THE USE OF *ELSA SPEAK* APPLICATION IN SCIENTIFIC APPROACH TO IMPROVE STUDENTS' SPEAKING ABILITY AT SMPN 23 BANDAR LAMPUNG

An Undergraduate Thesis

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FACULTY OF TEACHER TRAINING AND EDUCATION

UNIVERSITY OF LAMPUNG

BANDAR LAMPUNG

2024

ABSTRACT

THE USE OF *ELSA SPEAK* APPLICATION IN SCIENTIFIC APPROACH TO IMPROVE STUDENTS' SPEAKING ABILITY AT SMPN 23 BANDAR LAMPUNG

BY

NURMANITA ARIANTI

The objectives of this research are to find out the use of *ELSA Speak* Application in Scientific Approach significantly improve students' speaking ability and also to know which aspect of speaking that improves the most after the students were taught by using *ELSA Speak* Application in Scientific Approach. This research is quantitative research with one group pretest and post-test design. This research was conducted at SMPN 23 Bandar Lampung, involving 25 second-grade students by employing quantitative research with oral tests in the form of pre-test and post-test for the data collection. The results showed that the use of *ELSA Speak* Application in Scientific Approach could statistically improve students' speaking ability with a significant level of 0.05, The result showed that the Sig. (2 - tailed) is 0.000 < 0.05. Due to the value of Sig. (2 tailed) is lower than 0.05. This finding indicates that the use of *ELSA Speak* Application in Scientific Approach can improve the speaking ability among students in the second grade of Junior High School, especially in SMPN 23 Bandar Lampung, with pronunciation as the most improved speaking aspect compared to others; comprehension, grammar, vocabulary, and fluency.

Keywords: *ELSA Speak Application, Improvement, Scientific Approach, Speaking.*

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Undergraduate Thesis

Submitted in a Partial Fulfilment of
The Requirements for S-1 Degree

In

The Language and Arts Education Department
Faculty of Teacher Training and Education

FACULTY OF TEACHER TRAINING AND EDUCATION
UNIVERSITY OF LAMPUNG
BANDAR LAMPUNG
2024

Research Title : THE USE OF *ELSA SPEAK* APPLICATION IN
SCIENTIFIC APPROACH TO IMPROVE STUDENTS'
SPEAKING ABILITY AT SMPN 23 BANDAR
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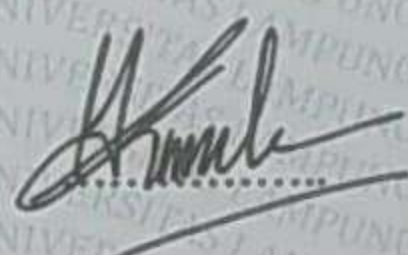The Department of Language and Arts Education

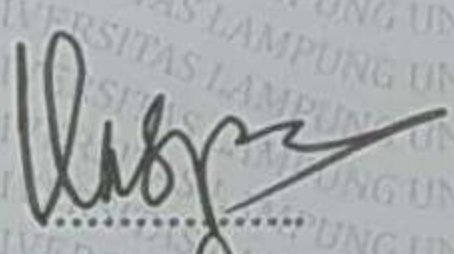**Dr. Sumarti, M. Hum.**
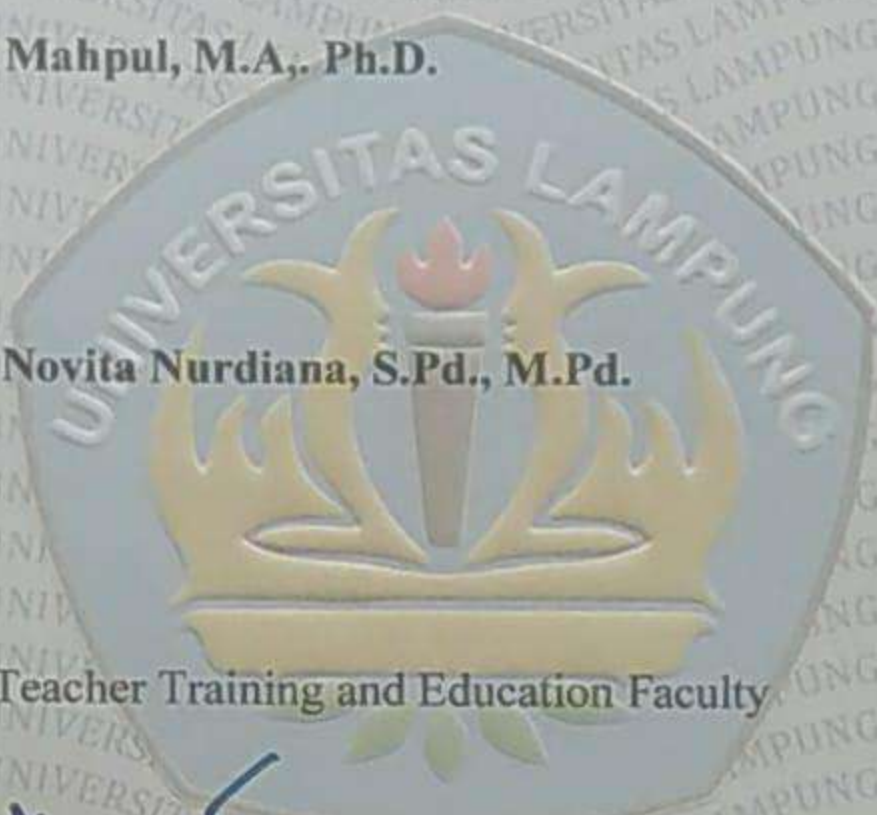NIP 19700318 199403 2 002
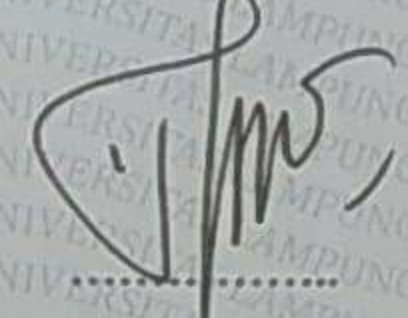
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Menyatakan bahwa skripsi ini adalah hasil karya saya sendiri. Sepanjang sepengetahuan saya, karya ini tidak berisi materi yang ditulis oleh orang lain, kecuali bagian-bagian tertentu yang saya ambil sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

Bandar Lampung, 12 Januari 2024
Yang membuat pernyataan,

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CURRICULUM VITAE

Nurmanita Arianti was born in Bandar Lampung on November 18th, 2001. She is the third child from the captivating couple, Sumardi and Suprihatiningsih. She has a sister and two brothers, named Nurul Alifia Anggun, Yusuf Arrosis Fasha and Arif Al Furqon.

