THE ROLE OF LANGUAGE LAB TECHNIQUE IN LEARNING ENGLISH AS A SECOND LANGUAGE
(Listening and Laboratory Work Analysis)

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UNIVERSITAS HKBP NOMMENSEN
MEDAN
2017
Preface

First of all the writer would like to devote his greatest thankfulness to Almighty God, Jesus Christ, for His blessing, guidance, strength and loves that He gives to the writer, especially in conducting this research.

In this opportunity, the writer would like to express his gratitude to the reviewers (Febrika and Nurhayati), for their advices, suggestions, guidances and constructive comments in the process of completing this research. The writer also likes to say thanks to FKIP lecturers and staff and Dr.Sahlan Tampubolon as the headmaster of English Department, for their advices, kindness and permission so that the writer can conduct this research in class of English.

The writer has effort as maximum as he can in conducting this research, the writer hopes some construct sugesstions and critics from the reader for the perfection on this thesis. The writer hopes this thesis can be useful and give many functions to the reader’s knowledge especially about subject matter which is discussed in this research.

Writer
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Abstract

The Role of Language Lab Technique in Learning English as a Second Language (Listening and Laboratory Work Analysis) is explained. The study is aimed to find out the phenomenon and to proof the effectiveness of a process of learning by applying language lab technique in listening subject of English as a second language. The research was carried out by teaching grade III students of English majority of HKBP Nommensen University of Medan. The sample is selected by using purposive sampling to choose two classes in the faculty, they are grup A and B. The data were collected by using a set of listening test that covering all subjects being taught. The effectiveness of the teaching method into the students’ achievement in teaching is obtained from their ability to answer the question before teaching (pre-test and after learning process have been conducted (post-test). The result of research showed that the data are normally distributed. There is effectiveness or influence of laboratory work method to increase students’ achievement in teaching English especially in listening and laboratory work. One of the most interesting aspects of the lessons was the way in which the teacher integrated the various technologies and harnessed their potential for language learning. Also, the teacher used the lab space very effectively as a classroom environment, with a variety of pace and interaction patterns. The original language labs are now very outdated. They allowed a lecturer to listen to and manage student audio via a hard-wired analogue tape deck based systems with ‘sound booths’ in fixed locations. The language laboratory is a very helpful tool for practicing and assessing one’s speech in any language. It provides a facility which allows the student to listen to model pronunciation, repeat and record the same, listen to their performance and compare with the model, and do self-assessment. Language laboratory gives every learner of any language freedom to learn at their own pace, it is flexible and does not necessarily require a lecturer all the time. At the same time, it is possible for lecturers to provide assistance individually and collectively. This study also shows that in order to become fully effective users of multimedia language labs, language lecturers need to be both technically and pedagogically proficient.

Keywords: language lab technique, listening and laboratory work
CHAPTER I
INTRODUCTION

1.1. The Background of the Study

Students often find difficulties to understand the subject matter of Listening and Laboratory Work especially in Listening subject that are generally practised. This difficulty will bring bad effect to the understanding of the students that will be economical concepts, because basically the facts that abstract or an explanation for the facts and concrete concepts. Laboratory work is a key of role to improve the students ability and skills in English learning. English Laboratory is compulsion for many topics in English subject as it is known that theoretical aspect has to be proven by practise (laboratory work) in the laboratory.

A good quality of education in a country indicates of succes development in education sector in that country. In Indonesia, showed that quality of national education still under national standard. This matter can be seen from student’s achievement in high school especially in English subject. Teaching method is one factor which influences the quality of education. In teaching process, choosing method and how to use teaching method exactly have to do by lecturers so that will be able to achieve good results. And exact and correct choosing in teaching method is able to decrease learning difficulties because it can improve student’s motivation and intellectual activities in lesson that were taught.

Teaching method need to be improved and appropriate teaching strategies employed as the teaching-learning situation may be demanded. Various teaching methods are introduced for English teaching such as inquiry, project, lecture-demonstration, problem solving, remedial and laboratory experiment (Ross,2007). There
is however the need to understand that for different topic in science, the teaching approaches may differ depending on the complexity and structure of the topics so that the purpose of learning which formulated can reach (Sola, 2007). The lecturers should be concerned with the use of variety of methods and procedures.

Laboratory work is an effort in process of teaching using laboratory equipment. Laboratory work give study experiment directly, so that higher meaningful rising. There are chances that students able to do observation, collecting of data, make hypothesis or making prediction based on collecting of data till making conclusion. By applying laboratory work method students have skill using practise method in face all of problems, so they aren’t easy to believe something that is not true yet certain.

Using laboratory work in process of English learning attention interest in materials that taught. Experiment teaching has purpose to help teaching process in order easily remembered by the students, so that will be able to give longer impression teaching. Teaching method with experiment method will be able to help students thingking concepts of knowledge and real situation in laboratory, by doing practice and experiment. Thus, teaching impression will give better effectiveness to improve students’ ability in studying of English in college. One of subject matter be researcher attention is listening and laboratory work. Teaching of listening and laboratory work is quite difficult, if used conventionally only by conventional method. For that case it is important to think teaching method which able to improve students’ ability in learning English, so it will be interest and easy for students to understand.

Teaching of laboratory experiment had researched by (Sihole, 2004) she said that resulted of students’ achievement was improved by teaching of laboratory experiment because this teaching method taken longer recall than conventional method. Using laboratory experiment in learning is very effective because student able to learn self from
from observation in experiment, so that able to improve students’ achievement (Hutasoit, 2006). Positive influence for advancing of student achievement was obtained by laboratory experiment, if happened because subject matter that taught by laboratory experiment able in arising students’ interest and attention (Purba, 2008).

