

THE EFFECTIVENESS OF USING CALL AND LANGUAGE LABORATORY ON IMPROVING STUDENTS LISTENING SKILL AT THE FIRST GRADE STUDENTS OF SMK TRIGUNA UTAMA

Dafitri Andri, S.Pd, M.Pd

ABSTRACT

The purpose of this experimental study is to investigate: (1) whether there is any significant difference of students' listening skill gained by the students taught using CALL; (2) whether there is any significant difference of students' listening skill gained by the students taught using Language Laboratory; (3) whether there is any significant difference of students' listening skill gained by the students taught using CALL and the one taught using Language Laboratory. A quantitative analysis which covered descriptive analysis statistics (mean, median, modus, maximum, minimum and standard deviation and frequency distribution), and the inferential analysis by using t-test were carried out to answer the research question of this study.

To collect data, the test used the instruments: listening test which was standardized consists of pre-test and post-test. Pre-test was carried out to know that students' listening skill of both groups was same. Post-test was done to figure out the effectiveness of treatment has been given to students. The data was counted by using t-test in SPSS for windows. The series of quantitative analysis finding indicate the improvement on students' listening skill in both classes. It was supported by the result of dependent t-test for CALL and Language Laboratory classes where $p\text{-value} = 0.000 > 0.05$. In addition, the result of dependent paired t-test showed that $t=0.05$ which meant that H_1 was accepted and H_0 was rejected.

In addition, this research consisted of the two independent variables (CALL and Language Laboratory) and one dependent variable (students' listening skill).

INTRODUCTION

A. Background of the Study

English as a foreign language is difficult for the students who learn English to understand what they learnt. They often misunderstand and do not comprehend the listening English material completely. It is not easy for the students who grow up in Indonesia to listen to what some native-speakers are talking about because English is different from Indonesian, for example, some words such as taught, subtle, queue, and version are not easy to be understood or recognized by the students. Those words not only have their own pronunciation, phonetic and but also have their own prosody. On the contrary, Indonesian as their native language also has its own pronunciation, phonetic and prosody which have influence on their listening comprehension. William states that people find some difficulties when they hear a language spoken for the first time and try to do on meanings of words, phrases, and sentences. Brown states that when we listen to words, we recognize speech sound and store in short-term memory; we determine not only the type of speech event such as monologue, interpersonal dialogue and transactional dialogue but also content of the

message; when we listen to words, we use linguistic decoding and background schemata to get an acceptable interpretation to the message.¹

A good listener who is able to be familiar with phonemes, words, intonation, or a grammatical category has an understanding of pragmatic context. Moreover, he not only determines meaning of auditory input but also develop the gist, a global or comprehensive understanding. It is known that an English native listener is able to recognize sound variations of English easily but the English students are not familiar with its sound variations very well because they are not able to recognize and identify those words and get knowledge of its basic meaning.

In addition, the differences between English and Indonesian involve neurological, psycholinguistic, development and pragmatic process. The differences between them must be taken into consideration in order to find an appropriate approach to teaching English listening skill.

When we were infants, we learned our first language through listening. Our parents said some words many times and they usually got us to repeat. As infants we did not have complete organ speech so that we could not imitate those words. We only listened to whatever they said. According to Michael Rost, normally we acquire our own native language through listening and we learn the language without paying attention to what the first language is. The infants begin to acquire listening ability by discriminating thousands of phonetic contrasts in any circumstances at home.

The English language has four skills such as listening, speaking, reading, and writing. Listening skill plays important role in communication and become the basis for language acquisition. When we use spoken language, the listening skill enables us to deliver our ideas. Before expressing the ideas, we have to understand what someone talks to us. We have to recognize what he or she intends to deliver and we have to respond his or her utterances appropriately.

Listening is also important for obtaining comprehensible input that is necessary to language development, so listening should receive primary attention in the early stage of English second language instruction. Furthermore, listening has an important role in encouraging learners to speak because they will be able to give respond to what they listen. The learners who have good listening skill are supported to master other language skills so that teaching listening skill cannot be neglected from the English instruction. In this case, it is very beneficial for English teachers to develop learning and teaching that help the students' process of learning and develop their strategic listening skill as well as develop integration among the language skill.

Improving students' listening skill by using language laboratory is considered as the limited tool so that the teacher should use a new tool in teaching listening. Therefore, the writer would like introduce a new tool which is called Computer-Assisted Language Learning (CALL).

Listening comprehension is difficult for English students when they are taught without using CALL. Why they find some difficulties in listening to the spoken English will be stated as follow. First, the language laboratory is not as attractive as CALL. Second, the listening material by using language laboratory is not easy to study or understand and Smith concludes that the use of a language laboratory had no discernible effect on student achievement. In fact, on a variety of tests, students who did not use the laboratory performed better than students who did use it.² Third, the language laboratory does not give a good example because it shows limited visualization of the native speaker. Fourth, the language

¹ H. Douglas Brown. *Language Assessment Principles and Classroom Practices: Principles of Language Assessment*. San Francisco: State University, copyright 2004, P. 119-120