Having done her education at TK Handayani Bandar Lampung in 2006, she continued it at SDN 2 Gedong Air in 2007. She continued her study at SMPN 7 Bandar Lampung and graduated in 2016. After that, she was accepted in MAN 1 Bandar Lampung then finished in 2019. Afterwards, in 2019, she entered the English Education Study Program of Teacher Training and Education Faculty in University of Lampung in 2019. She had to say goodbye to her old dream of getting into international relations; however, she never regrets that she is going to be a teacher.

During her study, she joined Rakanila *(Radio Kampus)* Unila. Her activeness in Rakanila earned her many achievements as an event organizer. In January 2020, she did *Kampus Mengajar* program at SDN 4 Rejomulyo. To accomplish her study at college, she did her research in SMPN 23 Bandar Lampung.

MOTTO

"Do not be afraid, I am with you all the time, listening and seeing"

-Quran 20:46-

DEDICATION

Devoted to my parents, my sister, my brothers, and all great teachers who instilled in me the delight of learning and teaching.

ACKNOWLEDGEMENT

9. Ine, Deska and Dini, for the uncountable love, immeasurable laugh, and incredible moments from the very first day of collage until today.

10. For everyone who could not be mentioned one by one by being the strength and motivation for her to finish this research. I owe this to you.

Finally, the author believes that her writing is still distant from perfection. There might be flaws in this research. Thus, the author would like to expect any suggestions for the improvement of it. Somehow, the author hopes this research would give a positive contribution to the educational development, to the readers, and to those who want to conduct further research.

Bandar Lampung, 12 Januari 2024
The Author,

Nurmanita Arianti

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I. INTRODUCTION

This chapter discusses the background of the research, research questions, objectives of the research, uses of the research, scope of the research, and definition of terms.

1.1 Background

Speaking is the ability to use language in order to do speech, and express or exchange thoughts (Mart, 2012). In line with Mart, According to Brown (1994); Burns & Joyce (1997), stated that speaking is an interactive process of constructing meaning that involves producing, receiving and processing information. People generally use speaking as a means of communication in daily interaction. It indicates that speaking is one of the important language skills that students must learn and master. Each of the speaker and the listener must build up a mutual communication in speaking activity in order to make the communication clear, both of the listener and also the speaker get the meaning or information in that conversation. English-speaking skills require, at a minimum, an authentic context and partners to communicate. The form and the meaning are depending on the context in which it occurs (Sun Z. , et al., 2017).

According to curriculum 2013, the objective of learning speaking is to improve students' ability to communicate with others, to express students' thoughts and

feelings, to help them improve their communication skills, to listen and respond to teacher and classmates, to gain their vocabulary, to give explanation in English, to develop their knowledge and confidence in speaking English, and to make progress their learning purpose in speaking. In other words, it means that the students require abilities to express their own ideas in target language. Therefore, students require abilities to communicate their own ideas as well as understand the aspects of speaking. In mastering speaking skill students must understand some kinds of speaking aspects; pronunciation, grammar, vocabulary, fluency, and comprehension. It is clear that speaking is important and should be mastered by the students to learn speaking.

However, many students find difficulties that often appear in oral language learning. Due to this fact, students have difficulty speaking in front of people (Leong & Ahmadi, 2017). Most students can tell their ideas in oral communication, but they are afraid of making mistakes and usually forget what they want to say after they ask to share their ideas in front of people.

In Bandar Lampung, according to Hussein (2014) the students get confused and feel afraid to speak English especially in functional text because they do not understand English. In line with Hussein, Anggraeni (2014) stated the cause that makes students difficult in speaking, especially in the grammar and vocabulary aspects, is that the teacher and environment give little support to the students to speak English frequently.

Moreover, based on the English teacher and the researcher's observation in SMPN 23 Bandar Lampung, there are still some students who have difficulties in speaking, especially in speaking monologue. For eighth grade junior high

school students, speaking is considered as an uninteresting activity because they find it difficult to express and communicate their ideas in English, while the teacher only gives boring media (in this case a book) for their learning activity. Since they do not have a good background knowledge that is not relatable to them, the students encounter many unfamiliar words and even do not know how to pronounce them. The students are also afraid of making mistakes while delivering their ideas. Therefore, the reason why most students still have difficulties in communicating their experience in English is not only because of a lack of vocabulary, but also because they often forget what they want to talk about, even though they have prepared the materials. Besides, the teacher does not use an interesting media in teaching speaking. The approach of the media used by the teacher becomes students' problem in class where teachers only give a book as a guide to speak. As a result, the students lost interest in speaking and received low speaking scores.

In this case, the role of the teacher is very important to develop students' speaking ability. Teachers must select and prepare good material and media to assist students in achieving the best possible results in their speaking class. When teachers cannot package the material effectively, students who feel tired after full day class in high school will also get less interested in learning something, especially to learn about speaking. Therefore, the teacher needs to use the media to teach students in order to make them interested in learning to speak. That is why the researcher chooses *ELSA Speak* Application to improve students' speaking ability.

The media might not be effective if there is not a proper method or approach. Students need a proper method or approach for investigating phenomena, acquiring new knowledge, also correcting and integrating previous knowledge. In curriculum 2013, scientific approach is as the basic point whilst teaching because this approach can make students more creative, critical, and able to solve the problem that students' face. Scientific approach is an approach that can be planned to make students more creative and active in the classroom through collecting information by doing observation, asking question, doing experiment, and discussing conclusion (Efrini, 2016). Therefore, the researcher uses *ELSA Speak* Application in Scientific Approach to improve students' speaking ability.

Based on the explanation above, the researcher is highly motivated to conduct research about The Use of *ELSA Speak* Application in Scientific Approach to Improve Students' Speaking Ability at SMPN 23 Bandar Lampung. It is expected, by using *ELSA Speak* Application in Scientific Approach as a media, students will find it easier to explore thoughts in speaking activity, especially in a recount form.

1.2 Research Questions

Regarding the background above, the problems were formulated as follows:

1. Does the use of *ELSA Speak* Application in Scientific Approach significantly improve students' speaking ability in eighth grade students of SMPN 23 Bandar Lampung?

2. What is the most improved aspect of speaking after the students were taught by using *ELSA Speak* Application in eighth grade students of SMPN 23 Bandar Lampung?

1.3 Objectives of the Research

In relation to the formulation of the problem, the objectives of this research were:

1. To find out whether the use of *ELSA Speak* Application in Scientific Approach significantly improved students' speaking ability at the eighth-grade students of SMPN 23 Bandar Lampung.

2. To know which aspect of speaking that improved the most after the students were taught by using *ELSA Speak* Application in Scientific Approach.

1.4 Uses of the Research

This research is useful both practically and theoretically as the following uses:

1. Theoretically, the result of this research is expected to be useful information in the knowledge of English Study, especially in speaking skill.

2. Practically, the uses of this research are:

   a. To be considered for English teachers to apply *ELSA Speak* Application in teaching speaking, especially in a recount form.

b. To encourage and motivate students' awareness about aspects of speaking by using *ELSA Speak* Application.

