## **CHAPTER I**

#### **INTRODUCTION**

The present chapter provides an overview of the primary subject matter addressed in the research. The document encompasses various components essential to the investigation, including the study's background, research questions, objectives, importance, scope, hypothesis, conceptual framework, and relevant prior studies.

## A. Background

The acquisition of pronunciation proficiency in English encompasses the mastery of phonetics and phonology, which involves the articulation and production of words within the framework of sound systems. Pronouncing words accurately is essential to convey a message and ensure comprehension by the recipient effectively. In learning pronunciation, learner also must understand the accent. Levis and Zhou (2018) explained that an accent is a socially significant collection of phonetic characteristics. For example, traits such as the consonant length of word endings, vowel length, pausing behavior, and degree of diphthongization can characterize differences in native accents.

Gilakjani (2016) stated that acquiring English pronunciation is a significant challenge for learners, necessitating a substantial investment of time to enhance this skill. Tambunsaribu and Simatupang (2021) explained that English is used as a second language for Indonesian students. However, in reality, they find and use English in everyday life, especially in dealing with one of the subjects at school, namely English. Gilakjani and Ahmadi (2011) mentioned that some students have difficulty learning pronunciation due to their mother language, motivation, and lack of knowledge about pronunciation. In particular, Gerald (2000) viewed that the teacher's pronunciation knowledge differs from the practice. The teacher has many pronunciation theories but needs more time to practice and produce words in daily activities because English is not the primary language in Indonesia. Sometimes, the teacher still needs to give examples of the words heard. Students have little space to express words freely because students make their teacher a role model.

Technology is rapidly advancing to support the teaching and learning of languages. In the context of the fourth industrial revolution, concepts such as the Internet of Things (IoT) and artificial intelligence (AI) are experiencing rapid growth. They are applied in various domains, such as browsing, business, networking, commerce, and education. Pokrivcakova (2019) described AI, which involves machines, computers, or computer systems emulating cognitive functions like learning and problem-solving. Underwood (2017) mentioned that AI could enhance students' motivation and opportunities for oral communication in the desired language.

Richard (2015) explained that utilizing the Internet and technology in faceto-face and virtual English meetings creates more opportunities for authentic language use than in traditional classroom settings. Benzies (2017) mentioned that numerous software, digital platforms, and applications are currently serving as tools for language acquisition, an example being the ELSA Speak application designed to improve pronunciation.

Regarding this research topic, several academic studies are related to using AI, digital platforms, and other applications to teach pronunciation and improve students' pronunciation skills. A research conducted by Noviyanti (2020) and Dewi et al. (2021) includes qualitative and quantitative research methods and involves participants from various educational backgrounds. The findings suggest that AI, digital platforms and other applications can improve students' pronunciation. However, several challenges were also identified, such as limited time to prepare materials and internet connectivity problems. Meanwhile, this research focuses on the effectiveness of the ELSA Speak application in improving their pronunciation abilities at MA Ar-Rosyidiyah in the Indonesian context.

From the explanation above, researchers are interested in testing the effectiveness of the ELSA Speak application as a medium for learning pronunciation. ELSA Speak application. Therefore, this study analyzes the effectiveness of using ELSA Speak application in improving the pronunciation ability of senior high school students.

## **B. Research Questions**

This research investigates the subsequent questions arising from the description above:

- 1. What is the students' pronunciation ability before using the ELSA Speak application?
- 2. What is the students' pronunciation after using the ELSA Speak application?
- 3. How significant is the improvement of the students' pronunciation ability after using the ELSA Speak application?

## **C. Research Purposes**

According to the question formulated above the purposes of the study are:

- 1. To figure out the students' pronunciation ability before using the ELSA Speak application.
- 2. To figure out the students' pronunciation after using the ELSA Speak application.
- 3. To figure out whether significant difference between students' pronunciation ability before and after using the ELSA Speak application.

## **D. Research Significances**

The significance of the study is divided into the following:

1. Theoretical Significance

The result of the study may give more information about improving students' pronunciation using the ELSA Speak application.

2. Practical Significance

This research holds the potential to benefit both students and teachers. For students, it offers the opportunity to enhance their pronunciation skills using the ELSA Speak application. This tool can provide valuable assistance in improving pronunciation, offering tailored exercises and feedback, ultimately boosting learners' language proficiency and confidence. On the other hand, teachers can find valuable support in their teaching endeavours, particularly in the context of pronunciation instruction. The research findings can equip educators with more effective strategies and resources, enabling them to guide their students more efficiently and accurately to achieve improved pronunciation. Overall, this research stands to make a meaningful impact on language learning and teaching, benefiting both learners and educators alike.