² <http://onlinelibrary.wiley.com/doi/10.1111/j.1944-9720.1995.tb00825.x/abstract>

laboratory does not give a chance to the students to measure their ability in listening directly. Fifth, the language laboratory does not give the differences of various style of English language such as British and American style. Sixth, the language laboratory does not give a good media for teaching and learning listening. Seventh, the material design of language laboratory is not as interactive as CALL. In CALL, students have opportunities to interact and negotiate meaning. They can learn all subjects in a language include grammar, pronunciation, and vocabulary in the process of language learning by computer technology. They are allowed to learn all the four skills such as listening, speaking, reading, and writing. Eighth, the language laboratory does not present the contextualized situation but CALL provides dynamic and realistic situations with native speakers speaking. Through the interaction with their classmates and teachers, they become communicative in English with proper body language and eye contacts. Ninth, the language laboratory does not give any simulation which is relevant to what is being listened. Tenth, the language laboratory does not give chance to students to imitate the pronunciation, intonation, and rhythm of the speakers and it is believed that a good listener have to recognize the accurate pronunciation, intonation, and rhythm of the speakers. Eleventh, the language laboratory does not make students autonomous students, for example, when students want to improve their listening skill at home, they cannot study because there is no a language laboratory at home. Twelfth, the language laboratory is not as flexible as CALL. Hartoyo states that CALL is more flexible than other tools. In traditional classes, students must attend the classes at particular time whereas computer assisted language learning, students can learn whenever they want.

Approach to teaching listening by using the CALL make the student more active and get involved in the process of teaching and learning. CALL materials attract their attention and the students can learn English with fun.

Based on the all above statements, the researcher is going to utilize CALL and automatically use some application software for helping students to learn English language such as Tell me More, Learn To Speak, American English Improve your Listening and Speaking Skill, Language Learning Business English Interactive, Learning English, Vocabulary, and English Word because the computer is powerless without its own application software. The researcher assumes that using those software are more effective than cassette and the cd of language laboratory. It is assumed that the CALL can cover the above problems and weaknesses of language laboratory.

B. Identification of the problem

In line with the background above, the statement of problem can be stated as follows:

1. Listening for students, especially for SMK Triguna Utama, was considered as a difficult skill. English is different from learners' first language, for example, sound variation of English is different from learners' first language. English words' pronunciation and phonetic are different from words of learners' first language.
2. Students still find some difficulties in improving their listening comprehension. Listening skill need to practice, on the contrary, learners cannot practice frequently because they do not have friends who always speak English with them. For example, many learners who learn English in Indonesia cannot practice listening because citizens use their own language when they speak to them or other people. Consequently, they seldom listen to English spoken language
3. Students need other help and tools in improving their listening skill. Language laboratory as one of tools which is considered as old one. It does not motivate learners and it makes them bored. The teacher should use different tools, ways, and media and have initiative

and creativity when he teaches his students. For example, they are not interested in listening to what the speakers say because language laboratory cannot give simulation of what they listen to. In addition, when learners want to learn English especially listening material at home or outside of school, they cannot use language laboratory as a tool of learning.

C. Limitation of the Study

Based on the identification of the problem above, the researcher limits the problem on whether the students could improve their listening skill after they are taught by using language laboratory and CALL.

D. Research Questions

In accordance with the limitation of the study stated previously, the researcher addresses the following research question:

1. Is there any significant improvement of students' listening skill gained by the students taught using CALL?
2. Is there any significant improvement of students' listening skill gained by the students taught using Language Laboratory?
3. Is using CALL more effective than using language laboratory to improve students' listening skill at the first grade students of SMK Triguna Utama?

E. Objective of the Study

The objectives of this study are

1. to find out whether there is any significant improvement of students' listening skill gained by the students taught using CALL?
2. to know whether there is any significant improvement of students' listening skill gained by the students taught using Language Laboratory?
3. to examine whether using CALL is better than using language laboratory to improve students' listening skill at the first grade students of SMK Triguna Utama?

F. Significance of the Study

The findings of this study are hoped to be useful or beneficial for readers scientifically, empirically, and pragmatically. The research findings aim to enrich knowledge of English teachers, learners, the stakeholders, and curriculum designers. The research findings may be useful for:

First, the research findings may enlarge knowledge and enrich the existing theories on CALL. Second, the research findings may be valuable references for other researchers of similar studies. Third, the findings of the research may be beneficial for the teachers, learners, stakeholders, and curriculum designers.

1. The teachers may benefit from the research findings, for example, they can improve their teaching and learning process and decide to use appropriate media and tools teaching English after they read the findings of this study.
2. The research findings may give learners the alternative way to help them to deal with their problem in improving the listening skill.

3. The stakeholders may consider the research findings to develop teaching and learning process of English.
4. The research findings may be taken into consideration before English curriculum designers develop curriculum.

THEORETICAL FRAMEWORK

A. Review of Previous Studies

For the last 20 years, the computer has been perceived as a useful tool in the teaching of listening skill, which has now been treated as a much more complex activity and is the “cornerstone of language acquisition”. Among the advantages are the combinations of media and the quantity as well as the quality of content. He would like to review how a combination of media in multimedia listening can offer better comprehensible input in terms of quantity and quality compared with traditional tools, on the basis of what have been documented in the literature.

According to Michael Rost, the computer programmers have thought over the utilization of computer in teaching and learning language for a couple years ago. Then, they begin to learn Nature Language Processing and they assume that the computer can give students the understanding of naturally spoken language and exert on students’ transactions and interactions³.

The computer science has designed programs to give models of natural language processing, for example, how humans understand and respond to speech. The designed programs will be helpful in understanding human listening. The computer programmers deal with three main challenges in speech processing: speech recognition, semantic analysis and appropriate response. Finally, they bring about some CDs of English Learning Software Programs and the CDs can recognize, analyze and respond to human speech. The computer runs the CDs and helps them to determine the words that are spoken.