1.5 Scope of the Research

This research was quantitative research. The researcher took one class of eighth grade students in SMPN 23 Bandar Lampung in the academic year of 2022/2023. This research focused on students' speaking ability in oral recount text by using *ELSA Speak* Application as the media. The students' speaking ability was measured by a set of pre-test and post-test. The assessment of the students' speaking skill was based on five-aspect; pronunciation, grammar, vocabulary, fluency, and comprehension.

1.6 Definition of Terms

Some terms are defined in order to give basic understanding of related variables and concepts. Those are stated below:

1. Speaking

Speaking is one of the most crucial skills to be developed and improved as a means of effective communication (Leong & Ahmadi, 2017).

2. *ELSA Speak* Application

A mobile application for users to improve their speaking, with high-quality assessment and consistent feedback that initially focused on scripted speech

English assessment, asking the user to read words, sentences, or paragraphs, assessing their reading quality, and offering detailed feedback on how to improve it (Anguera & Van, 2016).

3. Scientific Approach

Scientific approach is an approach that can be planned to make students more creative and active in the classroom through collecting information by doing observation, asking question, doing experiment, and discussing conclusion (Efrini, 2016).

II. LITERATURE REVIEW

This chapter presents literature review related to previous studies and theories related to the study.

2.1 Speaking

2.1.1 The Definition of Speaking

Speaking is one of four language skills: speaking, writing, reading, and listening. According to Torky (2006), speaking is one of the four language skills in which students can communicate with others to achieve certain goals in daily life. Speaking is also a two-way interactive process which involves producing, receiving, and producing information both speaker and listener (Brown, 1994; Sharma, 2018; Wong, 2021). This may involve expressing ideas and opinions; expressing a wish or desire to do something; negotiating and/ or solving a particular problem; or establishing, maintaining social relationship, and friendship (Sun, et al., 2017). To sum up from the definition above, speaking is a tool of communication to show the desire of a student to express viewpoints, ideas, and hopes to others for discussing, negotiating, or solving problems in order to make or maintain interaction or social relationship.

Speaking ability is indeed an important aspect in learning English. Speaking is an interactive process that goes on between the speaker and the listener. As mentioned by Brown (2004), there are several types of speaking;

1. Initiative: at one end of a continuum of types of speaking performance is the ability to imitate a word of phrase or possibly a sentence.

2. Intensive: a second type of speaking frequently employed in assessment contexts is the production that is designed to demonstrate competence in a narrow band of grammatical, phrasal, lexical, or phonological relationship. examples of intensive type are directed response, read aloud, sentence and dialogue completion.

3. Responsive: It includes interaction and test comprehension but in short conversations, standard greetings, simple requests, and small talk.

4. Interactive: the difference between responsive and interactive speaking is the length and complexity of the interaction, which sometimes includes multiple exchanges and/ or multiple participants.

5. Extensive (Monologue): It includes speeches, oral presentations, and storytelling, during which the opportunity for oral interaction from listeners.

However, the main purpose of speaking to young learner is to improve students' ability to communicate with others, to express students'

thoughts and feelings, to help them improve their communication skills, to listen and respond to teacher and classmates, to gain their vocabulary, to give explanation in English, to develop their knowledge and confidence in speaking English, and to make progress their learning purpose in speaking.

2.1.2 Problems in Speaking

According to Leong & Ahmadi (2017), there are several problems in speaking that need to be overcome by the teacher to help students in Junior High School Students to speak in the classroom. These are lack of topical knowledge, low or uneven participation, and mother tongue use (Tuan & Mai, 2015).

When students try to speak in a foreign language, they are fearful of criticism, shy of attention, and also afraid of making mistakes (Dincer, 2013; Leong & Ahmadi, 2017).

Another problem in speaking is lack of topical knowledge. Students may feel incompetent in oral communication or because the teacher has selected a topic that is not appropriate for them and they do not have enough information about it. So that they have nothing to express (Tuan & Mai, 2015).

Next problem related to speaking is low or uneven participation. In a large class, students will only have a few times or not at all because only one student can talk while others can hear what she/ he says.

The last problem related to speaking is when students are more comfortable to share their ideas using their first language. The students may use it because it is easier and comfortable. It also feels unnatural to speak to one another in a foreign language and they feel less 'exposed' if they are speaking in their mother tongue (Leong & Ahmadi, 2017).

2.1.3 Aspects of Speaking

According to Brown (2004), there are five components to recognize in analyzing speaking, these are:

1. Comprehension

   It is defined for oral communication that requires a subject to respond and speech as well as to take the initiative (Kurniati & Eliwarti, 2015). Comprehension is related to the capability of the students to make other people understand that the speaker is trying to convey a message in speaking performance. It means if a person can give the answer well and correctly, it shows that person comprehends well.

2. Grammar

   Grammar can be defined as a structure that aims to organize appropriate grammatical form for students to arrange correct sentences in conversation. Grammar is needed to help the listener get the real meaning of what the speaker says. Even if people do not focus on the grammar of their utterances, it becomes a need that the speaker has to convey a message in proper sentences.

3. Vocabulary

Vocabulary means all of the appropriate diction about word meanings and pronunciation that are necessary for communication (Baker & Ortiz, 2014). Vocabulary is important in speaking, because without comprehending vocabulary, people will find difficulties when the speaker wants to speak their thoughts, ideas, opinions, or feelings to the listener.

4. Pronunciation

Pronunciation is the production and perception of the significant sounds of a particular language to achieve meaning in context of language use. This includes the production and perception of segmental sounds of stressed and unstressed syllables or intonation patterns (Attamimi, 2014). Without a good pronunciation, listeners may not understand what the other person says and this will make the communication process more difficult.

5. Fluency

The fluency of speaking might show when someone is able to speak well. Fluency can be defined as the ability to speak spontaneously and eloquently. It also refers to some aspects like responding coherently within the turns of the conversation, using phrases and linking words keeping in mind a comprehensible pronunciation and adequate intonation without a lot of hesitation (Richards, 2006). Fluency also

includes an ability to read text quickly, accurately, and with proper

expression, allowing the reader to focus on meaning (Baker & Ortiz,

2014).

2.2 General Concepts of Media

Media is every tool that aims to convey information or messages from one

place to another place. In teaching, the learning process also uses media to

make the process run effectively and interesting.

2.2.1 Definition of Teaching Media

Generally, teaching media means all tools which may be used by teachers

to deliver teaching material to students in the teaching learning process

to reach certain learning goals.

According to Arsad (2017), teaching media is a media that brings

instructional purpose of messages or information of learning. Media is a

means of expressing messages and information. There are several kinds

of media, one of them is visual media. visual media which can show

information that just can be seen and read, for example picture, graphic,

diagram, and mind maps.

According to Arsad (2017), teaching media has some basic criteria, those

are;

1. Teaching media has physical meaning that can be seen, heard, and

   touched.