Based on the description above, the writer is interested in carrying out a research dealing the improving the knowledge to support listening skill, then the writer takes courage to write a thesis with the title “The Role of Language Lab in Learning English as a Second Language”.

1.2. Identification of Problems

a. the quality and the result of teaching listening skill is not significantly increased.
b. the lecturers are mostly not using the right method in teaching subjects in listening subjects.
c. Listening skill concept is needed to be improved due to their ability to understand.
d. the subject matter of listening and laboratory work is difficult for some students.
e. the lack of ability in managing laboratory.
f. the lack of understanding about laboratory’s function.

1.3. The Problem of the Study

Problem of study formulated as follows:

a. how does language lab technique help language learning?
b. are there significant differences of applying language lab to the students achievement?

1.4. The Scope of the Study

This study is limited of using language lab technique in teaching listening skill and laboratory work, students of the third semester, According to Zouhair Boukari
(2010) there are 4 kinds of teaching techniques that applying in learning Listening Skill subject, they are; the Guided technique, the Free-to-Roam technique, the Dynamic technique and the Language Lab technique. By conducting this research the writer will analyze and get the result by applying Language Lab technique to the third grade students of English department of Nommensen HKBP University of Medan.

1.5. The Objective of the Study

Problem of study formulated as follows:

a. to find out the way of language lab influences help language learning in listening skill subject.

b. to get the significant difference of influences between using language lab technique and conventional method to the students' achievement?

1.6. The Significances of the Study

a. Student have more skill in using scientific method to solve the problem to determine system and environment.

b. Students more active in thinking and do about by applying listening and laboratory work besides obtain knowledge, practice experiment and also skill in using laboratory equipment in listening topic.

c. Students are able to evidence the truth of a theory by self.

d. Giving complex challenges for students to solve the problem in listening.
CHAPTER II
REVIEW OF RELATED LITERATURE

2.1. Definition of Learning

To obtain an objective understanding of learning, especially learning in university level, to be formulated clearly. Understanding of learning has been often mentioned by experts of psychology, including educational psychologists. According to the psychological sense, learning is a process of changing, changes in behavior as a result of in daily the environment in meeting their daily needs. These changes will be significant for all aspects of behavior. Understanding of learning can be defined as follows: “learning is a process of effort for someone to acquire a new behavior changes as a whole, as a result of his own experience in interacting with their environment”.

Language learning is quite different from learning any other subject. It is not limited to writing an examination paper and getting marks or award. The four skills: listening, speaking, reading, writing have to be put into practice since having the ability to communicate well is the central purpose in learning any language. Communication entails the student’s capability to listen attentively to the exact meaning and to respond with appropriate words and with clear pronunciation.

There are several components necessary to master a language. It is not just about being able to read and understand certain words. It also entails mastery of the spoken language. There are language learners who learn how to read and write fast. However, if they are asked to talk, they could barely pronounce the words right. This is true especially in learning the English language. This is the reason why language laboratories are essential.
The curriculum of the present educational system does not have a laboratory session for arts subjects. Only those who study science subjects have practical work, which is undertaken in a laboratory. Hence, a laboratory for language learning is something new to Indian students, whereas it is very common in Western countries to train children in the laboratory to enrich their language learning experiences.

In today’s world the basic but the most expensive skill required is to handle the English Language efficiently. It silently reveals the caliber of the individual in their profession which in turn contributes to career growth. The language lab provides access to native-speakers via audio-video aids so that they learn correctly. Given large number of students pursue higher studies outside their home country; language lab would help them in studying the language of the country where they are planning to pursue their higher education.. As strong communication skills are essential in almost all of the professional careers, language lab can help in acquiring this important skill.

2.2. History of Language Lab

The word ‘laboratory’ originated in the late 15th century. It refers to a specific structure or a room for mixing chemicals and preparing medicines by science experts. Scientists used to follow structured steps to perform their experiments and research purpose. With the progress of science few types of mechanical and electronic equipments were added to this structure. Later on this structure was introduced for teaching learning process. Any learner can develop one’s subject knowledge practically in controlled conditions. Observe and improve through own experience is the key concern of any laboratory.

A language laboratory is a classroom equipped with tape recorders or computers where people can practise listening to and talking foreign languages. A language laboratory is a room equipped with tape recorders, etc, for learning foreign
languages. A 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.

The language laboratory or language lab is an audio or audio-visual installation used as an aid in modern language teaching. They can be found, amongst other places, in schools, universities, and academies. Perhaps the first lab was at the University of Grenoble in 1908. In the 1950s up until the 1990s, they were tape-based systems using reel to reel or (latterly) cassette. Current installations are generally multimedia PCs. The original language labs are now very outdated. They allowed a teacher to listen to and manage student audio via a hard-wired analogue tape deck based systems with ‘sound booths’ in fixed locations.

The language laboratory is an audio or audio-visual installation used as an aid in modern language teaching. They can be found, amongst other places, in schools, universities and academies. Perhaps the first lab was at the University of Grenoble. (Ruby, W.B. 2004) In the 1950s up until the 1990s, they were tape-based systems using reel to reel or (latterly) cassette. Current installations are generally multimedia PCs. The original language labs are now very outdated. They allowed a teacher to listen to and manage student audio via a hard-wired analogue tape deck based systems with ‘sound booths’ in fixed locations. According to American Heritage Dictionary 4, language laboratory is: “A room designed for learning foreign languages and equipped with tape recorders, videocassette recorders, or computers connected to monitoring devices enabling the instructor to listen and speak to the students individually or as a group”.

