

CHAPTER II

LITERATURE REVIEW

A. Theoretical Review

1. Elsa Speak Application

1) Definition of Elsa Speak

Elsa Speak was founded in 2015 by Vu Van, a Stanford University graduate, along with Dr. Xavier Anguera, an expert in speech recognition and artificial intelligence with the slogan “Everyone can speak English”. Its goal is to find and correct pronunciation errors and help users become better at speaking English (Thi et al., 2024). Also, Elsa Speak is an AI-based English learning app that aims to help users, especially those who are non-native speakers, improve their English speaking ability by concentrating on pronunciation. The automatic speech recognition (ASR) technology evaluates the accuracy of the user's pronunciation in real-time.

According to Luckin and Holmes AI can help language learning by providing interactive and personalized feedback. Using Elsa Speak, you can see how people pronounce words in English and provide critiques and recommendations for improvement (Luckin & Holmes, 2016). Moreover, compared to conventional language learning approaches, immediate feedback has been shown to be more effective in

improving students' speaking fluency (Derwing, T. M., & Munro, 2016). Elsa Speak real-time feedback feature allows users to immediately identify errors and correct them.

2) Objective of Implementing the Elsa Speak

There are several main purposes for using ELSA Speak:

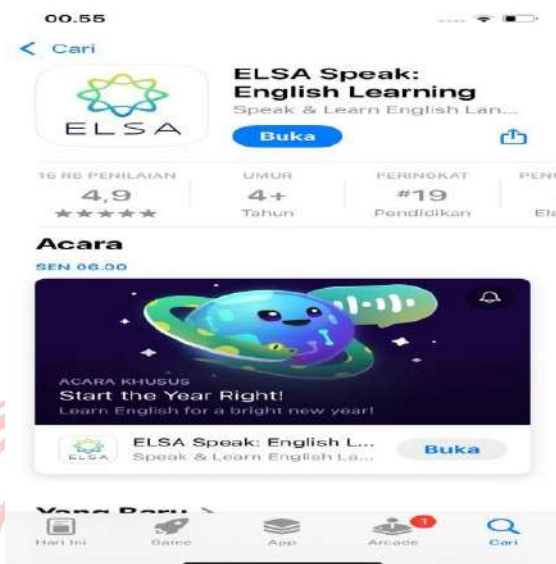
1. Help users become more fluent and accurate in speaking English.
2. Reduce the use of local accents that can make understanding difficult.
3. Improve English speaking ability.
4. provides lessons that are organised based on the user's ability level.

3) Steps to Use Elsa Speak

There are a few steps you have to do:

1. Download and Install the ELSA Speak App

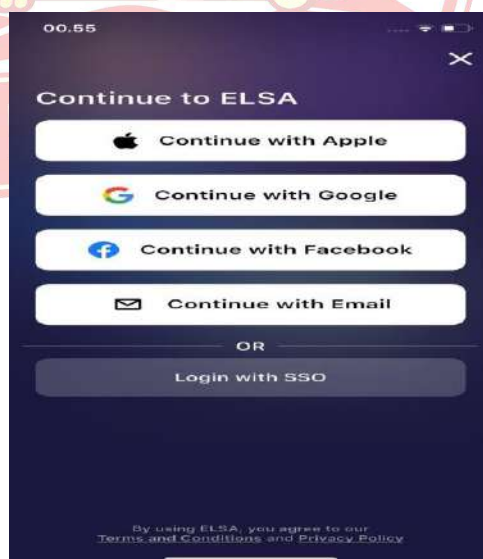
The app can be downloaded and installed on the Google Play Store and Apple App Store.



Picture 2. 1 Download and install Elsa Speak

2. Registration or Login

The users can create a new account or log in with an existing account.