2. Teaching media has non-physical meaning used to call software.

3. The emphasis of teaching media is in the visual and audio.

4. Teaching media is a tool to help the teaching-learning process both inside and outside class.

Based on the definition above, it can be concluded that the teaching media are all tools which may be used by the teacher and learner to help to achieve certain learning English.

2.2.2 The Function of Teaching Media

The importance of using media for teaching is a media that can be used to help the students in their study, in order to make the teaching and learning process more effective and efficient. By using media, the material is more interesting and easier to understand.

According to Sudjana (1997), the function of teaching media in teaching and learning process as follows:

1. The use of media in the teaching learning process is not an additional function, but has its own function as an aid to express effective teaching learning situations.

2. The use of teaching media is an integral part of all learning situations. It means that teaching media is one of the elements that should be developed by teachers.

3. The use of teaching media is more important to accelerate teaching and learning process and help students in comprehending material from teachers.

2.3 *ELSA Speak* Mobile Application

Developed by Vu Van and Dr. Xavier Anguera in San Francisco, California, the *ELSA* Application is an acronym, which stands for the English Learning Speech Assistant. Vu Van and Dr. Xavier Anguera first created *ELSA Speak* Application as a mobile application for users to improve their speaking, with high-quality assessment and consistent feedback that initially focused on scripted speech English assessment, asking the user to read words, sentences, or paragraphs, assessing their reading quality, and offering detailed feedback on how to improve it (Anguera & Van, 2016). However, on 2022, *ELSA Speak* Application developed Speech Analyzer to be used as a personal English assessment tool for spontaneous speech, new vocabulary, and grammar analyses to assess the content of recordings and give feedback on how the user can improve it (Anguera, et al., 2023). *ELSA Speak* is one of the applications that can be used as a media which helps the user to speak English clearly, fluently, and confidently (Samad & Aminullah, 2019). According to Xodabande (2017), *ELSA Speak* can help students increase their pronunciation and speaking skills outside of the classroom. Also it can improve quickly in accordance with accuracy in identifying spoken discourse and transcribing it into written text. For instance, when students pronounce words or certain sentences, the system of *ELSA Speak* does analysis and gives direct formative feedback on the accuracy (Kholis, 2021).

ELSA Speak Application can be downloaded for iOS and MacOS directly on iPhones or Play Store on Android. The base version is free on all available

platforms. Currently, the upgrade to the premium version with advanced features is available for purchase on Google Play.

2.4 The Advantages and Disadvantages of *ELSA Speak* Application

As claimed on its website, *ELSA Speak* Application has been featured on several digital media websites and magazines. It also has 4.5/5 ratings from 23.000 users (Becker & e Edalatishams, 2019). Therefore, *ELSA Speak* Application has several advantages according to Becker & e Edalatishams (2019) as follows:

1. *ELSA*'s basic interface is simple and provides navigation between topic and skills, levels, reports, and other features. Users can select a topic, under which users can choose from several lessons. Each lesson is labeled for proficiency level and includes various speaking and listening opportunities.

2. *ELSA Speak* offers a user "Profile" where users can customize settings about feedback, sharing, and also notifications. Users also can identify goals, set a daily reminder, and view the app's terms and policies.

3. *ELSA* provides a percentage correct score and users can also get a detailed report.

However, *ELSA Speak* Application also has disadvantages. The disadvantages of this Application have been conducted by Becker & e Edalatishams (2019) as follows:

1. *ELSA Speak* Application requires the use of internet connection to run the Application.

2. The paid version of the app, users only get more access to more lessons (only provides the extra exercises about the same skills and topics).

2.5 Scientific Approach

According to Rudolph (2005) the scientific approach was introduced to American science education in the late 19th century. Zaim (2017) stated that scientific approach is a body of techniques for investigating phenomena, acquiring new knowledge, also correcting and integrating previous knowledge. Scientific approach has the characteristics of "doing science", this approach allows teachers to improve the process of learning by breaking the process down into steps or stages which contains detailed instructions for conducting students learning (Tang, Coffey, Elby, & Levin, 2009). Therefore, scientific approach is used to be the basis for implementing the Curriculum 2013.

In Kemendikbud (2013) scientific approach is as the basic point whilst teaching because this approach can make students more creative, critical, and able to solve the problem that students' face. Scientific approach is an approach that can be planned to make students more creative and active in the classroom through collecting information by doing observation, asking question, doing experiment, and discussing conclusion (Efrini, 2016). According to Kemendikbud (2013) and Hosnan (2014) scientific approach is used in whilst

teaching process that consist of observing, questioning, experimenting, associating, and communicating.

2.5.1 Steps in Scientific Approach

The activities of each step can be explained as follows:

a) Observing

There are two main activities that should be done in observing step. First, the teacher gives a wide opportunity to do observation through reading, listening, or seeing the object. Second, the teacher facilitates students to do observation and train students to observe the important things from the object. There are four steps in observing process: determining the object to be observed, determining the purpose, reporting the result of observation, and comprehending the result. In observing session, the teacher may use some media such as a video as the object of observation (Prihadi, 2014).

b) Questioning

Questioning functions to encourage and inspire learners to actively learn and develop questions of and for itself; to raise skills of students in talking, asking questions, and the other can answer logically, systematically using proper and correct grammar; to encourage students' participation in discussing, arguing, developing the ability to think and draw conclusions; and to build an attitude of openness to

give and receive opinions or ideas, enrich vocabulary, as well as developing social tolerance in gregarious.

c) Experimenting

In experimenting, the steps are preparation, working, and follow up. There are five activities that can be done in experimenting: grouping students into several groups, asking students to discuss the finding, supervising the learning process to ensure that all learners are actively involved in the discussion, and directing the group that need help. This session can be done by doing several activities, for example reading books, field observations, trials, interviews, distributing questionnaires (Suja, 2019).

d) Associating

Associating is the ability to analyze and associate the information occurred within the group. Associating is the process of analyzing the information to find the relationship between one information to other information and to find the patterns of interrelationship of the information so that one can make conclusion from the patterns found (Prihadi, 2014).

e) Communicating

Communicating is the ability to conclude the facts that have been observed and experimented. There are four activities that can be conducted in communicating steps, asking the students to read their work to the class, asking each group to listen well and provide additional input with regard to the work of each group, giving

explanation after the group discussion ended, and structuring tasks and providing opportunities to the students to demonstrate attitude, skills, and understanding of the substance of learning given.

2.6 Procedure of *ELSA Speak* Application in Scientific Approach to Improve Students' Speaking Ability

The procedure of *ELSA Speak* Application in Scientific Approach according to Curriculum 2013 to improve students speaking ability as follows:

1. Observing

   - The students pay attention to the audio visual and find out what the audio visual is about.

   - The students are guided by the teacher to observe and find out the character, settings, and the kinds of activity based on the audio visual.

