

CHAPTER I

INTRODUCTION

In this chapter, the researcher provides the rationale, the research questions, the research objectives, the scope of research, and the significance of research.

1.1 Rationale

English communication is one of the most important and frequently discussed issues in language learning. As Chotimah (2022) points out, English is a global language used not only to communicate with native speakers but also with speakers of other languages. Its widespread use in various international contexts makes it an essential tool for global communication and cross-cultural interaction. However, effective communication in English is not solely about knowing the language but also about how it is spoken. In this regard, pronunciation plays a crucial role, as it directly impacts clarity and the speaker's identity in communication. Therefore, mastering correct pronunciation remains one of the most challenging yet essential aspects of learning English.

Building upon this point, mastering pronunciation is particularly important in the context of learning English as a Foreign Language (EFL). According to Jingjing & Andi (2023) pronunciation is a crucial aspect of language learning that ensures proper communication. However, many EFL learners struggle with pronunciation due to limited practice and exposure to authentic English. These challenges often lead to misunderstandings and a lack of confidence in using the language. For instance, students may mispronounce words such as “beach” as “bitch,” or “three” as “tree,” which not only affects meaning but also causes embarrassment and reluctance to speak further. Therefore, enhancing pronunciation abilities through proper learning methods is critical to help students communicate more effectively and gain confidence in speaking English.

This issue is especially evident in classroom contexts where students often lack opportunities to engage with native speakers or practice English in real-world situations. In many Indonesian high schools, including SMAN 1

Ciawigebang, students primarily rely on textbook-based instruction, with limited focus on speaking and pronunciation. As a result, students who are proficient in grammar and vocabulary may still struggle in accurate pronunciation. This leads to reduced speaking confidence and inadequate oral communication skills, which are crucial in both academic and professional contexts. According to Agung, Risma, Suwari, Ayu, Joni, Wirastuti (2023), self-confidence is a key factor influencing students' motivation to communicate. Students with higher self-confidence tend to speak more fluently and actively participate in communication activities, while those with lower confidence often hesitate or avoid speaking. Hence, it is essential to explore methods that can effectively enhance pronunciation in an engaging and accessible manner.

One promising approach to address these challenges is through the use of technology in language learning. In this context, Mayer (2024) multimodal learning theory promotes the use of technology, such as Text-to-Speech (TTS) programs that mix visual and aural inputs to improve learning retention and comprehension. *NaturalReader*, for example, can be used not only as a pronunciation model but also to boost students' confidence. These technologies provide students with repeated exposure to appropriate pronunciation in a low-anxiety setting, allowing for continued practice and improvement.

More broadly, the integration of technology in language learning has become increasingly important, offering dynamic and efficient solutions to help students improve their speaking, listening, reading, and writing skills. Karsenti, Kozarenko, and Skakunova (2020) argue that technology not only improves the classroom setting, but also gives students access to a diverse set of learning materials, enabling them to practice and improve their language abilities in novel ways. Given the continuous difficulties in mastering pronunciation, particularly among EFL learners, there is an urgent need for creative teaching approaches that enable effective pronunciation practice. However, research into the use of Text-to-Speech (TTS) technology as a technique for improving pronunciation remains restricted. Therefore, this research seeks to fill this gap by evaluating the

effectiveness of *NaturalReader* in the EFL learning context, specifically in improving segmental pronunciation features such as vowels and consonants.

NaturalReader is a promising application driven by Text-To-Speech (TTS) technology. Purnama, Rintaningrum, Nuswantara, Trisyanti, & Mark (2024), provides learners with examples of clear and natural pronunciation, which is especially useful for EFL students who struggle with pronunciation accuracy and fluency. Its capacity to generate speech from text while replicating the natural rhythm and intonation of human speech makes it perfect for both self-study and classroom applications. Furthermore, as Farhan & Hadi (2024) highlight, the AI underlying *NaturalReader* can discriminate between different accents, allowing students to become accustomed with varied English pronunciations. This exposure is crucial in minimizing misunderstandings, especially in global communication contexts where English is spoken with diverse accents.

