



**THE EFFECTIVENESS OF COMPUTER ASSISTED LANGUAGE LEARNING
IN ENGLISH LISTENING OF GRADE 6 STUDENTS:
A CASE STUDY AT A GOVERNMENT SCHOOL IN BANGKOK**

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ABSTRACT

The purpose of this research is to investigate the effectiveness of using Computer Assisted Language Learning (CALL), one of computer-assisted tools, for teaching English as foreign language learning on students' achievement in a Bangkok government primary school. To achieve the purpose of the study, the research sample of sixth grade students were distributed into experimental and control groups. The research instruments consist of a pre-test, post –test series and a questionnaire to measure students' level in English listening skills, and their satisfaction on the learning technology used in class. The data collection was conducted during the second semester of the academic year 2016. The experimental group was taught by using computer-assisted program while the control group was taught by using the traditional way. In this quantitative method research, mean and standard deviation of descriptive statistics were used for analyzing data collected from the pre and post- tests of students' achievement in English learning, and data from the questionnaire. The findings of the study indicated that there were significant differences in the post-test between the two groups in favor of the experimental group by showing an outperformance and higher mean scores of the experimental group over the control group. The additional findings from the survey showed that the students' learning satisfaction on class participation, learning interest, and learning inspiration were at the highest satisfaction level.

Keywords: Computer Assisted Language Learning (CALL), English listening skills, Grade 6 students, English teaching, English teacher

1. Introduction

The twenty-first century is the age of globalization and Information Technology which is well known and now ubiquitous in the people's lives across the globe. Moreover, English is an international medium of communication that has been use either as a native or second languages that understood and reorganized by everyone. People found that being knowledgeable in English is the key factor for better status in society and better communication in entire world. English has been playing a major role in many sectors including education, which is the most important area where English is needed, particularly, in a developing country like Thailand. With the support



of technology development over years, technology infused classrooms with digital learning tools, such as computers allow offers for improving the quality of classroom instruction.

The importance of listening in language learning has been considered the least understood of all the language skills. But, in a study (Wilt, 1950) it has been found that when people communicate, 45% of this comes from listening, 30% from speaking, 16% from reading and 9% from writing. Listening is the first language mode that children acquire according to Hyslop & Tone (1988). With the highest percentage of involvement in the exchange of information, listening has to be considered an English language forerunner. As humans communicate at about 71% of their waking time (Rankin, 1928), it can be confirmed that listening is utilized in most parts of the day. Listening plays a vital role in learning (Noowongsri, 2004), in language classrooms, it should be emphasized that comprehension of messages conveyed from the teachers or learning tools can be based on tone of voice, pitch and accent; and it is only possible when the learners listen.

Furthermore, a study by Chonprakay (2009) showed that listening comprehension was still a big problem for Thai students. Based on the study, one of the best English teaching approaches for Thai students who are English new comers is the eclectic approach. The eclectic approach is a flexible language-learning method. Its teaching style is a combination of all techniques used in all approaches. The teacher carefully considers and selects what he or she thinks, is suitable for his or her students. For English new learners, especially Thai students, the teaching techniques should start with the listening skill integrated with the other three skills: speaking, reading and writing skills respectively. It means that the listening skill must be the most important skill out of the four skills. Without listening skills, language learning is impossible.

In Thailand, technology has become the key issue and has a significant influence on current education. Thailand has placed the issue of technology in education into its priority of concern (Ministry of ICT, 2009). Therefore, the use of technology has been shown in several studies to facilitate English as a foreign language (EFL) learning in a variety of ways. Technology can be used not only as a means of classroom facilities but also as an effective teaching tool for English language learners in integrated skills and areas such as listening and speaking, interaction, communication, reading and vocabulary, writing and vocabulary, reading and writing, and etc. The use of the computer can be a useful supplement to traditional EFL classroom (Deerajviset, 2014). In this study, the researcher focused on a learning tool for English language listening class known as Computer-Assisted Language Learning (CALL), which is defined as any process in which a learner uses a computer, and as a result, improves his or her language (Beatty, 2013). Thus, the researcher aimed to investigate the effectiveness of using one of computer-assisted programs in enhancing the students' English listening skills.

2. Objectives of the study

2.1 To investigate and compare students' learning achievement in listening skills in English between experimental and control group after being taught through computer assisted teaching and traditional method.



2.2 To find out the learning satisfaction of students towards learning English through a computer-assisted language learning method.

3. Materials and methods

In this study, the researchers used a quantitative method in finding the effectiveness of using computer-assisted language learning programs for sixth grade EFL students' English listening classroom. The population and sample are as follows:

3.1 Population and Subjects

The population of this study was 169 students who were studying in grade six in one of the government primary schools in Bangkok in the academic year 2016. There were four sections of grade 6 students in this research school.

3.2 The Subjects

A cluster random sampling was adopted to select two sections out of four sections of grade six students from the research school. The two selected sections were divided into two groups of an experimental and a control group. The experimental group consisted of 21 students and control group consisted of 24 students. Both groups were comprised of mixed ability students.