#### **E. Research Scope**

The study and the research cannot cover all problems. The scope of the research focuses on using the ELSA Speak application to learn English pronunciation for the XI grade of MA Ar-Rosyidiyah in the 2023/2024 academic year. The research uses a pre-experimental study.

#### **F.** Conceptual Framework

This chapter encompasses various topics that are pertinent to the present examination. The concept of pronunciation is a fundamental aspect of language learning. In this context, the ELSA Speak application is a valuable tool for improving pronunciation skills.

### 1. Concept of Pronunciation

Pronunciation, a fundamental aspect of language, pertains to how words are articulated or vocalized within a given language (Hornby, 1987). It goes beyond the mere formation of words and encompasses the intricate dynamics of sounds, stress patterns, and intonation, all of which effectively convey meaning and intentions. Within the framework of the English language, Roach (2009) has classified segmental phonemes, which are the individual sound units that constitute spoken language. Notably, Roach's classification delineates two primary categories: vowels and consonants. It is paramount to understand that English comprises 44 distinct phonetic sounds in English phonetics. Out of this collection, 20 are classified as vowels, characterized by relatively unrestricted airflow in their production. Conversely, the remaining subset of 24 phonetic sounds falls under the category of consonants, distinctly characterized by a complete or partial closure of the airflow in the vocal tract. According to Yamin (2014), as cited in Usmanyar (2022), consonants are characterized by either a complete or partial closure of the airflow in the vocal tract, in contrast to vowels.

Classifying segmental phonemes into vowels and consonants is a fundamental concept that lays the groundwork for understanding the intricate landscape of English pronunciation. Vowels, the more sonorous and melodious sounds, are characterized by the relatively unimpeded airflow within the vocal tract. This openness allows for continuous and unrestricted sound articulation, contributing to their distinct quality and audibility. In contrast, consonants introduce variability and texture to spoken language. Their production involves specific articulatory mechanisms that lead to complete or partial obstruction of the airflow in the vocal tract. As a result, the obstructive nature of consonants results in diverse and often nuanced sounds that can be challenging for learners to master. The contrast between vowels and consonants is a pivotal aspect of phonetic instruction, as it guides learners in achieving accurate pronunciation in English.

Understanding the phonetic distinctions between vowels and consonants is essential for learners and educators. It lays the foundation for proper pronunciation and helps learners overcome the challenges of accurately articulating sounds within words and sentences. Mastering the intricacies of vowel and consonant pronunciation can significantly enhance language learners' ability to communicate clearly and effectively in English. Moreover, it underscores the importance of acknowledging the diversity and complexity inherent in the English language, making it a rich and multifaceted arena for linguistic exploration and mastery.

In addition, Morley (1991) mentioned that suprasegmental features (i.e., stress, rhythm, and intonation) are essential because they are used to complete meaning and create meaning. Stress is the emphasis on a particular syllable or word within a sentence. Cutler (2015), as cited in Lewis (2018), observed that in English, few words are distinguished purely by stress, such as INsight versus inCITE and the noun IMport versus the verb imPORT.

Isaacs and Trofimovich (2012) defined rhythm as alternations between stressed and unstressed syllables. Underhill (2005) described intonation as a pattern of pitch variation because intonation refers to the rising and falling of the voice as we speak, which can convey meaning and emotion.

Fa-Chun and Yin (2009) described that shed light on the significance of mastering stress and intonation to enhance one's English communication abilities. Stress and intonation are pivotal components of spoken language that extend beyond the mere articulation of words and delve into the realm of conveying meaning and emotions. Learning how to manipulate stress and intonation in pronunciation effectively is an essential aspect of improving English language proficiency, as it can profoundly impact the clarity and comprehensibility of one's communication.

Fa-Chun and Yin (2009) highlighted that stress plays a fundamental role in effectively delivering verbal messages. It refers to the emphasis on specific syllables or words within a sentence, accentuating their importance. For instance, in English, subtle variations in stress can distinguish words and nuances of meaning, as seen in pairs like "INsight" and "inCITE." These distinctions are crucial for conveying precise information and ensuring the listener accurately receives one's intended message. By mastering the art of stress in pronunciation, individuals can enhance their ability to highlight essential information and direct the listener's attention to critical discourse elements.