B. Theoretical Review

1. The Teaching of EFL

In EFL (English as a Foreign Language) or ESL (English as a Second Language) and the acronym ESL stands for English as a second language. In the United States, ESL refers to the teaching of those students for whom English is not a first language. In EFL (English as a Foreign Language) or ESL (English as a Second Language), the terms methods, techniques, activities and procedures are commonly used for teaching the four skills: listening, speaking, reading, and writing. Method is a single set of procedures which teachers are followed in the classroom. Methods encompass a range of different procedures and techniques. Procedure is a sequence of techniques and techniques and technique is a specific classroom activity (e.g. role play; drills, sentence completion, etc.) Different teachers might choose or use different methods. Differences among methods manifested themselves in the choice of different kinds learning and teaching activities in the classroom.

Deborah distinguishes between an approach, a method, and a technique:

In general an *approach* is viewed as an overall theory about learning language, which then lends it -self to “approaching” language teaching and learning in a certain manner. A *method* is often viewed as a series of procedures or activities used to teach language in a certain way. A *technique* is usually seen as one activity or procedure used within a plan for teaching.

³ Rost op. cit, pp. 75

2. Listening

Listening basically has different meaning from hearing. Listening is always an active process, while hearing can be considered as passive condition. Listening is an active process in which the listener tries to identify the sounds, decodes them, and understand meaning of words by means context. Potstovky states that listening is no passive skill; it requires full participation and undivided attention of listener.⁴

Underwood defines “Listening is the activity of paying attention to and trying to get meaning form something we hear” The key terms are activity, attention, get meaning, and hear. It can be stated listening is an activity which needs attention to get meaning from we hear.

According to Nunan, “Listening is a process of decoding the sounds that one hears in a linear fashion, for the smallest meaningful units (or phonemes) to complete text” The key terms are process, decoding, sounds, linear way. From the key terms, the writer can say listening is a process of decoding sounds in linear way.

3. Language Laboratory

Patel states:

Language laboratory is the place where the learners have to listen on headphone. The language labs are set up with a view to provide listening activities in order to make them developing good speech habit. The learning material are recorded on audiotapes which are played back by teacher is to be drilled and the same is monitored by the mentor. Learner himself records his practice and listens to it.

In addition, the language laboratory which is an audio or audio-visual installation helps students to learn the language and it is an electronic tool that needs regular maintenance. Traditional language laboratory consists of a master console which is electrically connected to a number of rows of students’ booths. The master console usually has many buttons that can be run by the teacher and student booths have a student tape recorder and headset with its microphone.

Hayes state:

A language laboratory is a classroom or other area containing electronic and mechanical equipment designed and arranged to make foreign language learning more effective than usually without it

Language laboratory is a classroom in which students learning a foreign language can practice sound and word patterns individually or under supervision with the aid of audio equipment, etc. Its room is designed for learning foreign languages and equipped with tape recorders, videocassette recorders, or computers which are connected to monitoring devices enable the instructor to listen and speak to the students individually or as a group.

4. Computer-Assisted Language Learning (CALL)

Levy states that CALL is software tools designed to promote language learning. Moreover, Levy states that CALL is also as the field that covers the search for the study of application of the computer in language teaching and learning which has become the concern of this study.

⁴ Morley J, *Listening and Language Learning in ESL: Developing Self-Study Activities For Listening Comprehension*, (New York: Brace Jovanovich 1984) p.9

CALL helps the students understand easily and fun when they learn second language. Some applications of the computer are used to assist the students to learn and focus on what they learn. CALL is software tools created to assist the students to master language.

Computer-assisted language learning (CALL) is briefly defined as the study of the computer's applications in language teaching and learning. CALL strongly emphasizes on students-centred materials in order to get students engage in the learning activities. According to Hick and Hyde's idea which is quoted by Made Wena, CALL uses a computer to present instructional materials in order to help students interact with the computer directly.

Multimedia technology can present a variety of media (text, graphics, sound, animation, and video) to be accessed on a single machine. Multimedia which is supported by hypermedia becomes more powerful. Hypermedia means that hypertext is connected with other media such as graphics, animation, and sound. Hypertext is similar to hypermedia. The difference between hypertext and hypermedia, hypertext is non-sequential reading and writing and it allows users to select any information available in one electronic document without beginning from the first document sequentially. On the contrary, hypermedia enables users to link text to graphics, video, spreadsheet, animation, and sound. Hypermedia gives some advantages for language learning. First, the authentic learning environment can be created, since listening is combined with seeing, just like in the real world. Second, all language skills such as listening, speaking, reading, and writing can be integrated in a single activity. Third, students can control their own learning by going forward or backwards to different parts of the program. Finally, hypermedia can lead the students to grammatical explanations, vocabulary glossaries, exercises, correct pronunciations, and questions.

The Internet can help students communicate directly, inexpensively, and conveniently with other learners or native speakers of the target language for 24 hours a day, from school, work, or home. It not only allows them one-to-one communication but also one-to-many communication and it can also be a medium of global communication and a source of limitless authentic materials.

The internet does not need physical shape because everything can be constructed by internet application; it encourages the students to interact with others through real time such as chatting and video conference and through non real time such as e-mail, bulletin board, and mailing list. The internet accommodates all process of learning from registration, material delivery, discussion, evaluation and even transaction, moreover; it can be accessed from any location. Its' material can be designed with multimedia and dynamic.

RESEARCH METHODOLOGY

A. Setting

The research was carried out at the SMK Triguna Utama in Ciputat, South Tangerang, Banten. It involved two classes from the first grade of SMK Triguna Utama for this research. The students learned English twice a week and the English class lasted in 80 minutes per session. The research was carried out at the school because it was provided with CALL and the language laboratory.