3.3 Research Instruments

3.3.1 Pretest and Posttest

Each pretest and posttest contained ten questions in order to determine the effectiveness of the treatment enforced by the researcher in the experimental group and the traditional teaching in the control group. The pretest was conducted in both groups at the beginning of the class. The posttest was administered at the end of the experiment to find out the differences of the students' learning achievement among the groups due to the use of different methods of teaching. The purpose of these two types of test is to compare the differences of level of learning ability between the two groups.

3.3.2 Questionnaires on CALL Learning Satisfaction

The other research instrument was a set of questionnaire. The questionnaire was created to measure the students' satisfaction towards learning English through a computer-assisted language learning tool. The twenty-itemed questionnaire was administered at the end of the treatment to the students in experimental group. The Likert's five-rating scale questions requested the students to answer by checking (✓) each statement based on their true experience gained after learning. The score of 5 means the highest and 1 means the least satisfaction.



3.3.3 Validity

Research instruments were validated by four experts. The researcher used index of item objective congruence (IOC) to validate the instruments. Researcher used those items that were actually accepted as per the set criteria of IOC. IOC result index ranges from -1 to +1. If the rating is 1, it means that the item clearly matches stated objectives. If rating is 0, it means that item is unclear or not sure whether the measures meet the objectives or not. If the rating is -1, it means that the item clearly doesn't meet the objectives. If the value for any test item is between 0.05 and 1.00, the item is considered to be accurate and acceptable and if the value is below 0.05 to -1, the item needs to be changed. The formula for calculating the IOC is $\frac{\sum r}{n}$ where 'r' is the sum of the scores of individual experts and 'n' is the number of experts (the criteria of IOC was used).

3.3.4 Reliability

The learning achievement test consisted of 30 multiple choice questions prepared from the chapter and did a try-out test with 30 grade six students at a Governmental Primary School who were neither control nor experimental group prior to the experiment. The tryout test was done with the grade six students of that school as the very topic was already taught. It was computed to find out the reliability coefficient of the test items. The coefficient was 0.76 which was greater than 0.70, this revealed that the learning achievement test was reliable. From the 30 questions, 25 questions were selected for the pre-test and post-test.

The description of internal consistency using Cornbach's alpha as followings: 1) $\alpha \geq 0.9$ that meant the internal consistency is excellent; 2) $0.7 \leq \alpha < 0.9$ that meant the internal consistency is good; 3) $0.6 \leq \alpha < 0.7$ that meant the internal consistency is acceptable; 4) $0.5 \leq \alpha < 0.6$ that meant the internal consistency is poor; 5) $\alpha < 0.5$ that meant the internal consistency is unacceptable.

3.4 Data Collection

The data collection process was conducted in the English listening class. The totals of eight lesson plans of 60 minutes for the class, including the six sub-topics under each major topic, were used during the experiment. The researcher taught two lessons for each class to both groups in one week. The experimental group was taught by using CALL in the audio and video formats for listening and the control group was taught through the traditional method by using chalk, chalkboard, textbook, and lecture.

The researcher analyzed the data assembled from pretest and posttest using paired and independent t-test. A comparative statistical analysis using paired sample t-test was done within the group. The comparison between pretest and posttest scores of the two groups was done by conducting independent t-test to assess and compare the learning achievement between control and experimental group. The inferential statistics t-test with $p < 0.05$ level of significance, mean (\bar{x}) and standard deviation (SD) were used to conclude the results. To analyze the data collected from the questionnaire, mean and standard deviation were used to analyze the satisfaction level.



4. Results

This research attempted to find the effectiveness of the effectiveness of using computer-assisted language learning programs for sixth grade EFL students' English listening classroom through a comparison with the traditional approach teaching. The comparisons of pretest and posttest scores results (at p-value < 0.05) of both groups are as follows. The pretest mean scores of the experimental group ($\bar{x} = 33.19$, SD = 5.05) is lower than the control group ($\bar{x} = 35.00$, SD = 5.04). The posttest mean scores of the experimental group ($\bar{x} = 52.19$, SD = 5.01) is much higher than the control group ($\bar{x} = 35.66$, SD = 4.69).

The other result illustrates the level of students' satisfaction towards learning English through computer-assisted language teaching method. The three categories of the satisfaction included class participation, learning interest, and learning inspiration. The findings showed that the students had the highest satisfaction levels in Learning Interest ($\bar{x} = 4.95$, SD = 0.16); Learning Inspiration ($\bar{x} = 4.74$, SD = 0.42); and Class Participation ($\bar{x} = 4.70$, SD = 0.39). The results indicated that the students had highest level of satisfaction in every category and the average \bar{x} was at 4.79 (SD = 0.97).