The Webster’s New World College Dictionary definition of the 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” (Language Lab in Webster’s New World College Dictionary). Cesar (2006) defined language laboratory as: “…a teaching tool requiring the implementation of well-constructed tasks based on the students ‘needs”. Beder (2008) in defining language laboratory stated:“A Language Laboratory is a room in a school, college, training institute, university or academy that contains special equipment to help students learn foreign languages by listening to tapes or CDs, watching videos, recording themselves, etc.”.

Mambo(2004) affirmed that: “language laboratories are environments designed to enhance foreign language learners’ skills. Generally equipped with analog and digital hardware, and software (tape recorders, videocassette recorders, or computers), they provide practices in listening comprehension, speaking (listen and repeat), with the goal to reinforce the grammar, vocabulary and functions (grammatical structures) presented in class. “

2.3. The most common components in a modern language laboratory:

a. Teachers and students use computers with language lab software for conducting language learning exercises and activities.

b. Teachers and students use headsets with microphone to communicate and conduct language learning exercises and activities

c. Students have a media player/recorder to listen to audio and watch video and for recording their speech exercises

d. Preset language learning lesson activities allows the teacher and students to get on task fast and easy to use without any mistakes or lengthy teacher workarounds

e. The teacher and student computers are connected via the network, and in cases of digital language labs separate cat 5 cabling is used
f. In the case of a digital language lab a server computer or a separate storage device is often used to store lesson materials and student recordings in a digital format.

g. Teacher has a computer with appropriate software for conducting language exercises.

h. Teacher and students wear headsets that block outside sounds and disturbances

i. Students have a media player/recorder for listening to audio and recording speech

j. Teacher and student positions are connected via LAN (local area network), in some cases also via separate audio cabling

k. A server computer or a separate storage device is often used to store lesson materials in a digital format

2.4. Characteristics of a good Language Laboratory

There are different features of language lab, which make the students to have interactive session. Few are summarized here.

a. **Attention**: Attention on subject is increased resulting in better retention of the concepts. As the language lab allows the student to listen to the program stimulus individually, each individual student’s attention is focused on the program material being studied, ultimately increasing the attention span of the student and teaching the student to listen and analyze the content of the lesson.

b. **Acoustics**: It provides equal opportunity to all the students to hear the instructor irrespective of place where they are seated. There will be less miscommunication because of direct nature of the sound transmission. The language lab provides all students no matter where they are seated in the room with equal opportunity to hear the instructor and to be heard by the instructor. None of the lesson material is misheard due to the direct nature of the sound transmission. Each student can listen to the lesson material at a level set by themselves for their own comfort.
c. **Building Student Experience**: Students can build on their existing experiences and gain further knowledge of computers while learning in the computer language lab. Practicing with systems, software and new applications enhances exportable skills. The more experience students have with computer technology, the more successful they will be in the “real world”.

d. **Developing Listening skills**: Listening skills are an essential element in becoming linguistically fluent. The language lab helps students develop good listening skills and aids the process of communication. Furthermore, it develops the listening and communication skills, since they hear correct pronunciation through their headphones.

e. **Excitement**: Students become excited when using learning lab systems. The student’s attention is heightened and the boredom of repetitive learning is lifted. Learner will show more enthusiasm and excitement in learning lesson because of learning lab system.

f. **Efficiency**: The teacher can monitor individual students (and talk to them) much more efficiently than in a regular classroom. Usually in a regular classroom all other students stop speaking when the teacher communicates with an individual student. In a lab they will continue working without interruption.

g. **Appropriate use of time**: The language lab makes most efficient use of time, improving the teacher/student time ratio and allowing the instructor to maximize the use of time in a given lesson. Efficient use of time and learning efficiency is much more than usual classroom learning.

h. **Improve discipline**: The instructor can improve the discipline of the class by privately conversing with individual students who are being objectionable. By utilizing a system of seat management, any equipment faults or acts of minor
vandalism can be reported by the next student entering the booth. If not reported by
the student, they become the target of the investigation when the next student
enters the booth. Students have great difficulty talking to each other when wearing
headsets.

i. Individualization: Labs provide the capability for dividing the class into several
groups. These groups can be listening to different programs on varying subject
matter and at different levels of interactivity. This set up fosters more interactive
session between students and teacher.

j. Internet access: The new generation of multimedia systems allows the students to
be connected to the World Wide Web and to be able to access information on a
global basis. This allows instantaneous access to information worldwide and
communication in the following ways:

✓ Access to foreign literature and museums for research and study.
✓ Direct communication with other students from their country and culture of
  study.
✓ Person-to-person communication through email, chat rooms, internet phone, etc.
✓ Student-to-student video conferencing with local and foreign classes.
✓ Viewing English and target language web sites.
✓ Watching live TV broadcasts and listening to foreign radio broadcasts.

k. Native speaker/ Different voice: The lab provides the students with a variety of
model voices rather than just the voice of the teacher (who is often not a native
speaker). All modern systems have a Model Voice feature allowing a native
speaker to converse and be used as a model voice subject for the rest of the class.
l. **Overcoming shyness:** Lab systems tend to make students more anonymous. Language labs motivate students to talk freely and lose the shyness when talking in front of their friends.

m. **Oral testing:** Oral test features allow instructors to test students with a question or stimulus and only record the student’s answer. Instructors can then play back the recorded answers at a later time for grading, without having to listen to the questions.