B. Research Design

The researcher employed a quantitative research design. Fraenkel states that an experimental research usually involves two groups of subjects and those groups consist of an experimental group and a control group or a comparison group. The experimental group

receives a treatment such as a different method or a different tool of teaching while the control group receives no treatment or the control group receives a different treatment. The control group is important in the experimental research because it helps the researcher to figure out whether the treatment has an effect or whether one treatment is more effective than another.⁵

He conducted an experiment to observe the process in which students get involved in learning by using Language Laboratory and CALL to improve their listening skills.

1. Design

The study aims to test the truth of hypotheses on the effect of using language laboratory and CALL in improving students' listening skill. It used pre-test and post-test for every experiment. Consider the following table.

The present study used the pre-test and the post-test before conducting the experiment. The experimental design can be illustrated in the following table.

The experimental design

Group	Pre test	Treatment	Post test
Control class (K1)	Pre-test (X1a)	Lab (T)	Post-test (X2a)
Experimental class (K2)	Pre-test (X1b)	CALL (T)	Post-test (X2b)

This experimental study aims to investigate the effect of two different treatments that are given to the K1 and K2 classes. The first K1 was taught listening by using Language Laboratory, and the K2 was taught listening skill by using CALL. Then, this study compared the differences between the two tools in teaching listening skill at SMK Triguna Utama in Ciputat, South Tangerang, Banten.

The above table shows that the result of the pre-test and the post-test are analyzed by using statistic (t_{test}) to know if the students who have been given the treatment by using language laboratory and CALL in improving students' listening skill have significantly difference or not.

2. Variable

The study accounted on the effect of using language laboratory and CALL on improving students' listening skill. The variables could be broken into independent and dependent variables. The independent variables are the effectiveness of using language laboratory and CALL, while the students' achievement in listening skill is called the dependent variable.

3. Treatment

The treatment aims to implement the process of teaching and learning English especially listening skill by utilizing language laboratory and CALL. In addition, the treatment is a methodical procedure carried out with the goal of verifying, falsifying, or establishing the accuracy of a hypothesis. The treatments vary greatly in their goal and scale, but always rely on repeatable procedure and logical analysis of the results.

The research gave different treatments to two groups of students. The first group of students was taught listening skill by using Language Laboratory and the second group

⁵ Jack R. Fraenkel and Norman E. Wallen: *How to Design and Evaluate Research in Education*. 6th ed. New York: Mc Graw-Hill. 2007. p. 268

of students was taught listening skill by using CALL. The second group of students was as the experimental group and the first group of students was as the control group.

C. Population and Sample

1. Population

The population of the research was part of the first grade students of SMK Triguna Utama with total of the students were 368 students. SMK Triguna Utama has some majors and they are automotive, electro, office administration, engineering, and accounting. The automotive students were 230, the electro students were 70, the office administration students were 70, the accounting students were 30, and the engineering students were 42. The researcher did not take the engineering, electro, office administration and accounting students as population in this research but he was interested in taking automotive students as population. So, the population of the research had 230.

2. Sampling technique

Furthermore, the researcher used the cluster random sampling by taking two groups randomly. Total of sample as the subject of the study were 62 students, thirty two students involved in the control group and the rest joined the experimental group. He believed that those chosen sample have special qualification of some sort or are deemed representative. The steps in the cluster sampling process would be as follows:

- a. The researcher identified the target population: 230 first grade students of SMK Triguna Utama and he divided the population in N groups. N groups are called clusters.
- b. He found that there were 230 automotive students with 5 classes.
- c. He randomly selected n clusters include in the sample. He randomly selected one of the five automotive classes as the experimental group and selects one of four automotive classes as the control group.

To guarantee class homogeneity, he took some students of those experimental groups who has the equal level listening ability as the sample after they take the listening test in the early.

D. Time

The experimental design of the study was conducted in four months, and each listening session lasted in 80 minutes. There were one meeting per week. The pre-test was given to the XIb on October 28, 2011 at 07.00-08.10, and to the XIa class was given the pre-test on October 26, 2011 at 11.10-12.20. Furthermore, the treatment was conducted to the XIa and XIb classes from November 2011 to January 2012. Then, the XIb classes were given the post-test on February 3, 2012 and XIa class were given the post-test on February 1, 2012.

E. Method of the Research

To get the data on listening skill, the researcher decided to use listening test as the instrument. The test was multiple choices and designed in such a way in order to suit to the students' proficiency level.

1. The selection of the items

Selecting the items of the test, there are some points to be considered:

- a. The relevance of the items to the purpose of the study.
- b. The appropriateness of the listening material for test items of vocabulary difficulties.

- c. The relevance of the students' language proficiency at SMK Triguna Utama's first grade students.

2. Trying-Out Test

The researcher tried out the test conducted on October 2011, checked its validity and the reliability in order to fulfill the requirement of the research. In this case, the trying out test was carried out in order to figure out the difficulties level of the test items. There were 74 students of SMK Triguna Utama who participated in the try-out test. The students, who had different background of English vocabulary and knowledge, were the second year study.

3. Analyzing result of the try out test

The result of the try out test was analyzed, and the revision could be made to improve the test. Each item was analyzed in terms of its level of difficulty. The test was calculated to decide the validity and reliability of the test.

a. Validity of the test

Alderson says:

The characteristics of a good test must have three main types of validity: rational, empirical and construct validity. Rational (content) validation depends on a logical analysis of the test's content to see whether the test contains a representative sample of the relevant language skills. Empirical validation depends on empirical and statistical evidence as to whether students' marks on the test are similar to their marks on other appropriate measures of their ability, such as their scores on other tests, their self-assessments or their teacher's rating of their ability construct validation refers to what the test scores actually mean.

For the purpose of the study, the researcher validated the test so it was reliable to be used to measure the student achievement. Furthermore, the instrument of this study was intended to fulfill the requirements as stated above in order to fulfill the criterion of the content validity.