5. Discussion

According to the result, the students had the highest level of satisfaction on "Learning Interest" to learn English due to the integration of computer-assisted language learning tool into teaching. It showed that the use of computer-assisted language teaching method in teaching English has motivated students to love English, developed interest and curiosity to learn more. The results also supported the findings of Cracker (2006) and Normah & Salleh (2006), in their studies; they stated that the inclusion of computer-assisted teaching into the process of teaching and learning made learning an enjoyable process where the students derived maximum joy in learning. Furthermore, they concluded the reason for success in English education have been associated with motivation and curiosity of the students, which has been geared up by using computer-assisted language learning method in the teaching. In addition, achievement, motivation and student interest are influenced by positive and negative attitudes (Miller et al, 1961).

With regard to "Learning Inspiration" category gained the second highest level of satisfaction due to use of computer-assisted language teaching method in teaching, it indicated that students were highly inspired in learning English through using computer-assisted language teaching method. The result further confirmed that integration of computer-assisted language teaching method made English lesson more interesting, fun and motivational for the students. The finding supports what Wang (2008) claimed the integration of computer-assisted teaching in classroom inspires students to work with each other and develop teamwork skills and learns from their peers. Computer-assisted teaching brings the world into the classroom and appeals to different learning styles, actively engaging the learners.

Integration of computer-assisted language teaching method is observed to have enhanced classroom participation as well. The result of "Class Participation" indicated the third highest level of satisfaction, it showed that the students were highly encouraged to attend the class when the lessons were taught using computer-assisted language teaching method and supported the research findings of Seth (2009); Subba (2011) and Zimmer (2003).



They found that the students participated more actively in the activities when they were taught using computer-assisted instruction and could make students understand the content faster and better, and as a result, it encouraged students to participate more. Teaching through computer-assisted instruction not only helps students to gain information quickly and efficiently, but also engages them in learning with full attention and enthusiasm.

The result indicated that the integration of computer-assisted language teaching method into teaching English lesson not only made lessons appealing to the students but also motivated students to learn more. Moreover, the result also agreed with the findings of Kovar & Zekany (2001) and Swaffar & Vlatten (1997) who stated that the integration of computer-assisted aided instruction into the classroom teaching enhances learning achievement and makes learning an enjoyable process, alongside helping the students take greater interest in learning the lesson.

The overall result from the questionnaire on learning satisfaction showed that the students in the experimental group were highly satisfied in learning English with the use of computer-assisted language teaching method. The result showed that using computer-assisted aided instruction into teaching English boosted the students' interest towards learning, aiding them to gain confidence in learning, and motivating them to attend the classes. Moreover, the students wished to have integration of computer-assisted language teaching method into teaching other subjects too. The result supported the findings of the studies [Akpinar & Ergin (2008); Ercan (2014); and Um, Song, & Plass, (2007)] that using computer-assisted instruction in teaching promotes positive emotion, which enhances interest towards learning, boosts higher learning satisfaction, and motivates students to learn more with much thrill than in the traditional approach.

6. Conclusion

The researcher concluded that integration of computer-assisted language learning tool in teaching English listening class had positive effect on students' learning satisfaction. It also did enhance students' learning satisfaction positively that should ultimately support the direct correlation with students' leaning achievement. Thus, when computer-assisted language teaching method was integrated in the lessons with proper management, the students take active participation in classroom activities. It provides an opportunity for the students to explore more information through varied channels.

Consequently, computer-assisted language learning approach can develop better interactions among students and teachers and also among the students themselves thereby creating interactive classroom environment, which would enhance learning. It was concluded that when computer-assisted language teaching method was integrated in the lessons with proper management, the students take active participation in classroom activities. The excitement and motivation created by the use of computer-assisted aided instruction would lead to higher learning satisfaction. Therefore, using computer-assisted language teaching method in teaching English lessons was effective



in enhancing students' learning satisfaction. The finding was also parallel to what concluded that computer-assisted language learning allows students to take more active role in learning.

RECOMMENDATIONS

Recommendation for implementation

1) Teaching through a computer-assisted language teaching method had a greater positive impact on learning achievement of students than teaching through a traditional method. The result from this study showed that the learning achievement score of the students in the experimental group was almost double than the students in control group (i.e. Posttest score: control =35.66 and Exp.52.19). Therefore, integration of a computer-assisted language teaching method into daily instruction is highly recommended.

2) Students in the experimental group showed a high level of learning motivation in learning English through computer-assisted language teaching method. Thus, making use of media (video, animation, PowerPoint or still mages) in daily teaching would be rewarding.

3) Computer-assisted language teaching method can be useful and effective if the teachers develop it as per the requirement of the lesson and suitability to the content.

4) Teachers must take the initiative to integrate computer-assisted language teaching method into their lessons to make it interesting and fun, to bring positive change in learning behavior of students and to enhance their learning achievement.

5) Using more fancy clips, animations and images would distract concentration of students during the lessons. Hence, selecting simple, interesting and appropriate materials would be more beneficial to students.

Recommendation for further research

1) To understand the true effectiveness of this instructional approach and to get better results, research needs to be carried out over a longer period of time with the larger sample in both remote and urban schools.

2) Further research could be carried out in relation between computer-assisted instruction, attitude and learning achievement of students.

3) It would be worth doing similar research in other subjects as well.

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