n. **Privacy:** It also provides the privacy that encourages the shy students to speak without any hesitation. In addition instructor can speak to individual or group of students in privacy without interrupting rest of class. The headset/microphone provides students with a psychological privacy that promotes their speaking ability. It reduces the inhibitions felt in normal classroom situations.

o. **Provide feedback:** The instructor can easily generate records of attendance, grading and oral responses to true/false or multiple choice taped tests. An automated record keeping process can save much time. The student’s progress can also be monitored regularly so that teacher can provide feedback based on individual pace and ability.

p. **Record/Comparing:** The students have the ability to record their own voices along with the master stimulus. Each student can be working interactively on different segments within the same program or be working with completely different program material.

q. **Role playing exercises:** Using the random pairing/random grouping feature that all advanced modern learning systems incorporate, instructors can generate a variety of exercises structured around role-playing. Students can be paired or grouped together in small numbers and hold conversational practice with each other. Due to
the random selection of student partners the students interest level is always high in anticipation of who their paired partner is likely to be. The instructor can also allow the students to listen to a stimulus from the console allowing the students to practice with each other while responding to the master stimulus.

r. **Self-pacing:** The students may work through the lesson material at a pace suited to their ability. The lab is for them a personal tutor. Thus allowing the classroom as student-centered approach. The students can access digitally stored programs, exercises and tests that can be completed at their own pace and at a time they decide is appropriate.

s. **Teacher monitoring:** Since the teacher is not concentrating on producing the next question or drill, he/she can concentrate more on the student responses. The instructor has more time to produce materials and oversee class activities due to the automatically, rather than manually, controlled instructor console features. Teacher can look after each student, which is not possible in case of the regular classroom. In a lab instructor can communicate with many students by pressing a mouse key in order to talk with students.

t. **Variety:** The language lab provides variety from regular classroom situations. The teacher’s role is changed and the students are more active for longer periods of time. The use of visual stimulus coupled with selective audio materials increases the attention span of the students. The language lab brings variety in teaching learning process instead of boring verbal centered teaching.

2.5. **Appearance and configuration**

The 'traditional' system generally comprises a master console (teacher position) which is electrically connected to a number of rows of student booths (US: carrels), typically containing a student tape recorder and headset with a boom arm
microphone. The teacher console is usually fitted with master playback source equipment (tape recorder), some means of monitoring of each booth in the class via the teacher headset and an intercom facility offering 2-way communication between teacher and student. All but the most simple or first generation laboratories allow the teacher to remotely control the tape transport controls of the student booths (record, stop, rewind etc.) from the master desk. This allows for easy distribution of the master programme material, which is often copied at high speed onto the student positions for later use by the students at their own pace.

a. Operation

Once the master program had been transferred onto the student recorders, the teacher would then hand over control of the decks to the students. By pressing the record key in the booth, the student would simultaneously hear the playback of the program whilst being able to record his or her voice in the pauses, using the microphone. This is known as an audio active-comparative system. From a technological point of view, this overdubbing was made possible by use of a two-channel tape recorder.

b. Problems

Language laboratories in the 1970s and 1980s received a bad reputation due to breakdowns. Common problems stem from the limitations and relative complexity of the reel to reel tape system in use at that time. Design played a part too; the simplest language laboratories had no electronic systems in place for the teacher to remotely control the tape decks, relying on the students to operate the decks correctly. Many had no way to stop the tape running off the reel in fast rewind or forward wind, which meant time wasting and greater chances of failure through misuse.
The tape recorders in use after the early 1970s in the language laboratory were more complex than those in the home, being capable of multi-tracking and electronic remote control. As a result, they often had several motors and relays, complex transistorised circuitry and needed a variety of voltages to run. They had lots of rubber parts such as idlers and drive belts which would perish and wear out. Bulbs in the control panels were also in continual need of replacement. Since the student booth tapes were not normally changed from one class to the next but were recorded over each time, these would eventually wear, and shed their oxide on the tape heads leading to poor sound and tangling.

2.6. Why should use a language lab for language teaching?

A language lab creates a learning environment much more effective than traditional classrooms enhancing the capabilities of students and allowing a high degree of immersion and attention to diversity. A language laboratory encourages the participation and integration of the students in the different exercises and this is reflected, for example, in the time it takes to students to speak in another language during class. In a traditional class of 45 minutes the percentage of time spent by students to speak in the language they are studying is 2.2% while in a language laboratory classroom the percentage of time spent reaches nearly 24%. It is also necessary to note that these figures might be higher depending on the exercises taking place in the class.

Today’s language labs are available in a number of different types of technology. Multimedia language labs use computers and incorporate language lab software. Digital language labs that typically use digital hardware for the students and software at the teacher station only. Language labs can also be Mobile language labs or wireless language labs. The most common language labs terminologies are;
Language laboratory, multimedia language lab, language lab, language lab & media centre, multimedia language learning centre, software language, digital language lab, portable language lab. Research shows that in a classroom average language class, all students combined speak only a limited time of the class time. With a language lab, all students in the class can work on different levels in 6 different groups or self-access, and speak simultaneously without distracting each other regardless of the class size. This work can be played back to the students to practice and improve and the teachers can save this work and assign this as homework for the students. Without a language lab, this is not possible and in a class of more than 10 students, each student gets less than one minute of speaking practice without being able to record or save the students work.