Hariyadi states that to measure the validity of the test, the researcher used Point Biserial Correlation. The formula which is used to figure out Point Biserial Correlation is shown in the following formula.

$$r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$

- where,
- r_{pbi} = the number of Point Biserial Correlation
 - M_p = the mean score which students have correct answer
 - M_t = the total of mean score which is taken from all item tests.
 - SD_t = the total of the deviation standard
 - p = the proportion of the correct answer
 - q = the proportion of the incorrect answer

To interpret the value of Point Biserial Correlation, the researcher consulted with the Product Moment. We can see free degree (db) with formula $db = N - nr$ ($nr =$ total of column) and he consulted it with r_{table} . Therefore, the value of Point Biserial Correlation is considered as r_{xy} to consult it with r_{table} . If the value of Point Biserial Correlation (r_{pbi}) is smaller than the value of r_{table} , the item is invalid. On the contrary, when the value of Point Biserial Correlation (r_{pbi}) is bigger than the value of r_{table} , the item is valid.

b. The Reliability of the Test

One of the important characteristics of a good test is reliability.

Brown states:

Reliability test is consistent and dependable. If teacher give the same test to the some students or matched students on two different occasions, the test should yield similar results. The issue of reliability of a test may best addressed by considering a number of factors that may contribute to the unreliability of a test. Consider the following possibilities: fluctuations in the student, in scoring, in test administration and in the test itself.

The study above has the reliability of the test, the stability of the test scores, and the consistency of test scores. A test cannot measure anything well unless it measures consistently. To measure the reliability of the test, several different methods can be used such as test-retest, parallel test, KR20 and split-half. In this study, KR 20 was adopted as the following formula.

$$r_{ii} = \frac{k}{k-1} \left[1 - \frac{\sum p_i q_i}{st^2} \right]$$

Where,

- r_{ii} = Coefficiency of the test reliability
- k = total of the item
- $p_i q_i$ = variance score of the item
- p_i = Proportion of correct answer for the item
- q_i = Proportion of incorrect answer for the item
- st^2 = total of score variance

c. Use item indices to accept, discard, or revise items.

Brown states that we can accept, discard, or revise items after we find their facility, discrimination, and distractor efficiency.

1. Item facility (IF)

To find better data on the appropriateness of the test, each test should measure its difficulty level. Therefore, the test must be analyzed in order to find whether it is suitable for good or poor students. The test is too easy when 99 % of respondents get it right but it is too difficult if 99 % of respondents get it wrong.

The following formula was used to measure the facility value of the test item:

$$IF = \frac{\text{Students answering the item correctly}}{\text{Total of Students responding to that item}}$$

2. Item discrimination (ID)

Item discrimination which an item can distinguish high-ability test takers from low-ability test takers. The formula for calculating ID is

$$ID = \frac{\text{high group correct} - \text{low group correct}}{\frac{1}{2} \times \text{total of your two comparison groups}}$$

C. Data Collection and Analysis

1. Data Collection

a. Instrument

Listening test is the most important instrument used in this research. All students deal with the listening test in order to get the real result of the teaching and learning process. In the first group (language laboratory group), students' test of the first drafts are as pretest, on the other hand, the test of the second drafts are as data for posttest. In the second group (CALL group). The result of the first test is as pretest and the second one after the treatment is a data as posttest.

In the revision, the first group of students who are taught by using language laboratory; the second group of students who are taught by using CALL. Pretest is carried out early, and posttest is carried out after conducting treatment. The validity and reliability of the listening test are administered before they are given to students.

b. Questionnaires

To support the instrument, the researcher uses questionnaires. Questionnaires are designed to analyze not only how using language laboratory work to encourage students to learn the material but also how CALL stimulate students to learn the material. It will be conducted at the end of the research. This instrument aims at finding students' ideas, suggestions, advices and preferences. Furthermore, the researcher could know which the better technique is and decide to use the better technique. The kind of the questionnaires is a open ended questionnaire which can not only figure out students' ideas, suggestions, advices and preferences but also find their feeling and perception after they are taught by using language laboratory and CALL. There are ten items of the questionnaires, five items refers to using language laboratory and the other refers to CALL.

2. Data Analysis

After all data have been collected, the researcher does the following steps:

a. Technique of Data Organization

The obtained data for the research is arranged systematically. It uses frequency of distribution table which is concerned with the result of the learning and teaching process. The data is counted for mean, median, modus, and deviation standard.

b. Test Requirement for Data Analysis

1) Normality Test

Normality test were carried out for knowing whether the sample is normal or not. Normality test used Liliefors test.

2) Homogeneity Test

Homogeneity test carried out for knowing whether the sample is homogeneous or not. Homogeneity test carried out after finding data normality or data is normal. It used Fisher test.

3) T test

After proving the normality and homogeneity of pretest and posttest data, the researcher carried out t_{test} with significance level 5% ($\alpha = 0,05$). To find or verify significant differences among variables and to compare the result of different group, the research used the t_{test} . An experiment usually involves two groups of subjects, an experimental group and a control or a comparison group. The experimental group received the treatment of teaching listening skill by using CALL and the control group received the treatment of teaching listening skill by using Language Laboratory.

In addition, the process of data collection was carried out through three phases: the pre-test, the treatment and the post-test. The data were analyzed in order to find the answer of the problem by using t_{test} .