Picture 2. 2 Registration or Login

3. Lesson Options

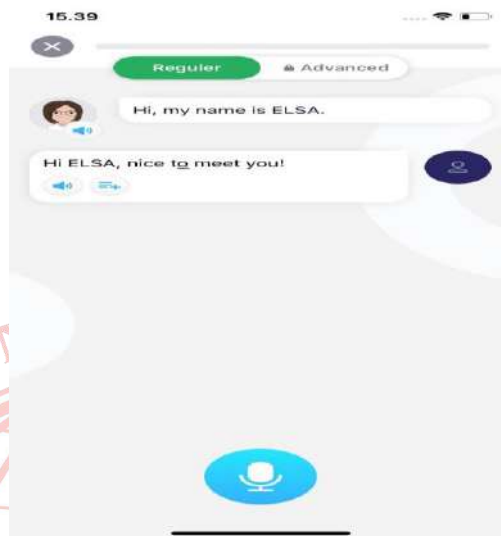
Based on the assessment results, ELSA Speak will recommend appropriate learning materials.



Picture 2. 3 Lesson Options

4. Pronunciation Practice

The user will be given pronunciation exercises using the available words or phrases. The app will provide feedback on elements that need to be corrected in real-time.



Picture 2. 4 Pronunciation Practice

5. Monitor Progress

The app has provided an analysis and progress report feature that allows users to see their progress.



Picture 2. 5 Monitor Progress

4) Advantages and disadvantages of Elsa Speak

According to (Becker, 2019) there are some advantages and disadvantages of Elsa Speak:

There are several advantages:

1) Real-Time Feedback

ELSA offers immediate feedback that helps users correct pronunciation quickly

2) Diverse Learning Materials

More than 1,200 lessons and 60 topics are available on ELSA, covering a wide range of communication contexts, such as travel, business and education.

3) Highly flexible and connected

It's ideal for independent students as users can study anytime and anywhere.

4) Conformance to international standards

Elsa offers methods that conform to international English language standards such as TOEFL and IELTS, which help students prepare for those exams.

There are several disadvantages:

1) Limitations of free features

Many features are only available to premium users; additional fees are required to gain access to all features.

2) Dependence on Technology

For these apps to function properly, they require a stable internet connection; this may be an issue in areas with limited internet access.

3) Lack of Social Interactions

While this app is great for individualized learning, the lack of social interaction with native speakers can limit communication skills.

2. Speaking Ability

1) Definition of Speaking Ability

Speaking is a productive skill that requires fluency and accuracy, which must be built through interaction and practice (Harmer, n.d.) Speaking ability is a person's ability to express ideas, feelings, or information to others orally. According to Lander and Brown speaking is a productive skill that involves using language to convey a message to people who listen to it. Speaking ability is an essential productive skill in oral communication (Lander & Brown, 1995).

According to G. Brown and Yule speaking can be transactional to establish and maintain social relationships, both for informational and interpersonal exchanges (G. Brown & Yule, 1983). According to Richards this ability includes message planning, vocabulary selection, grammatical structures, and

communication strategies to overcome communication barriers (Richards, 2008).

In practice, speaking ability is measured based on several important elements. First, accuracy refers to the correct use of grammatical and lexical structures. Second, fluency refers to the speed of speech, continuity of utterance, and lack of unnecessary pauses. Third, differences in sentence structure and vocabulary used indicate complexity. Fourth, coherence and cohesion, also known as “coherence” and “cohesion”, are measures of the ability to logically organize ideas and connect them with appropriate discourse markers. Finally, comprehensibility depends on the clarity of pronunciation, both segmental (phonemes) and suprasegmental (intonation, stress, and pauses), so that the listener can understand the message well (Luoma, 2004).

Canale and Swain conceptualized communication ability as consisting of four subcompetencies: linguistic ability (knowledge of language forms), sociolinguistic ability (ability to vary language according to social context), discourse ability (ability to construct and interpret discourse), and strategic ability (ability to overcome communication barriers), (Canale & Swain, 1980). Furthermore, Bachman and Palmer created this model by dividing

organizational abilities into linguistic (grammar + discourse) and pragmatic (illocutionary + sociolinguistic) abilities. They also emphasized the role of strategic capabilities as a means to overcome communication challenges (Bachman & Palmer, 1996).

overall, speaking ability is the result of a combination of linguistic knowledge, social skills and communication strategies. A deep understanding of these components and competency models helps educators design effective learning and assessment so that language learners can speak confidently, appropriately and comprehensibly in a variety of contexts.

2) Types of Speaking Ability

Speaking ability can be divided into several types based on their purpose:

1. Interpersonal Speaking

Works to build social relationships, such as everyday conversations.