   - The students observe and find out the vocabulary that they heard based on the audio visual.

   - The students report their observation by telling the teacher about what they find.

2. Questioning

   - The students are given the opportunities to ask the teacher related to the video.

   - The teacher responds to the students' questions by explaining the material.

- The teacher asks students related to vocabulary that they find related to the video, how to pronounce it, and what they know related to the video, to make sure they understand.

- The students share their response orally.

3. Experiencing

  - The students and the teacher elaborate the video related to characteristic or sequence in recount text (characters, settings, series of events, and reorientation) to make sure the students are familiar with recount form.

  - The students retell the recount text and get speaking checked (Vocabulary, Grammar, Pronunciation, Fluency, and Comprehension) by AI in *ELSA Speak* Application.

  - The students repair their pronunciation and grammar based on the analysis by *ELSA Speak* Application.

  - The students are divided into several pairs.

  - The students are asked to make monologues related to their activities during the holiday.

  - The students practice their speaking performance by using *ELSA Speak* Application.

4. Associating

  - The students and the teacher discuss with other groups related to their monologue. The teacher and the students recheck if there is missing information related to their monologue, and review their

presentation related to aspects of speaking, these are pronunciation, grammar, vocabulary, fluency, and comprehension.

5. Communicating

- Each representative of the groups is required to present their monologue related to the activities during holiday.

- Teacher asks students to discuss the phase together whether there are any mistakes related to aspects of speaking.

- The students correct together with the teacher related pronunciation, fluency, grammar, vocabulary, and comprehension.

- The students are asked to retell or re-explain about today's activity.

- Teacher provides feedback, emphasizes, and straightens so that students can understand events in depth and broadly about the materials. Teacher also guides students to decide important points that can be concluded.

2.7 Theoretical Assumption

In line with the theories mentioned above, the researcher assumes that the use of *ELSA Speak* Application in Scientific Approach can improve students' speaking ability.

2.8 Hypothesis

Based on the theoretical assumption above, the researcher formulated the hypothesis that will be tested in this study as follows:

H_0 : There is no significant improvement of students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach.

H_1 : There is a significant improvement of students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach.

2.9 Previous Research

There are several studies related to teaching speaking through mind mapping techniques by using *ELSA Speak* Application. The Following paragraphs will discuss several previous studies focusing on students' speaking ability using mind mapping by application.

The first study conducted by Makhlouf (2021) which aimed to investigate how far AI could contribute to developing Speaking skills of non- English major students at preparatory year Albaha University. The title of this study is "Effect of Artificial Intelligence-Based Application on Saudi Preparatory -Year Students' EFL Speaking Skills at Albaha University". The participants of the study were 20 Preparatory-year students at Engineering college at Albaha university who study integrated English skills courses. The study adopted a mixed method research design, quasi-experimental one-group design for data collection. The findings of this study showed that the AI-based App of ELSA was effective in helping the non-English major students improve their EFL speaking skills in the preparatory year at Albaha University. The AI feedback

improved students' linguistic knowledge and allowed them to learn more about their speaking skills.

Another study conducted by Hanna, Harmayanthi, & Astuti (2022) with the title "The Effect of *ELSA Speak* App towards Students' Speaking Skill". This study aimed to find out whether *ELSA Speak* Application can improve students' skill. The participants of this study were 30 students at the first grade of SMK Sahid Jakarta. The data collection of this study was experimental design. The results of statistical analysis of the Pre-Test and Post-Test show that using *ELSA Speak* could improve students' speaking skill.

Considering the previous research, there are differences between this research and previous studies based on its focus. This research will use *ELSA Speak* Application as the media and use scientific approach to find out whether there is a significant improvement on students' speaking ability in Junior High School. And to find out which aspects of speaking that improves the most after using *ELSA Speak* Application in Scientific Approach. Based on the statement above, the researcher is interested in researching the use of *ELSA Speak* Application in scientific approach to improve students' speaking ability at SMPN 23 Bandar Lampung.

III. RESEARCH METHOD

This chapter provides an overview of research design, research's population and sample, data collecting technique, validity and reliability test, data analysis and the implementation of ELSA Speak Application.

3.1 Research Design

This research was a quantitative study since it was focused on the product (the result of the test) not the process of teaching learning. This study used *one group pretest posttest design*. In this research, the researcher used regression study. Regression was used to predict the effect of dependent variable towards independent variable. The researcher selected the class by *random sampling* for the experimental class. The experimental class had a pre-test, three treatments, and a post-test. The students were tested before and after the treatment. In this research, the pre-test was given to the students to measure their speaking ability before the treatment and the post-test was given after the treatment to find out whether there was a significant difference in students' speaking ability after implementing the treatment. The research design was illustrated as follows:

$$\mathbf{T_1 \quad X \quad T_2}$$

T_1 : Pre-Test (Before treatment)

X   : Treatment (Teaching speaking by using *ELSA Speak* Application as mobile based learning in Scientific Approach)

T_2 : Post-Test (After treatment)

(Setyadi, 2018)

The study was to investigate whether *ELSA Speak* Application as mobile based learning in Scientific Approach could be used to increase students' speaking ability by comparing the average score (mean) of the pre-test with the average score (mean) of the post-test.

Firstly, the researcher administered a pretest to the students to identify their achievement of speaking ability by considering their pronunciation, grammar, vocabulary, fluency, and comprehension before applying the technique. Then, the students were given three treatments of teaching speaking by using *ELSA Speak* Application as mobile based learning in Scientific Approach. Eventually, a post-test was administered to identify students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach. If the average score of the pre-test was higher than the average score of the post-test, it indicated that *ELSA Speak* Application in Scientific Approach cannot be used to increase students' speaking ability. However, if the average score (mean) of the post-test was higher than average score (mean) of the pre-test, it showed that *ELSA Speak* Application in Scientific Approach can be used to increase students' speaking ability significantly.

3.2 Variables of the Research

A variable is a characteristic or attribute of an individual or an organization that (a) researchers can measure or observe and (b) varies among individuals or organizations studied. Measurement means that the researcher records information from individuals by asking them to answer questions. And when variables vary, it means that scores will assume different values depending on the type of variable being measured (Cresswell, 2012). In this research, there are two variables, they are independent variables and dependent variables.

An independent variable is an attribute or characteristic that influences or affects an outcome or dependent variable. Independent variables are the cause of other variables (Cresswell, 2012). Based on the definition above, the independent variable of this research was students' speaking ability.

A dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable (Cresswell, 2012). This variable was not manipulated by the researcher, but it was affected by the independent variable. The dependent of this research was the use of *ELSA Speak* Application in Scientific Approach.

3.3 Population and Sample

3.3.1 Population

The population of this research was the eighth-grade students of SMPN 23 Bandar Lampung. There were nine classes in eighth grade of SMPN 23 Bandar Lampung with 25 to 30 students for each class.