The data taken from the pre-test and post-test were then calculated to find out the mean (X) and the standard deviation (SD). Before using t_{test} , the researcher finds the the standard deviation value of the experimental group and the control group. The following formula was used to determine standard deviation of the experimental group:

$$S = \sqrt{\sum_{i=1}^n \frac{(X_i - \bar{X})^2}{n}}$$

S = Standard deviation

n = Sum of the students in the experimental class

X_i = Score of the sample in the experimental class

X = Mean scores of the sample in the experimental class

In addition, the formula was used to figure out the standard deviation of the control group.

$$S = \sqrt{\sum_{i=1}^n \frac{(X_i - \bar{X})^2}{n}}$$

S = Standard deviation

n = Sum of the students in the control class

X_i = Score of the sample in the control class

X = Mean scores of the sample in the experimental class

To test the hypothesis, the researcher used the following formula.

$$t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

Where,

- t = t distribution
- X1 = Mean scores of the experimental class
- X2 = Mean scores of the control class
- S1 = Standard deviation of the experimental class
- S2 = Standard deviation of the control class
- N1 = Samples of the experimental class
- N2 = Samples of the control class

If the t_{obtained} is bigger than $t_{\text{critical value on the table}}$ ($t_{\text{obtained}} > t_{\text{critical value on the table}}$) or If $-t_{\text{obtained}}$ is smaller than $-t_{\text{critical value on the table}}$ ($-t_{\text{obtained}} < -t_{\text{critical value on the table}}$), the experimental is effective.

If the t_{obtained} is less than $t_{\text{critical value on the table}}$ ($t_{\text{obtained}} < t_{\text{critical value on the table}}$) or If $-t_{\text{obtained}}$ is bigger than $-t_{\text{critical value on the table}}$ ($-t_{\text{obtained}} > -t_{\text{critical value on the table}}$), both of the group have equal averages.

RESEARCH FINDINGS AND DISCUSSIONS

A. Research Findings

Before testing hypothesis, there must be the test requirement for data analysis. It needs the normality test and homogeneity test. Based on the pretest and posttest, the researcher examined the normality and homogeneity of the tests.

1. Pre-test Score Analysis

a. Normality distribution test

Normality distribution test is calculated by using Liliefors test and the test is conducted to check whether the pre-test scores of both groups are normally distributed.

a.1. Normality Distribution of the Data in control group's pre-test

The level of significance (0,05) and 0,1566 was found as $l_{\text{critical value on the table}}$ from $N = 32$ and l_{obtained} was 0.12525. So, l_{obtained} was smaller than $l_{\text{critical value on the table}}$ ($0.12525 < 1566$) and it means that control groups was normally distributed.

a.2. Normality Distribution of the Data in experimental group's pre-test

The level of significance (0,05) and 0,1566 was found as $l_{\text{critical value on the table}}$ from $N = 32$ and l_{obtained} was 0.0665. So, l_{obtained} was smaller than $l_{\text{critical value on the table}}$ ($0.0665 < 1566$) and it means that experimental groups was normally distributed.

First, the normality test used Lilieforse test. Based on the result of the control group's prettest, it could be obtained as $L_{\text{obtained}} = 0,12525$. From the table of Lilieforse test with significance level (α) = 0,05, the value of $L_{\text{critical value on the table}} = 0,1566$. It could be concluded that the result of the control group's prettest is normal. $L_{\text{obtained}} = 0,0665$ which was taken from from the result of the experimental group's prettest when L_{obtained} compared to the value of $L_{\text{critical value on the table}} = 0,1566$, it could be concluded that the result of the experimental group's prettest is normal because $L_{\text{obtained}} < L_{\text{critical value on the table}}$

b. The homogeneity variance test.

The homogeneity test was used for figuring out whether the variance score of the experimental and control groups are homogenous.

Test of Homogeneity of Variance in control and experimental groups' pre-test

Based on the above data and calculation, it was found that $F_{\text{obtained}} = 1,082597$ which was taken from the result of the control group's pre-test and the experimental group's pre-test shows the population data of the control group's pre-test and the population data of the experimental group's pre-test are homogeneous. Based on the value of $F_{\text{distribution}}$ with the significance (α) = 0,05, $F_{\text{critical value on the table}} = 1,82$. The data of population is homogeneous because F_{obtained} is lower than $F_{\text{critical value on the table}}$ ($1,082597 > 1,82$).

2. Post-test Score Analysis

a. **Normality test of post-test.** Consider the following data

a.1. Normality Distribution of the Data in control group's post-test

The level of significance (0,05) and 0,1566 was found as $l_{\text{critical value on the table}}$ from $N = 32$ and l_{obtained} was 0.1437. So, l_{obtained} was smaller than $l_{\text{critical value on the table}}$ ($0.1437 < 1.566$) and it means that control groups was normally distributed.

a.2. Normality Distribution of the Data in experimental group's post-test

The level of significance (0,05) and 0.1566 was found as $l_{\text{critical value on the table}}$ from $N = 32$ and l_{obtained} was 0.0962. So, l_{obtained} was smaller than $l_{\text{critical value on the table}}$ ($0.0962 < 1.566$) and it means that experimental groups was normally distributed.

In addition, the result of the control group's posttest shows $l_{\text{obtained}} = 0,1437$ and the value of $l_{\text{critical value on the table}} = 0,1566$, so the result of the control group's posttest is normal because $l_{\text{obtained}} < l_{\text{critical value on the table}}$. Then, the result of the experimental group's posttest show $l_{\text{obtained}} = 0,0962$ and the value of $l_{\text{critical value on the table}} = 0,0962$, so the result of the experimental group's posttest is normal because $l_{\text{obtained}} < l_{\text{critical value on the table}}$.

b. The homogeneity of variance test

Morover, based on the data of the control group's post-test and the experimental group's post-test, $F_{\text{obtained}} = 1,155395$ and $F_{\text{critical value on the table}} = 1,82$, so F_{obtained} is lower than $F_{\text{critical value on the table}}$ and it could be concluded that the data population of the control group's posttest and the experimental group's posttest are homogeneous.