Given these advantages, it is crucial to investigate how *NaturalReader* can improve students' pronunciation in an educational setting. This research investigates its impact on EFL students at SMAN 1 Ciawigebang by comparing an experimental group utilising *NaturalReader* to a control group using traditional methods. In addition, students' perceptions of the tool were obtained via questionnaire. The findings are likely to provide useful information about the role of TTS technology in pronunciation learning, as well as practical recommendations for English language instruction.

In selecting the appropriate tool for this research, *NaturalReader* was chosen for this research due of its functionally, accessibility, and ease of use for both teachers and students. Unlike other pronunciation tools that require advance hardware or subscriptions, *NaturalReader* provides a free and user-friendly platform that can be accessed on desktop and mobile devices. Its smooth, native-like voice output provides pupils with consistent pronunciation models, enabling learners to imitate sounds and engage in repeated practice. These features make it an ideal option for integration in both classroom-based and independent learning environments, especially in low-resource settings. This is reinforced by

Fitria (2022) also supports this, stating *NaturalReader's* Text-to-Speech technology can help learners improve their pronunciation by exposing them to accurate pronunciation models, adjustable speech speed, and a range of speaker selections. Furthermore, she stated that such tools enable both teachers and students to engage in more participatory and autonomous learning, making pronunciation practice more effective and convenient.

Beyond improving teaching methods, this research aims to boost students' confidence and pronunciation Proficiency through innovative technology. Inspired by previous research conducted by Nur Ardini, Suryana, and Latifah (2024) entitled “*Development of Mobile Application through the Concept of Artificial Intelligence to Enhance Pronunciation Skill in EFL*”, this research shifts the focus to *NaturalReader* as an alternative tool for pronunciation practice. While the earlier study developed an AI-based mobile application called *Jonglish* using Natural Language Processing (NLP) to enhance EFL learners' pronunciation, this current study specifically emphasizes segmental pronunciation features (vowels and consonants), which are essential for producing clear and accurate speech.

1.2 Research Questions

The researcher aimed to find answers to the following question based on the context of the research:

1. Is *NaturalReader* effective in improving students' pronunciation proficiency?
2. What are the students' attitudes to using the *NaturalReader* application?

1.3 The Objectives of Research

The researcher aimed to establish the following objectives based on the context of the research:

1. To measure the impact of using *NaturalReader* on students' pronunciation proficiency.
2. To analyze students' attitudes to the *NaturalReader* application.

1.4 Scope of The Research

This research aims to determine the impact of using the *NaturalReader* application on EFL students' pronunciation proficiency. The subject in this research is class X-J as the experimental group and X-L as the control group at SMAN 1 Ciawigebang. This research used Quasi-experiment with experiment group and control group, including a pre-test, treatment with the *NaturalReader* application for experiment group and teacher directed for control group, and a post-test. This research focuses on segmental features of pronunciation, and the assessment uses a reading-aloud task involving report texts. In addition, to provide a more objective assessment of students' pronunciation proficiency, the research also uses Praat software for acoustic analysis.

1.5 Significance of Research

This research intends to contribute to the theory of employing text-to-speech (TTS) technology in language acquisition, specifically in improving EFL students' pronunciation of segmental features (vowels and consonants). The findings help teachers choose appropriate technologies for pronunciation education. Furthermore, this research adds innovation by assessing the impact of *NaturalReader*, an underutilised TTS tool, on improving EFL students' pronunciation proficiency. Based on these objectives, the significance of this research can be seen both conceptually and practically, as indicated below:

Theoretically:

- Contributes to the development of theory on the use of text-to-speech (TTS) technology in language acquisition, with a specific emphasis on enhancing EFL students' pronunciation of segmental characteristics (vowels and consonants) using *NaturalReader*.

Practically:

- Helps teachers choose effective technology to enhance students' pronunciation.

- Provides insights into how *NaturalReader* can be integrated into pronunciation learning.
- Supports students in improving their pronunciation through interactive and accessible learning methods.