In addition, the use of the language lab allows students to have access to the information quickly and easily developing many types of classroom exercises, personalizing the learning process, encouraging creativity, innovation and training . Language laboratories also favour a high degree of skill development, team and collaborative work eliminating socio-temporal barriers since information is not found in a particular and specific place and at the same time, they foster digital literacy responding to new educational and social needs.

2.7. The basic aims of the language lab

The basic aims of the language lab are the same as they ever were and they are;

- To improve listening skills – classroom and individual with high quality audio
- To improve speaking skills – individual, paired, groups
- To present and demonstrate language skills – both screen and voice in seconds
- To monitor and guide students – discrete monitoring and intervention as required
Empirical evidence from users over many years has shown that language labs help to; increase the number of students taking languages, attract more boys to study languages, significantly improve the Speaking Test results obtained, encourage peer-assessment and parental involvement.

2.8. Procedure of the Use of Language Laboratories

A language laboratory can be utilized for teaching or learning through a teacher’s console. The functions of a teacher’s console are:

a. Staying in Control:
Staying in control includes various activities, like monitoring students’ work and activities; locking cursors and keyboards to focus attention on a given task; shutting down, logging off, or restarting student computer sets; etc.

b. Reinforcing Learning:
Teachers can use communication tools that are familiar for their students, such as text messaging or chatting. They can also communicate with them in an engaging way by creating more opportunities to interact in the target language. Learners can reinforce their language in various activities. They can revise pronunciation, grammar, vocabulary, sentence structures, and conversations.

c. Teaching with Software that is approachable:
Approachable software is one with which teachers will be perfectly at ease in their teaching activities. It is used as the interfaces which are easy to use and activity-driven. No specialized Instructional technology skills are needed for this interface.

d. Ensuring the Best Learning Result:
The best learning result can be reinforced by the existence of language learning software. The language learning software gives learners access to resources for independent or supplemental learning and study. This unique learning-on-demand
feature creates additional learning opportunities and reinforces classroom activities. It is possible to carry out tests, practice tests, and get results in individualized manners.

2.9. Kinds of Language Laboratories

The language laboratory assists educators in delivering foreign language instruction, and has been through many developmental stages over the years. Few kinds of laboratories are being focused on here.

a. Traditional/Conventional laboratory.

This is the earliest form of language laboratory developed. It makes use of a recorder and cassette tapes to help language learners. The tape usually contains texts or stories read aloud by a native language speaker. There are also listening and speaking exercises that follow in each chapter. The teacher plays back the tape and the learners listen to it and learn the material.

b. Lingua Phone Laboratory

A lingua-phone laboratory is like conventional laboratory, with a little modernization. The students are given a headphones to listen to the audiocassettes that are played back. As regards to the conventional laboratory, the distractions in this laboratory are less so there is certain amount of clarity in listening. There is also a modernized lingua phone laboratory available today, which uses an electronic device that works as a cassette player with all the features of a normal cassette player on the left side, and as a repeater on the right side that helps one to record one’s voice and replay it for comparison.

c. Computer Assisted Language Laboratory (CALL)

There are two brands of this laboratory: Computer Assisted Language Laboratory (CALL) and Web Assisted Language Laboratory (WALL). The first one that is CALL uses the computer to teach language. Computer Assisted Language
Laboratory. This is one of the most modern speech laboratories available today. The entire course module is already stored in the computer. The language course resources are already downloaded on the computer and are presented to students according to the features available in the system.

Compared with CALL, WALL is almost the same as CALL with one difference that is, in WALL system, computers are connected to the internet. In WALL, the teacher as well as students can browse any resources from the internet during the teaching learning process. (Wilson, & Thayalan, 2007). There are many and different other kinds of language laboratories like The Dial Access Lab, Mobile Lab, Wireless Lab…etc.

d. Mobile Lab:

This is basically a console on wheels with storage spaces for headsets. It is best used within a single building where it can be moved from one room to another. While the advantage of the mobile lab is that any classroom may be turned into a lab, the drawback is that the equipment is heavy and hampers free movement. It requires time and energy to set up.

e. The Dial Access Lab:

The Dial Access Lab needs more spaces than the Conventional Lab. It also needs more technicians at any given time. It is basically a broadcast operation. Depending on the size of operation, any number of students can access a particular tape at any given time. Usually, a number of rooms are used to provide space for the different programs mounted; video and/or computer interface may be added again, depending on the size of the operation. The student needs a minimum of equipment, namely, an activated headset, a dial or touch-tone selector, and controls for a remote selector.
f. Wireless Lab:

The wires connecting the sources to student headsets are replaced by radio transmission in a wireless laboratory. The console contains a small transmitter that serves this purpose. Monitoring and intercom are NOT possible with this lab. It combines well with the Mobile Lab, though the important functions of monitoring and intercom are forfeited.

g. Remote Controlled Lab

This arrangement enables students to control specific tape decks located elsewhere at remote locations. The actual equipment installation is similar to that of a conventional laboratory room. The electronics are relatively more complex, though. Here, the student can; start, stop, backtrack, and rewind at will, without actually including combinations e.g. Listen,Respond, and Record.

2.10. The Benefits of using a language lab

Language labs are becoming highly valued at colleges and universities because they offer students a structured eLearning environment that is successful and reliable. New technologies are increasingly more present in classrooms as they facilitate the teacher’s role in creating a more attractive learning environment for the student and can offer their students more practice hours and up-to-date exercises than can be found in language books.

a. A language lab is practical

Learning a new language just by studying the theory is not enough to guarantee a successful language learning experience. Language labs provide practice in an entertaining and interactive way to acquire the 4 main language skills: listening, speaking, reading, and writing. Students learn more comprehensively through a language lab, using more class time instead to achieve these three main objectives:
• **Self-learning:** The student progresses in a self-guided but structured and progressive training to achieve the goals and objective set by the school or educational body.