3.3.2 Sample

The sample was one class as an experimental class, which was selected by using Random Sampling. Random sampling was a type of probability sampling in which every class in the entire target population had an equal chance of being selected. The sample was randomly selected which was intended as an unbiased representation of the total population. The class was selected randomly by lottery, since the second grade in SMPN 23 Bandar Lampung was not a stratified class. There was not a priority class. It was applied based on the consideration that every student in the population has the same chance to be chosen and in order to avoid the subjectivity in the research (Setyadi, 2018).

3.4 Research Instrument

Research instrument was the tool of collecting data that should be valid and reliable. A research instrument could be valid if the instrument could measure what would be measured. The instrument in this research was a speaking test. The researcher conducted the speaking test for the pre-test and the post-test. The test was used to measure the students' speaking ability before and after the students were taught by *ELSA Speak* Application in Scientific Approach. The researcher recorded by using phone-recording tools about students' presentation regarding experience in a form of recount text during pre-test and post-test. Each student's monologue was recorded by the researcher, then transcript students' speaking utterances from recordings that had been conducted.

3.5 Data Collecting Technique

This research will be used pre-test and post-test to collect the data as follows:

1. Pre-test: Pre-test was conducted before students were taught by using *ELSA Speak* Application in Scientific Approach or before the treatments process. This pretest was given to assess students' speaking ability before being taught by using *ELSA Speak* Application in Scientific Approach. The pretest was in the form of an oral test.

2. Post-test: Post-test was conducted after students were taught by using *ELSA Speak* Application in Scientific Approach or after the treatments process. This post-test was given to assess students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach. The post-test was in the form of an oral test.

3.6 Criteria of Good Test of Speaking

In this research, there were two parts to prove whether the test of speaking had good quality, these were validity and reliability test.

3.6.1 Validity

A test can be considered valid if the test can measure the object to be measured and suitable with the criteria. According to Setyadi, (2018) there are two types of validity: content validity and construct validity.

1. Content Validity

   Content validity is concerned whether the test is sufficiently representative and comprehensive for the test. In the content validity, the material is given suitable with the curriculum. Content validity is the extent to which a test measures a representative sample of the subject matter content, the focus of content validity is adequacy of the sample and simply on the appearance of the test (Hatch & Farhady, 1982).

   The topic chosen was recount text form. The topic was the representative of speaking materials of Curriculum 2013 Revised 2018 as a matter of tailoring the lesson to students' needs. Therefore, the researcher made a test based on the syllabus for Junior High School. In this study, researcher used recount text which was in accordance with Basic Competence 3.11 and 4.11.2 in the syllabus of Curriculum 2013 Revised 2018. The researcher also used a scientific approach since Curriculum 2013 Revised 2018 were required to apply a scientific approach in teaching and learning activities. To know whether the test had a good content validity, the instructions of the test were discussed with the expert (advisors), and the English teacher of Junior High School.

2. Construct Validity

   Construct validity is the validity that processes the test object that wants to measure according to a certain concept that has been determined in the form of an instrument. Furthermore, construct

validity refers to whether Construct validity concerns whether the test is actually in line with the theory of what it means to know the language that is being measured (Hatch & Farhady, 1982). If the test has construct validity, it is capable of measuring the students' achievement. It means that the pre-test and post-test measures certain aspects based on the indicator. Because this research required data on speaking, the instrument must really test students' ability to express their experiences in the form of recount text. The test was in oral form and each test would be conducted within 30 minutes including preparing and presentation. Related to this research, the test items must involve aspects of speaking proposed by Brown H. D. (2004). These are vocabulary, pronunciation, grammar, fluency, and comprehension in order to fit the construct validity.

3.6.2 Reliability

Reliability of the test can be defined as the extent to which a test produces consistent results when administered under similar conditions (Hatch & Farhady, 1982). In achieving the reliability of the pre-test and post-test of speaking, inter-rater reliability was used in this study. Inter-rater reliability was used when the score on the test would be independently estimated by two raters. In this case, the first rater was the researcher and the second rater was the English teacher. Moreover, the first and second raters discussed and put into mind the speaking criteria in order to obtain the reliable result of the test.

In addition to inter-rater reliability used in this research, the researcher also used the Spearman Rank Correlation to calculate the reliability score between the first and second raters.

The Spearman Rank Correlation of reliability was as follows:

$$R = 1 - \frac{6\ (\Sigma d2)}{N.(N2-1)}$$

R : Reliability

N : Number of Students

d : The different of rank correlation (Mean score from pre-test and post-test)

1-6 : Constant Number

After finding the coefficient between raters, the researcher analyzed the coefficient of reliability with the standard of reliability below:

a. Very low reliability   (range from 0.00 to 0.19)

b. Low reliability   (range from 0.20 to 0.39)

c. Average reliability   (range from 0.40 to 0.59)

d. High reliability   (range from 0.60 to 0.79)

e. Very high reliability   (range from 0.80 to 0.100)

(Guilford, 1942)

Statistical computation of SPSS version 16 was used to measure the inter-rater reliability in this research.

The researcher has found the result of the reliability of the test as follows:

$$\mathbf{R} = 1 - \frac{6\ (\Sigma d2)}{N.(N2-1)}$$

$$R = 1 - \frac{6\,(394,75)}{25.(25^\wedge 2 - 1)}$$

$$R = 1 - \frac{2368,5}{15600}$$

$$R = 1 - 0,15183$$

$$R = 0,81327$$

In conclusion, the reliability of the test was 0,81327. Thus, the coefficient of reliability with the standard of reliability was very high.

3.7 Normality Test

To investigate whether the pre-test and post-test were normally distributed, the researcher conducted a normality test. The researcher used the SPSS Saphiro Wilk program because the sample (df) was lower than 30. The criteria of normal distribution are:

H_0: The data is not distributed normally. (The significant value is<0.05)

H_1: The data is distributed normally. (The significant value is>0.05).

The hypothesis is accepted if the result of the normality test is higher than 0.05 (sign > α). The results of normality test as follows:

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreTest	.144	25	.191	.952	25	.284
PostTest	.138	25	.200[*]	.952	25	.283

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 1 Normality Test

The table shows the significant level of the pre-test is 0.284 also the significant level of post-test is 0.83. Since the significant level of both tests are more than 0.05, it can be concluded that the data was normally distributed or H_1 is accepted.

3.8 Scoring System

In evaluating the students' speaking scores, the researcher used the Oral Proficiency Scoring Categories proposed by Brown (2004). Based on the Oral Proficiency Scoring Categories, there are five components that are going to be tested to the students namely grammar, vocabulary, comprehension, fluency, and pronunciation.