B. Descriptive Analysis

Before t -test, the researcher would like describe data in detail. To figure out the result of listening test, the researcher give the test with 24 items of multiple choice to the control and the experimental groups. The control group consists of 32 students and the experimental group has 32 students. The control group was taught by using language laboratory and the experimental group was taught by using CALL in improving their listening skill. The obtained data could be discribed as follow:

a. The Analysis Result of Frequency Distribution of the Experimental Group's Prettest.

After calculating frequency distribution, the result of the experimental group's pretest shows the range is 54,16, the number of data is 32, the number of interval class is 6, the length of class interval is 9, the greatest score is 70,83 and the smallest score is 16,67. The mean score of the experimental group is 48, its median is 49,20, its modus is 40,17, its standard deviation is 117,14.

- b. The Analysis Result of Frequency Distribution of the control group's pre-test.
After calculating frequency distribution, the result of the control group's pretest shows the range is 54,2, the number of data is 32, the number of interval class is 6, the length of class interval is 9, the greatest score is 79,2 and the smallest score is 25. The mean score of the experimental group is 47,3, its median is 46,55, its modus is 37,48 and its standard deviation is 119,02.
- c. The Analysis Result of Frequency Distribution of the experimental group's post-test.
After calculating frequency distribution, the result of the experimental group's pretest shows the range is 58,33, the number of data is 32, the number of interval class is 6, the length of class interval is 10, the greatest score is 91,67 and the smallest score is 33,33. The mean score of the experimental group is 71, its median is 71,59, its modus is 68,06 and its standard deviation is 195,81.
- d. The Analysis Result of Frequency Distribution of the control group's posttest.
After calculating frequency distribution, the result of the control group's pretest shows the range is 50, the number of data is 32, the number of interval class is 6, the length of class interval is 8, the greatest score is 91,67 and the smallest score is 41,67. The mean score of the experimental group is 63, its median is 61,50, its modus is 65,50 and its standard deviation is 155,20.

C. Inferential Analysis

The inferential analysis is conducted to answer the hypotheses.

A. First Hypotheses

- 1). The difference between Pre-test and Post-test for Experimental group
- a. If $t_{obtained}$ is bigger than $t_{critical}$ value on the table ($t_{obtained} > t_{critical}$ value on the table) or If $-t_{obtained}$ is smaller than $-t_{critical}$ value on the table ($-t_{obtained} < -t_{critical}$ value on the table), there is significant improvement between pre-test and post-test for experimental group.
- b. If $t_{obtained}$ is smaller than $t_{critical}$ value on the table ($t_{obtained} < t_{critical}$ value on the table) or If $-t_{obtained}$ is bigger than $-t_{critical}$ value on the table ($-t_{obtained} > -t_{critical}$ value on the table), there is no significant improvement between pre-test and post-test for experimental group.

Paired samples statistics of pre and post-test for experimental group

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Posttest	70.3119	32	12.95151	2.28953
Pretest	47.7865	32	12.34148	2.18169

Paired Samples Correlations			
	N	Correlation	Sig.

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Posttest	70.3119	32	12.95151	2.28953
Pair 1 Posttest & Pretest		32	.890	.000

Paired Samples Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Posttest - Pretest	2.252541	5.97348	1.05597	20.37175	24.67909	21.331	31	.000

It is found that the value of t_{obtained} is bigger than t_{critical} value of the table. ($21.33 > 2.04$) with level significance 0.05 and $df = 31$ and it indicates that null hypotheses (H_0) is rejected. It could be stated that there is significant improvement between pre-test and post-test for experimental group.

2). The difference between Pre-test and Post-test for control group

- If t_{obtained} is bigger than t_{critical} value on the table ($t_{\text{obtained}} > t_{\text{critical}}$ value on the table) or If $-t_{\text{obtained}}$ is smaller than $-t_{\text{critical}}$ value on the table ($-t_{\text{obtained}} < -t_{\text{critical}}$ value on the table), there is significant improvement between pre-test and post-test for control group.
- If t_{obtained} is smaller than t_{critical} value on the table ($t_{\text{obtained}} < t_{\text{critical}}$ value on the table) or If $-t_{\text{obtained}}$ is bigger than $-t_{\text{critical}}$ value on the table ($-t_{\text{obtained}} > -t_{\text{critical}}$ value on the table), there is no significant improvement between pre-test and post-test for control group.

Paired samples statistics of pre and post-test for control group

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Posttest	61.0678	32	12.04870	2.12993
Pretest	48.5677	32	11.86134	2.09681

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Posttest & Pretest	32	.906	.000

						tail e			Lower	Upper
ScoreTest	Equal variances assumed	.198	.658	2.956	62	.004	9.244	3.127	2.993	15.495
	Equal variances not assumed			2.956	61.679	.004	9.244	3.127	2.993	15.496

It presents that t_{obtained} is bigger than t_{critical} value on the table ($2.96 > 1.99$) with level significance 0.05 and $df = 62$ and it indicates that null hypotheses (H_0) is rejected. It could be stated that there is different improvement from both of group.

B. Second Hypotheses

The second hypotheses are:

- 1). Using CALL is more effective than using Language Laboratory in improving students' listening skill.
- 2). Using Language Laboratory is more effective than using CALL in improving students' listening skill.

It could be concluded that using CALL is more effective than using Language Laboratory in improving students' listening skill because t_{obtained} is bigger than t_{critical} value on the table ($2.96 > 1.99$) and its significance level ($0.000 > 0.05$).