• **Complimentary:** Language labs allow students to reinforce material learned in class by putting them into practice through interactive activities.

• **Monitoring and Evaluation:** Teachers know the progress of each student and receive reports of strengths and weaknesses to better adapt the classroom activities.

b. **Students learn much faster in the language lab**

Practice leads to language learning success! Language labs’ interactive courses help students learn much faster than in a regular classroom setting. The methodology of the classroom language network uses a progressive model to promote natural learning, where students learn the different concepts of language in an intuitive way. The language lab boosts the motivation of students achieving higher levels of language retention and progress.

c. **The teacher takes on a more important role in the language lab**

There is a big fear in the education world that technology will replace the role of the teacher and the position will become obsolete entirely. The language lab debunks this myth because it provides supplementary materials that only facilitate the role of the instructor rather than compete with it. The teacher can then focus on the important parts of the course rather than waste time explaining everything. The structure of the language lab courses also facilitate the work teacher puts in when preparing lessons and allows them to prepare them in less time and with a greater volume of interactive resources.
d. Use more resources and varied activities than in a traditional classroom

Language labs allow students to practice the language with a much wider variety of activities and exercises based on the computer. Learning occurs in a structured way, in a real context and visually attractive way that immerses the student in the language learning environment and promotes language use. The students can watch videos, practice their pronunciation through a speech recognizer, learn new vocabulary, and much more.

e. Language labs allow for diversity in the classroom

Language laboratories provide teacher attention to students, especially in the case of schools with different levels because as interactive courses, language labs are tailored to the individual needs of students. On the other hand, thanks to monitoring and evaluation in real time, the teacher knows exactly what course objectives pose major difficulties for the student time and can reinforce the class accordingly.

f. Labs foster communication in the classroom

Language labs also encourage communication student-teacher as well as student-student with activities and exercises essential to oral communication and the understanding of the language. The labs include tools for creating groups, host conversations via chat, promote messages on the board, access to a community of students who are also studying the same language, etc.

g. Language labs are an intuitive tool for both the student and teacher

This method of learning does not require professional technical skills for use in the classroom, the teacher only needs basic computer skills and students will welcome the added technology they are already so adept with.
h. Language labs optimize computing resources

Both universities and colleges have classrooms with computers there for students to complete school works or study other subjects. There are also a number of faculty computer labs or office computers for administration also available. Language labs essentially recycle resources an educational institute already has and adapts it to the language course.

2.11. Difference between Traditional and Innovative methods of Teaching

When we try to revise the difference between the traditional methods of teaching against the language lab we wrong ourselves by keeping the teacher or the student and not the learning or the content. We at the center we think too much about effective methods of teaching and not enough about effective methods of learning. This is where language lab becomes more effective as compared to the traditional methods of chalk and duster. The traditional method of teaching is mostly two dimensional visual but without the usual requirements of practical teaching environment as in the Language Lab and the technologies of the contemporary age. On the other hand in the Language Lab, the teacher is not directly involved, and hence the class is less personal, as people might say, ‘the class lacks the emotional quotient’. In this part, we intend to evaluate the advantages and disadvantages of both the Traditional and Innovative (Language Labs and Multimedia) teaching methods. Traditional Methods:
CHAPTER III

METHODOLOGY RESEARCH

3.1. Design and Planning of the Research

The sample of this study consisted of 30 students of grade III studying at FKIP, Nommensen HKBP University of Medan. As the college was a public sector institution located in capital, students from various socio-economic backgrounds from different parts of the country were eligible to join it. The age of III grade students had completed first fourteen lesson of their English textbook. Sample students were randomly divided into two groups i.e. control group and experimental group, each consisting of 15 students on equivalent basis. The class sections were allotted randomly to control and experimental groups.

In this research, the researcher used laboratory work method as a treatment in experimental class (laboratory) and control class taught by using conventional method. Both of classes were taught with the same topic, that’s listening and laboratory work at the same time. Design of the research is shown in the table 3.1.

Table 3.1. Design of the Research

<table>
<thead>
<tr>
<th>NO</th>
<th>Faculty</th>
<th>Total students</th>
<th>Total class (parallel)</th>
<th>Selected class</th>
<th>Selected sample A</th>
<th>Selected sample B</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FKIP</td>
<td>30</td>
<td>1</td>
<td>A and B</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

3.2. Location and Time of the Research

This research was conducted in Nommensen HKBP University of Medan with owning laboratory facility. The administration process have been made to ask the permission to the member of the researcher free to do research in the class. Agreement
from faculty targets have been obtained and the lecturer in the campus had agree to help the researcher in preparing the study being succes starting from selection of the target sample, introducing an innovated teaching method, doing teaching activities based on the research procedures prepared by the researcher, conducting evaluations (pre-test and post-test) and obtaining the data.

3.3. Population and Sample

The populations are all the students of the third semester, class English department, Nommensen HKBP University of Medan. The samples are chosen purposively due to the limitation of the researcher, those are group A and Group B. Each class will be given a same conduction but only selected sample which is used as a research sample.

3.4. Research Procedures

The research procedures began from administration process to have permission to do experiment in English Department, Nommensen HKBP University of Medan. In to the target, the class sample are chosen to be included in the study, followed by sampling process to obtain experiment class and control class in each of the selected class.