2. Transactional Speaking.

Used to convey information, such as presentations or explanations.

3. Interactive Speaking:

Involves a two-way discussion, such as a discussion or debate; and serves to convey information clearly.

3) The Important of Speaking Ability

Speaking ability is very important both in daily life and in work. Speaking ability allows one to establish good interpersonal relationships and convey ideas effectively, (Harmer, 2019). In addition, in the current era of globalization, the ability to speak various foreign languages, such as English, is highly valued in various fields of work.

B. Theoretical Framework

One of the challenges in junior high school education is students' ability to communicate correctly in English. This is due to the lack of interactive learning techniques and supporting technology that can help develop independent speaking ability, so students often experience difficulties in pronunciation, fluency, and confidence when speaking. Technology-based learning methods have been proven to have a significant influence on language skills, including speaking skills. Technology can provide a more interactive and effective learning environment than traditional learning (Susanto, F., & Zasrianita, 2023). According to Richards, speaking skills include the use of linguistic and non-linguistic strategies, contextual understanding, grammar, vocabulary, and intonation to communicate effectively in various contexts. Speaking skills can help students communicate and convey messages

accurately (Richards, 2008). Therefore, the author wants to improve their speaking ability.

This research is grounded in the theory of social interaction in language learning, which states that language is acquired through active engagement with the learning environment. Vygotsky emphasizes that interaction supports the development of speaking ability (Vygotsky, 1985). The Elsa Speak app reinforces this process by providing instant, personalized feedback, creating an interactive environment that accelerates students' speaking improvement.

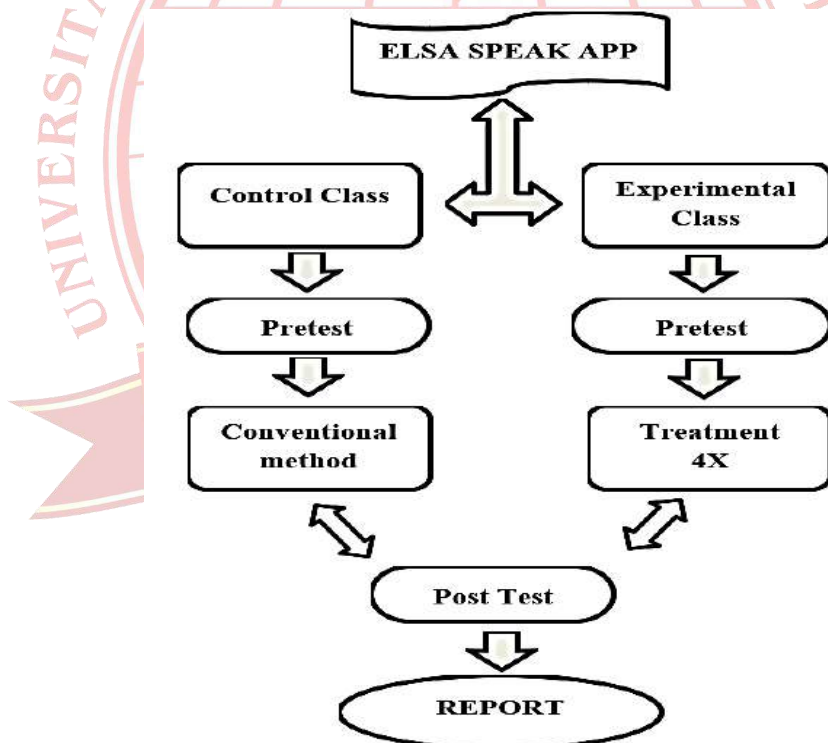
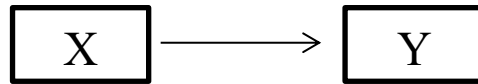


Diagram 2. 1 Theoretical Frame Work of the Research

The research paradigm is a simple paradigm consisting of one independent and dependent variable.