In addition, the gain score is used to know how effective the both tools to improve the listening skill. To know their effectiveness, use this following formula.

$$g = \frac{\text{posttest score} - \text{pretest score}}{\text{maximum possible score} - \text{pretest score}}$$

To find out what tool that is more effective, it can be seen from the mean score for gain from both of groups. It indicates that the mean score for gain of CALL was 0.45 and for gain of Language Laboratory was 0.26. The mean score of CALL was higher, and the gain of Language Laboratory was low. So, it can be inferred that the null hypothesis (H_0) was rejected and the research hypothesis (H_1) was accepted. Therefore, using CALL is better than using language laboratory to improve students' listening skill at the first grade students of SMK Triguna Utama.

D. The Discussion of the Research

The research found that Language Laboratory and CALL had improved students' listening ability. The means of both tools increased in posttest.

It is clear that it prove that the data is normal and homogenous. Somehow, the pre-test and post-test needs the normality and homogeneity test. Based on data analysis, the data was normally distributed and the variance score of both experimental and control group are homogenous because its significance is higher than the significance level (0.05). It could be stated that the data is taken from the normal and homogenous data.

Based on the data analysis of the frequency distribution of the experimental group's pretest and posttest, the mean of the posttest is higher than the mean of the pretest ($71 > 48$). Moreover, the data analysis of the frequency distribution of the control group's pretest and posttest, the mean of the posttest is higher than the mean of the pretest ($63 > 47,3$)

Somehow, the comparison of the improvement means of experimental and control group is counted by using independent *t*-test, it is used for knowing the improvement of mean between the experimental and control groups' score. The result shows that H_1 is accepted because t_{obtained} is bigger than $t_{\text{critical value on the table}}$ ($2.96 > 1.99$) with level significance 0.05 and $df = 62$ and it indicates that null hypotheses (H_0) is rejected. It could be stated that there is different improvement from both of group. It could be concluded that there is significant difference between the post-test means for the control and experimental group.

Based on the data above, it can be concluded that the students who was taught by using CALL are better than they who was taught by using language laboratory. Why was the experimental group's listening achievement better than the control groups' listening achievement? CALL has some strength as the follow:

First, CALL is an attractive tool. Second, CALL's lesson is easy to study or understand. Third, CALL has comprehensible visualization of the native speaker. Fourth, CALL gives a chance to the students to measure their ability in listening directly. Fifth, CALL help students have opportunities to interact and negotiate meaning. They can learn all subjects in a language include grammar, pronunciation, and vocabulary in the process of language learning by computer technology. They are allowed to learn all the four skills such as listening, speaking, reading, and writing. Sixth, CALL present the contextualized situation and provides dynamic and realistic situations with native speakers speaking. Through the interaction with their classmates and teachers, they become communicative in English with proper body language and eye contacts. Seventh, CALL gives students simulation which is relevant to what is being listened. Eighth, CALL gives chance to students to imitate the pronunciation, intonation, and rhythm of the speakers and it is believed that a good listener have to recognize the accurate pronunciation, intonation, and rhythm of the speakers. Ninth, CALL makes students autonomous students, for example, when students want to improve their listening skill at home. Tenth, CALL is flexible. Hartoyo states that CALL is more flexible than other tools. In traditional classes, students must attend the classes at particular time whereas computer assisted language learning, students can learn whenever they want. Eli Hinkel states:

“CALL not only helps students to enhance their comprehension but also affects students' acquisition.

In addition, Eli Hinkel state:

“... the computer is used for a medium of communication or as a means of providing meaningful linguistic input. However, the computer can also act as the partner with which the learner interact.

Deborah also states that CALL uses contextualized, interactive activities to practice listening and helps students develop sentences. CALL helps students develop their listening comprehension with dialogues, songs, vocabulary, phonic, and games.

CONCLUSION AND SUGGESTIONS

A. Conclusion

The result of the research had shown that there is different result from the CALL and Language Laboratory in improving students' listening skill which was proved by the gain scores from both groups. It indicates that unusual result and different improvement between two groups. The different result from both group might be caused by each class which has strengths and weaknesses for students and influenced by their interest to improve their listening skill.

Based on the result of the data analysis, the hypotheses tests and discussion, the following conclusion as follow”

1. Based on t-test, there is significant improvement between pre-test and post-test for experimental group and it could be concluded that using CALL can improve students' listening skill significantly
2. In addition, there is significant improvement between pre-test and post-test for control group and it could be concluded that using language laboratory can improve students' listening skill.
3. Based on t-test, there is different improvement from the experimental and control groups. Independent samples test proves that using CALL is more effective than using language laboratory. It could be concluded that students who are taught by using CALL have better achievement than ones who are taught by using language laboratory. The researcher concludes that teaching listening skill through CALL can make the learning in listening more enjoyable, interesting, and fun. The students were not forced by the teacher to learn. Using CALL can be one alternative way to increase students' listening skill. They experienced themselves and shared the knowledge with other members in classroom.

B. Suggestions

The researcher would like to give some suggestions that may be useful for:

1. The English teachers as follows:
The English teachers have to be able to organize teaching listening activities and have to give materials by using suitable visual source such as CALL to master and understand the lesson. To solve problems in learning English especially in teaching listening, the teacher can use visual source that suitable and interesting to the students, such as CALL. Teacher should use CALL that support the teaching listening.
2. The student as follows:
Students should enrich their knowledge about English by using CALL. Using CALL can be a good model of teaching strategy in teaching listening to the students. Using CALL can help students to prepare listening teaching practice.
3. Institution
SMK Triguna should consider CALL as one of alternative tools and media for improving students' listening skill.

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