The data achievement of the students on Listening subject were obtained from evaluation test that were conducted at the end of the teaching. The evaluation test were conducted two weeks after the teaching treatment to obtain how far the students understand the concepts on Listening subject with those treated by the laboratory work method compare to a conventional method.

Madhavi(2009) suggested six stages that can be done to improve students’ listening skills in the language laboratory. They are understanding the setting, pre-
teaching unfamiliar English words, focusing on listening, comprehending, analyzing, and giving graded listening tasks.

a. **Understanding the Setting:**
   After the first listening, students should be able to understand the location of the recording. Thinking about the setting encourages students to go on to guess about the contents of what the speakers are intending to say or will say.

b. **Pre-teaching Unfamiliar Words:**
   Teachers may choose to introduce the setting before the students listen. This provides an opportunity to introduce and explain the sort of language that might be heard in that setting. This language is listed on the board and students listen and mark what they actually hear.

c. **Focusing on Listening:**
   The teacher should line up a number of Listening tasks before the students listen so it gives them a reason for listening and focus their attention on.

d. **Comprehending:**
   Each student has a different level of comprehension from another student. The teacher gives students a number of questions equally to groups of students after listening, students share their answers for comprehension.

e. **Analyzing:** After students have understood the general idea and some important details of a recording, they can analyze it in more details and examine the way in which the speakers have expressed their ideas.

f. **Giving Graded Listening Tasks:** Teachers often teach listening by ranking comprehension from understanding generally to identifying specific information. They can also grade the listening tasks from easy to more difficult by the forms
of the questions. They use and evaluate them based on the kind of production by
the learners in the form of writing or speaking.

3.5. Arranging the Research Instrument

In his book Teaching and Learning Dwyer(2010) stated: Lessons in the
laboratory must be planned in such a way that the overall objective of the lesson is to
bring about a transfer of any mechanical skill taught in the laboratory to a functional
context reflecting the way the student has to use that skill outside the classroom in real
life. To make it real, students could record their voices and check pronunciation. He
also stated: “These three activities are elements of the one lesson with the major
objective being ensuring the student’s ability to use the skill in a communicative
setting” According to him the model lesson proposed can be drawn up in this way:

a. Input: teacher’s demonstration of the skill to be learnt in a communicative
situation (done away from the laboratory booths).

b. Practice: modeling practice of the specific skill(listening in our case), Self-
practice by the students, following a given model, Performance monitored by the
teacher (done in the laboratory booths)

c. Application: students’ demonstration in a communicative situation of the skill
learnt (listening in our case), open dialogues, group work, role play. The teacher
acts as adviser, offering encouragement.

3.6. Teaching Treatment

3.6.1. The Features of a Teacher’s Console

A console is the desk like part of an organ that contains the keyboard, stops,
and a central control panel for a mechanical, electrical, or electronic system, in other
words, a console is a keyboard or a panel for keys of an electronic or mechanical
equipment.
Teacher’s console is a desk like part in the language laboratory which is endowed with a broadcasting system that is utilized to control the teacher and students’ talks, it makes the communication between the teacher and a precise student, individually possible with just a button blow, in addition to a headphone, and a microphone. In some laboratories the teacher’s console is provided with a computer which can be used for supervising students’ work and activities.

The teacher console acts as a control board enables the teacher to:

a. Enables the teacher to interact with students in private without disturbing others.

b. Encourage the students separately, as well.

c. Gives the role of the moderator of the group discussions.

d. Giving instructions to individual student with personalized attention

e. Listen to the student’s voice independently.

f. Permits the teacher to include a wide range of language learning materials and activities

g. Prevent actions at a selected student’s booth for giving instructions.

h. Provide options for listening to the native speakers

i. Supervise the activities of students while they practice the lessons.

3.6.2. Features of Student’s Booth (console)

Booths are small semi-private enclosed spaces where learners seat to receive and listen to the lesson directed by the teacher. In general, there are ten to twenty booths in a language laboratory. In a language laboratory each student has: earphone, a microphone, a booth and a tape recorder. Students’ booths enables the student to:

a. Allows the students to speak and being corrected at the same time in the language lab’s time session.

b. Enables them to self – evaluate themselves.
c. Listen to pre-recorded material spoken by native voices,

d. Listen to the native speaker’s records and pronunciations.

e. Permits to recite simultaneously and receive correction in the laboratory period”

f. Ready to play back the recording of his own repetition in alternation with the native model

g. Repeat the lesson determined by the teacher, record, and replay, can be part of a group discussion.

h. Repeats what he hears in pauses,

i. Transport or carry pre-recorded lessons from the teacher’s console

3.7. Data Collection and Analysis

The proposed data to be obtained in this study is students’ achievements. Students achievements is obtained from the students achievement to solve the problem in evaluation tests, they are pre-test and post-test. There are 20 questions are used that covered the Listening subject. The data are counted from students achievement in sample class for the right answer. The data are based on the class and treatment group. Pre-test is carried out before the teaching treatment into the experiment class and control class. The score obtained in the pre-test is set up to measure the students’ achievement in subject matter.
CHAPTER IV
ANALYSIS AND DISCUSSION

4.1. Data Analysis

In this section will be described in detail about the results of research on the differences of student achievement for those who take course and those who do not take course, the third semester of English Department students, HKBP Nommensen University of Medan in Academic Year 2016/2017. Learning achievement data which is obtained from the research is secondary data namely, the final scores of students or report. The students' final grades will be distinguished between the students before and after the test.