X = Elsa Speak Application

Y = Speaking ability

C. Previous Studies

To support of the research, the author will include some studies related to the effect of Elsa application on speaking ability. The first study to be discussed is the research by Masekan the purpose of this study was to find out whether the Elsa Speak application can help students at SMP N 8 Satap Tondano become better at speaking. The study involved 50 students in grade eight from the 2022-2023 school year, with 19 students selected from one class; the dependent variable was students' speaking skills, which included pronunciation, vocabulary, grammar, and fluency. The independent variable was the use of the Elsa Speak. A pre-test-post-test strategy was employed in a quantitative approach. The students completed an initial speaking assessment prior to utilizing the Elsa Speak. They performed a final test to gauge their development after receiving assistance with the program. The kids' speaking skills significantly improved, according to the results (Masekan et al., 2024).

The second one, research by Putri The purpose was to find out how much influence the use of Elsa Speak has on the speaking skills of grade VIII students at SMPN 4 Cijaku, Lebak-Banten, in the 2023/2024 academic year. Students' speaking skill is the dependent variable of this study, and the Elsa Speak application is the independent variable. The study involved 54 students, with purposive sampling technique used. 27 students from Class VIII A became the experimental class with Elsa Speak application, and 27 students from Class VIII B became the control class with Cake application. The researcher gave a pre-test before treatment and a post-test after treatment. The results showed that students' speaking skills improved significantly. The pre-test score for the experimental group increased from 59.07 to 74.81 in the post-test, and the control score increased from 56.67 to 70.78. Statistical analysis showed a two-sided significant value of 0.000, which is smaller than 0.05, indicating that the Elsa Speak application had a positive impact on students' speaking skills (Putri et al., 2024).

And the third, the research conducted by Aswaty and Indari from STKIP Budidaya Binjai, aims to find out how the use of the Elsa (English Speaking Assistant) application impacts on students' speaking ability in grade eleven at MAS Darul Al Muhajirin in the 2021/2022 school year. Students' speaking ability is the dependent variable in this study, and the use of Elsa Speak application is the independent variable. 40 students from the study population were divided into two

classes: XI-MIPA 1 as the control class and XI-MIPA 2 as the experimental class. The method used was experimental design with pre-test and post-test. Elsa Speak application was used for the experimental class, and Google Translate was used for the control class. The results showed that the use of ELSA application had a significant impact on students' speaking ability; the t-test value obtained was 10.619, which was greater than the t table value (2.02 for 5% and 2.70 for 1%). This indicates that the null hypothesis is rejected and the alternative hypothesis is accepted. The results show that students obtained better speaking scores after using the app (Aswaty & Indari, 2022).

Overall, the three studies shown here show that using the Elsa Speak program greatly improves students' speaking skills, including vocabulary, grammar, fluency, and pronunciation. All three research used an experimental design and a quantitative methodology, and they all came to the same conclusion about how well Elsa Speak worked as a tool for learning how to speak English. However, there are several key differences between these previous studies and the research that will be conducted by the author. First, this study will not compare Elsa Speak with other applications, unlike the study by Putri et al. (2024), which compared Elsa Speak with the Cake app, or the study by Aswaty & Indari (2022), which compared Elsa with Google Translate. The focus of the author's research is to examine the effectiveness of Elsa Speak on its

own. Second, the differences lie in the research setting, population, and sample, which can offer new contributions within the context of a different region and learner characteristics that have not been the subject of previous studies. Third, the most distinctive aspect of this study is the use of the Solomon Four Group Design. This design allows the researcher not only to measure the effect of the treatment (the use of Elsa Speak) on speaking skills but also to identify and control the potential influence of the pre-test itself. Therefore, while the topic and general research objectives may appear similar, this study offers a more comprehensive approach to determining the extent to which the Elsa Speak application can assist students in improving their speaking skills. It is also expected that the results of this study will offer practical recommendations for teachers, schools, and curriculum developers seeking to utilize technology in English language instruction.

D. Hypothesis

A hypothesis is a temporary solution to the formulation of a research problem. Referring to the background of the problem described above and the assumptions that have been assumed, the researcher proposes a hypothesis that there is a significant increase in students' mastery of comprehension after students are taught with the Elsa Speak Application.

1. Hypothesis Alternatif (Ha):

The use of the Elsa Speak application in teaching is going to have a significant effect on increasing speaking ability at SMPN 4 Bengkulu City

2. Hypothesis 0 (Ho):

The use of the Elsa Speak application in teaching is not going to have a significant effect on increasing speaking ability at SMPN 4 Bengkulu City.