Intonation, however, represents the melodic and rhythmic patterns of pitch variation in spoken language. It reflects the rising and falling of the voice as we speak and carries the emotional and attitudinal nuances that underpin communication. Intonation is a potent tool for conveying feelings, intentions, and the overall mood of a conversation. By understanding and using intonation effectively, language learners can infuse their speech with subtleties that communicate the words' meaning and the underlying emotions and intentions. This aspect of pronunciation is invaluable for creating engaging and expressive communication, ensuring that one's message is understood and felt by the listener

# 2. ELSA Speak Aplication

The acronym ELSA represents the English Language Speech Assistant. ELSA Speak is a language learning platform founded by Vu Van in 2015. The company is based in San Francisco. ELSA Speak is an exemplary artificial intelligence technology designed to facilitate language acquisition, emphasising enhancing speaking skills and refining pronunciation abilities. This application is also classified as Mobile-Assisted Language Learning (MALL). The learning process is enhanced when it becomes a reciprocal exchange. The functionality of this programme is contingent upon the accurate pronunciation of words or designated sentences by students. The ELSA Speak system analyses the pronunciation and then provides corrective feedback. Individuals are required to complete the registration or login process before using the programme. Subsequently, users will be presented with their initial encounter with the ELSA Speak programme, wherein they will be provided with a range of options about the different levels of their pronouncing proficiency. The many stages of talent were also accessible. The present application utilises Automatic Speech Recognition (ASR) technology. Liakin et al. (2014) explained that automatic speech recognition (ASR) technology can accurately transcribe spoken words from a microphone into readable text. Carrier (2017) mentioned the potential for rapid improvement in Automatic Speech Recognition (ASR) systems in accurately identifying spoken discourse and transcribing it into written text.

Additionally, ASR technology can facilitate the study of phonology and accent in a more streamlined manner. Additionally, Neri et al. (2008) explained that automatic speech recognition (ASR) has the potential to assist students in improving their pronunciation skills, particularly about individual speech sounds. The ELSA Speak application offers students the opportunity to acquire knowledge in pronunciation, encompassing phonetics and phonology, which pertains to the accurate written representation and articulation of words.

# G. Hypothesis

Creswell (2012) described a hypothesis as a researcher's prediction regarding the anticipated relationship between variables. Formulating a hypothesis elucidates the specific research question that will be investigated. Additionally, it is imperative to ensure that the hypothesis is explicitly articulated.

The hypothesis of this study includes the alternative hypothesis  $(H_a)$  and the null hypothesis  $(H_0)$ . The hypothesis of the study is formulated as follows:

- H<sub>0</sub>: No significant difference exists in improving students' pronunciation ability after using the ELSA Speak application as media. It means rejected because there is no difference between before and after using the ELSA Speak application in improving students' pronunciation ability.
- H<sub>a</sub>: There is a significant difference in improving students' pronunciation ability after using the ELSA Speak application as media. It means accepted because there is a difference between before and after using the ELSA Speak application in improving students' pronunciation ability.

### **H.** Previous Studies

Several studies have been conducted with a focus on improving English pronunciation. First, the research conducted by Fouz-González (2020) researched the English File Pronunciation (EFP) application to help foreign language learners improve their pronunciation. Participants were 52 Spanish EFL learners enrolled in an English Studies degree. The result is that training fostered substantial improvements in the learners' perception and production of the target features. However, the differences between groups were not statistically significant for every sound or task.

Second, the research conducted by Yến and Linh (2021) researched the effectiveness of the Otter application as a tool for pronunciation practice. The study participants were 40 students of one English Oral proficiency class at the School of Foreign Languages, Thai Nguyen University. The results were that

practicing Otter in learning benefits students' speaking skills, especially pronunciation.

Third, the research conducted by Adityarini et al. (2021) researched the implementation of pronunciation android applications—English Pronunciation and English Phonetic Pronunciation and English Phonetics—to improve students' pronunciation. The participants in this study were 100 first-semester students of the English Education Department of Muhammadiyah University Surakarta who enrolled in the Pronunciation and Phonetics course in the academic year 2021/2022. English Pronunciation and Phonetic Pronunciation and English Phonetics applications can improve students' pronunciation.

Fourth, the research conducted by Wongsuriya (2020) examined English pronunciation by students in a remote area and evaluates the student's performance in English pronunciation using Google Translate mobile application. The study participants were 24 university students who experienced the learning incorporated a selected purposive sampling process selected mobile application. All students' results revealed that mobile applications helped them improve their pronunciation, even those with limited English pronunciation ability.

The difference is that the study tries to improve the pronunciation of the EFL students using the EFP application, Otter application, English Pronunciation application, English Phonetic Pronunciation and English Phonetics application, and Google Translate application. This research offers a different perspective from the previous studies because it exploits the ELSA Speak application. In addition, the study only focuses on senior high school students in the Indonesian context