Aspects of Speaking	Rating Scales	Description
Pronunciation	5	Equivalent to and fully accepted by educated speakers.
	4	Errors in pronunciation are quite rare.
	3	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign.
	2	Accent is intelligible though often quite faulty.
	1	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to speak his language.
Vocabulary	5	Speech on all levels is fully accepted by educated speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.
	4	Can understand and participate in any conversation within the range

		of his experience with a high degree of precision of vocabulary.
	3	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.
	2	Has speaking vocabulary sufficient to express himself simply with some circumlocutions.
	1	Speaking vocabulary is inadequate to express anything but the most elementary needs.
Fluency	5	Has complete fluency in the language such that his speech is fully accepted by educated speakers.
	4	Able to use the language frequently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of his experience with a high degree of fluency.
	3	Can discuss particular interests of competence with reasonable ease. rarely has to grope for words.
	2	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, family, and autobiographical information.
	1	(No specific fluency description. Refer to other four language areas for implied level of fluency)
Comprehension	5	Equivalent to that of an educated speaker.
	4	Can understand any conversation within the range of his experience.
	3	Comprehension is quite complete at a normal rate of speech.
	2	Can get the gist of most conversations of non-technical subject (i.e., topics that require no specialized knowledge)

	1	Within the scope of his very limited language experience, can understand and make statements if delivered with slowed speech, repetition, or paraphrase.
Grammar	5	Equivalent to that of an educated speaker
	4	Able to use the language accurately on all levels normally pertinent to professional needs. Errors in grammar are quite rare.
	3	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversations on practical, social, and professional topics.
	2	Can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.
	1	Errors in grammar are frequent, but the speaker can be understood by a native speaker used to dealing with foreigners attempting to speak his language.

Table 2 Table of Scoring Aspect by Brown (2004)

The score of speaking based on five aspects can be calculated as follows:

For example:

A student gets 4 in Pronunciation, 3 in Vocabulary, and 3 in Fluency, 4 in comprehension and 3 in grammar.

Therefore, the student's total score will be:

       Pronunciation   4 X 4 = 16

       Vocabulary   4 X 4 = 12

       Fluency   3 X 4 = 12

Comprehension   4 X 4 = 16

Grammar   3 X 4 = 12 +

Total   68

It means he or she gets 68 for speaking. The score of speaking based on five components can be compared in the percentage as follows:

Grammar   20%

Vocabulary   20%

Fluency   20%

Pronunciation   20%

Comprehension   20% +

 Total   =   100%

3.9 Data Analysis

In analyzing the data, the researcher used quantitative approaches in order to answer each research question. The quantitative data were analyzed by comparing the mean score of pre-test and post-test, then processed by using the Paired Sample T-test in Statistical Package for Social Science or SPSS. The aim of this activity was to know whether there was any significant improvement in students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach. To analyze the data, the researcher needed to calculate the score of pre-test and post-test, and also found the average and the mean of pre-test and post-test.

The statistical formula is:

$$\overline{X} = \frac{\sum x}{n}$$

Notes:

$\overline{X}$: average score / mean

$\sum x$: total score of students

n : the number of students

(Arikunto, 2011)

In addition, after using repeated measures t-test for analyzing whether there was significant improvement on students' speaking ability. The researcher also found the answer for the second question, that was the aspect of speaking that improved the most after the students were taught by using *ELSA Speak* Application in Scientific Approach.

3.10 Hypothesis Testing

After collecting data in the form of scores, the researcher determined whether the hypothesis was accepted or rejected. The researcher analyzed the data to investigate whether there was significant improvement in students' speaking ability before and after the students were taught by using *ELSA Speak* Application in Scientific Approach.

The criteria for hypothesis acceptance are if the significant (p) value (denoted by Sig) or less than the significant level 0,5 and t-value is more than the t-table,

it means that H_0 is rejected. In contrast if the significant (p) value (denoted by Sig) or more than the significant level (0.05) and t-value is less than the t-table it means that H_0 is accepted. The hypothesis of this research are as follows:

H_0 : There is no significant improvement of students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach.

H_1 : There is a significant improvement of students' speaking ability after the students were taught by using *ELSA Speak* Application in Scientific Approach.

3.11 The Implementation of *ELSA Speak* Application in Scientific Approach

a. The First Meeting

At the first meeting, when the researcher started the treatment, the researcher focused on the students' understanding of the recount form by using *ELSA Speak* Application as their learning media in scientific approach. To open the meeting, the students were first asked to install an Application called *ELSA Speak* then they were given some time to explore the Application.

In order to get a better understanding about recount form, during the observation session, the students were asked to pay attention to the audio visual. The students were guided to observe and find out the aspects of speaking, they were given a worksheet to help them understand the audio visual. After that, the students reported the results of their observations regarding what they found.

In the questioning session, the students were given opportunity to ask the teacher. In this session, the students and the researcher had a discussion

related to the recount form based on the audio visual. For instance, the vocabulary found by the students, the topic of the video, and how to pronounce it to make sure the students' understanding.

In the experimental session, the students were asked to retell the recount form based on the audio visual and had their speaking checked (Vocabulary, Grammar, Pronunciation, Fluency, and Comprehension) by AI in *ELSA Speak* Application. Next, the students improved their pronunciation and grammar based on the analysis of the *ELSA Speak* Application.

To practice how to make a story in a recount form, the students were divided into several groups to make monologues related to their activities during the holidays. In this activity, the students were using *ELSA Speak* Application as a guide to make a complete recount story.

As on the associating session, the students and the researcher reviewed the monologue related to five aspects of speaking by using *ELSA Speak* Application. The example of students' speaking analysis by using *ELSA Speak* Application can be seen on Appendix 9. Based on the analysis, the students made mistakes in pronouncing /p/ /t/ /k/, /l/ /r/, as well as ending sounds. In addition, the students have a low pace that needs to be improved. For grammar, the students explained their monologue in present tense while recount form needed to explain in the past tense, student used "see" instead of "saw", also "misses" instead of "missed". Based on the analysis, the students used basic vocabulary, this aspect was comprehensible since the students were not used to speaking in English, therefore they spoke

using their familiar vocabulary. Moreover, because *ELSA Speak* application already provided students with clues about what they are being asked to explain, most students have a better understanding of the topic compared to the Pre-Test.

The students and the researcher discussed and corrected together regarding five aspects of speaking (Pronunciation, Fluency, Vocabulary, Grammar, and Comprehension) in a communication session. After that, the researcher provided feedback, emphasized, and straightened, so that students could understand events in depth and breadth regarding the materials.

The first meeting of the treatment was challenging. Because the researcher faced several problems, such as the lack of time, and also the lack of internet connection. Because there were some sessions of scientific approach that took longer than expected, the researcher almost canceled other sessions. For example, since the students were lack of internet connection, the students took longer to download and explore the *ELSA Speak* Application. Also when it came to the experimental session, there were a lot of students who had an internet connection problem, therefore the researcher asked the students to take turns analyzing their monologue by using *ELSA Speak* Application.