4.2. Instruments and Data Analysis

The data which are obtained are students’ achievement that is students’ value by answering question in evaluation. Data are grouped based on the class and group which are tested. The effectiveness of method which is given to increase students’ achievement in using laboratory work method and inquiry approach for each treatment group and treatment in conventional method. The data are collected, tabulated and analyzing by statistic method.

According to Salaberry (2001), argues that, “the effectiveness of computer technology is directly related to the extent that it allows teachers to implement effectively specific pedagogical tasks that may be difficult to achieve in other environments.” Before using test instrument as evaluation in process of collecting data the first has done tye out to expert valuator, amount of valid instrument whic is acquired 20 instruments. Valid test instrument is used as istrument in this research to get the result of students’ achievement in each class.

4.3. Students’ Achievement Before and After Teaching Treatment

The data which is needed to discuss in this research is the result of prior evaluation pre-test and post-test. By analyzing data will be known how the effectiveness of teaching
English by using laboratory language lab technique to increase students’ achievement. Before giving treatment in experiment and control class, the first is giving pre-test for students to know their beginning knowledge. The result of pre-test is also important to know how far the degree of their normality and homogeneity. The result of collecting data in pre-test shows that generally students in both of the two classes (grup A and grup B) can be seen from students’ achievement in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Name’s code</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>No</th>
<th>Name’s code</th>
<th>Pre-test</th>
<th>Post-test</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>A1</td>
<td>47</td>
<td>60</td>
<td>1</td>
<td>P6</td>
<td>73</td>
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<tr>
<td>2</td>
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<td>2</td>
<td>Q7</td>
<td>73</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>C3</td>
<td>43</td>
<td>53</td>
<td>3</td>
<td>R8</td>
<td>57</td>
<td>70</td>
</tr>
<tr>
<td>4</td>
<td>D4</td>
<td>43</td>
<td>60</td>
<td>4</td>
<td>S9</td>
<td>67</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>E5</td>
<td>43</td>
<td>60</td>
<td>5</td>
<td>T0</td>
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<td>73</td>
</tr>
<tr>
<td>6</td>
<td>F6</td>
<td>43</td>
<td>50</td>
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<td>U1</td>
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<tr>
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<td>V2</td>
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<tr>
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<td>I9</td>
<td>37</td>
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<td>X4</td>
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<td>73</td>
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<td>10</td>
<td>Y5</td>
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<tr>
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<td>Z6</td>
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<tr>
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<td>C9</td>
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<tr>
<td>15</td>
<td>O5</td>
<td>33</td>
<td>43</td>
<td>15</td>
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</tr>
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<td></td>
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<td>807</td>
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<tr>
<td></td>
<td>Average</td>
<td>38.53</td>
<td>53.80</td>
<td></td>
<td>Average</td>
<td>24.73</td>
<td>46.26</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>5.43</td>
<td>5.63</td>
<td></td>
<td>Standard Deviation</td>
<td>4.81</td>
<td>5.33</td>
</tr>
</tbody>
</table>
4.4. Findings

Based on the result of the research:

The average score of students’ achievements after giving test is grup 38.53-53.80, grup B 24.73-46.26. There is a significant achievement of the students after test. In summary, then, language lab technique has emerged from this project: it means that the technique is an ideal way to apply for lab classroom management; lecturers and students have access to a range of generic and specialist software applications (for example, text, graphics, audio and video tools) to use in the preparation of materials, traditional good pedagogical practice plays a fundamental role in the effective delivery of multimedia lab-based language teaching and learning; and in order to be effective practitioners in multimedia lab-based teaching environments, teachers need a high degree of both technical and pedagogical competence.
CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1. Conclusions

Based on the result of the research that has been conducted it can be concluded that: There is effectiveness or influence of laboratory work method to increase students’ achievement in teaching English especially in listening and laboratory work. One of the most interesting aspects of the lessons was the way in which the teacher integrated the various technologies and harnessed their potential for language learning. Also, the teacher used the lab space very effectively as a classroom environment, with a variety of pace and interaction patterns. The original language labs are now very outdated. They allowed a lecturer to listen to and manage student audio via a hard-wired analogue tape deck based systems with ‘sound booths’ in fixed locations. The language laboratory is a very helpful tool for practicing and assessing one’s speech in any language. It provides a facility which allows the student to listen to model pronunciation, repeat and record the same, listen to their performance and compare with the model, and do self-assessment. Language laboratory gives every learner of any language freedom to learn at their own pace, it is flexible and does not necessarily require a lecturer all the time. At the same time, it is possible for lecturers to provide assistance individually and collectively. This study also shows that in order to become fully effective users of multimedia language labs, language lecturers need to be both technically and pedagogically proficient.

5.2. Suggestions

Based on the results of the research, the researcher suggests:

1. The results of the research can be used as the reference for the next researchers as the prospective lecturers to carry out duties as lecturer in the future.
2. For the university, especially for lecturers of English Department, Faculty of Language and Art, HKBP Nommensen University of Medan to design and to hold a course program as one of the extracurricular activities for students.

3. The results of the research can be used as a reference and referral for other researchers who want to conduct the research in different times and places.

4. For university stakeholder to create a new program for students to share their minds, express their ability and talent especially in English basic skill subjects.

5. The project findings will form the basis for the production of lab-based teaching ideas in the form of a booklet of lesson suggestions along with appropriate technical guidelines on how to accomplish the stages of each lesson. In addition to this, it would be useful to create a shared resources bank of ready-made digital materials for use on the language courses provided some experts.


Teresa, Fernández-Ulloa,(2013). “Teaching with Social Networks: Facebook, Twitter