent of students vocabulary knowledge after using CALL lesson and dependent – sampling t-test was utilized.

To answer the second research question, the delayed English vocabulary test will be scored. Percentages (%), Mean Scores ($\overline{X}$), and Standard Deviation (S.D.) on the delayed vocabulary test was calculated to identify the extent of students vocabulary retention two week after using CALL lesson and dependent – sampling t-test was utilized.

To answer the third research question, the information obtained from the set of five-points Likert scale questionnaire. The questionnaire was calculated for mean scores ($\overline{X}$) and standard deviation (S.D.).

Results

The findings indicate that the immediate test scores of the students was significantly different in five exercises (p = .000, .000, .000, .000 and .000); however, there was no significant differences between the mean scores. The percentage of all target words were required by students immediately after the treatment. The answer of the first research question was that CALL lesson enhance students' vocabulary learning

The finding on vocabulary retention indicate that students retained target words with moderate scores (55%). The answer of the second research question indicated that students retained vocabulary knowledge through CALL lesson.

In conclusion, the students were satisfied with the CALL lesson (Mean scores is between 4.10 -5.00). The students found that the CALL lesson were interesting and easy to use. They learn with fun activities as well. CALL lesson helped students to develop their English vocabulary learning also.

Discussion

After data collection was completed, as displayed in chapter 4, it reveals that the use of CALL was an effective tool for vocabulary learning. In terms of students' vocabulary acquisition, it

could be concluded by statistically descriptive analysis that the students' vocabulary acquisition was improved towards the significant change between the total mean scores of the post tests ($\sum \bar{x}$ = 16.65) and the pre-tests ($\sum \bar{x}$ = 5.75) of the students from Banbon schools. According to the result, it could be interpreted that students gained better words knowledge after using CALL lesson.

Furthermore, CALL lesson not only enhances vocabulary acquisition ability (short term memory) but also for retention (long term memory), which was illuminated by the different scores of delayed test as these were analyzed and revealed that there was a statistically significant difference of 0.05. Also, the total mean score of the delayed test is at 14.35 respectively nearly the total mean score of post test (16.65). This could be concluded that the technique had a great impact on students' vocabulary retention in promoting and enhancing their abilities of recalling vocabulary in the long term. The result supports the second hypothesis that the result of retention of vocabulary words through the use of CALL.

According to the researcher's observation during the experiment, the majority of students were interested in CALL lesson. They enjoyed employing it to acquire new English vocabulary, they were also curious about the method and found the images to be funny. They were motivated to choose, match, drag and write the correct meaning to images and plan to use in the future. This may confirm the visualization of CALL lesson, of being able to motivate students to learning vocabulary.

To sum up, the use of CALL has been found valuable because it has a facilitating effect on foreign language vocabulary acquisition and retention for young learners. However, CALL lesson as a memory-enhancing strategy is not an overall vocabulary teaching approach. There are other various good ways to teach vocabulary. A teacher should select and consider the appropriateness of vocabulary techniques and use several techniques which are suitable to students' preference or personality and also prevent their boredom as well as enhance their effectiveness in vocabulary acquisition.

Conclusions

         Students learned vocabulary through CALL lesson, they acquired 83.25% of the target words after the treatment. It pointed out that learning vocabulary through CALL lesson enhances short-term memory of vocabulary knowledge. However, students learning through CALL lesson gained significantly scores. The delayed test result after two weeks, it was found that the experimental group retained lower scores than they acquired in the English vocabulary tests (post test). It was obvious that the vocabulary loss occurs two weeks after the treatments. However, the comparison to the previous scores in vocabulary retention, 71.75 % remained high. Moreover, there was no significant difference between the retention scores of the experimental group. Test results pointed out clearly that learning vocabulary through the use of CALL lesson facilitates long-term memory of vocabulary.

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