Apart from that, during the activities, the researcher realized that the students understood every instruction given in English but were still hesitant to answer them in English, therefore they all answered any questions in Indonesian. At this stage, the researcher helped students to convey their answers in English, so that the students were familiar with the

English language environment. Thus, besides learning in class, the researcher also asked every student to explore and practice their English by using *ELSA Speak* Application.

b. The Second Meeting

The researcher conducted a full oral practice with the students at the second meeting. Before starting the activity, the students were asked to review the previous activity with the researcher. At the second meeting, the researcher did not give the worksheets to each student during observing and questioning sessions. Instead, the researcher provided the worksheet that was shown in front of the class by using a projector. In the first 15 minutes, the researcher ensured that the students understood how to implement the language features of the recount form by having a discussion based on the worksheet with the researcher. During this stage, the researcher also ensured that the pronunciation of the students and related vocabulary and grammar that they used during the discussion were correct.

In the experimental session, the students were asked to open *ELSA Speak* Application to get their speaking checked about the recount text that had been provided in the worksheets. Thus, the students improved their pronunciation and grammar based on the analysis by *ELSA Speak* Application. Furthermore, the students were divided into several groups and asked to make a monologue about their worst holiday and then practice their speaking performance by using *ELSA Speak* Application.

In the association session, the students reviewed their presentation related to aspects of speaking, such as pronunciation, grammar, vocabulary, fluency, and comprehension by using *ELSA Speak* Application.

In the communication session, the students were asked to correct together with the researcher regarding pronunciation, fluency, vocabulary, grammar, and comprehension based on the students' result analysis in *ELSA Speak* Application. Thus, the researcher provided feedback, emphasized, and straightened so that students could understand events in depth and breadth regarding the materials.

The researcher could see differences in the students' behavior during this stage, as they started to use English to follow the discussion of the topics that was provided. Even though the students are full of consideration and hesitant, their intention to use English could be seen. The differences in students' behavior could also be seen in their analysis after using *ELSA Speak* Application. For example, in pronunciation, the students only made mistakes in pronouncing Diphthongs, /ə/, also replaced /i/ and /ɪ/. In addition, the students still had a low pace that needed to be improved. For grammar, some students still explained their monologue in present tense, while the recount form needed to explain in the past tense, students used "go" instead of "went", also "are" instead of "were". Based on the analysis, the students used basic vocabulary but it is better than the first treatment. This aspect was comprehensible since the students were not used to speaking in English, therefore they spoke using vocabulary they were familiar with but it was better than the previous treatment. Moreover, since

ELSA Speak had provided students with instructions about what they were being asked to explain, most students had a better understanding of the topic compared to the first treatment.

The interest of students in using *ELSA Speak* Application also could be seen. This was because some students tend to explore *ELSA Speak* Application before the class started.

Based on the second meeting, the lack of internet connection also became the students' main problem. A hotspot from the researcher was not enough for all students, therefore the students still had to take turns analyzing their speaking by using *ELSA Speak* Application.

c. **The Third Meeting**

The third and the last treatment meeting, was when the students focused on having a better understanding of the recount form by using *ELSA Speak* Application.

The researcher used the same way in observation and questioning sessions as in the second meeting. The students had shown a worksheet on the projector and discussed it together. In this meeting, observation and questioning sessions aimed to recall the students' memories regarding the form of recount text.

In the experimental session, the students were divided into several groups and asked to make their own monologue about their best holiday. Afterwards, the students practice their speaking performance by using *ELSA Speak* Application.

Based on the association session, the students explored *ELSA Speak* Application more than in the previous two meetings. The students discovered several features of *ELSA Speak* Application, one of which was pronunciation practice. Therefore, after getting an analysis of their speaking abilities, the students practiced incorrect pronunciation by using a feature called Improve Pronunciation on the *ELSA Speak* Application. Then, the students took another opportunity to get better feedback by using Speech Analyzer features on *ELSA Speak* Application.

Following the association session, the students were asked to present their story and corrected it together with the five aspects of the speaking and communicating session. The students and the teacher also corrected together regarding pronunciation, comprehension, fluency, grammar, and vocabulary based on the monologue. At the end of the communication session, the researcher provided feedback on the materials and several points that could be concluded.

At the last meeting of the treatment, the lack of internet connection also became the main problem. However, the students immediately take turns analyzing their monologue.

V. CONCLUSION AND SUGGESTION

This chapter presents the conclusion of the research results and the suggestions as the reference for the English teachers and future researchers who intend to use *ELSA Speak* in teaching speaking.

5.1 Conclusion

After the researcher conducted research at SMPN 23 Bandar Lampung which has been explained in the previous chapter, it can be concluded that the use of *ELSA Speak* Application in Scientific Approach helps students learn and improves students' abilities. Based on the result of the tests and the analysis of the data, there was an improvement in students' speaking abilities after using *ELSA Speak* Application in the Scientific Approach. It could be seen from the improvement in students' speaking abilities in pre-test and post-test, the mean score was 45.12 in the pre-test to 67.68 in the post-test. The gain score was 22,56. From the statistical findings, it is also known that the null hypothesis is rejected and the alternative analysis is accepted because the results are sig. (2-tailed) is 0.000 which is lower than 0.005. It means that the use of *ELSA Speak* Application can improve students' speaking ability in a scientific approach.

The aspect of speaking that increased the most after the students were given the treatment were the pronunciation and comprehension aspects. With the gain 3.56 for pronunciation aspect, and 3.4 for comprehension aspect. The main

reason for this result was because *ELSA Speak* Application has different kinds of activities about pronunciation to be explored. Also, the use of the same topics in the tests and during the treatments was the reason for the increase of comprehension aspect.

5.2 Suggestions

Based on the conclusion above, there are several suggestions that can be put forward from this research;

1. Suggestions for English Teacher

    a. Since it is proven that *ELSA Speak* Application can improve students' speaking skills, English teachers are encouraged to use *ELSA Speak* Application if speaking skills are the main priority for students to be improved by modifying the topic in order to be reliable in the current context.

    b. *ELSA Speak* Application can improve students' speaking skills, especially in Pronunciation and Comprehension. However, to improve other aspects of speaking, it is strongly recommended for the teacher to be more attentive to the Speech Analyzer provided by *ELSA Speak* Application.

    c. Since the fluency aspect is less improved than the other aspects, it is encouraged for English teachers to always provide a safe space for students to use the language on a daily basis so that the students will get used to speaking English, and also motivate continuously on the use of *ELSA Speak* Application.

2. Suggestions for Future Researchers

    a. This research is carried out with Junior High School students as the sample. The future researchers are encouraged to develop the media with a different sample to see the relevance of the result.

    b. This study focuses more on the *ELSA Speak* Application towards speaking ability in a scientific approach. To learn more about the effect of the *ELSA Speak* Application, it is suggested that the future researchers focus more on specific aspects of speaking.

    c. *ELSA Speak* needs a stable internet connection to run the application. The future researchers are encouraged to provide an alternative internet connection for the students.

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