CHAPTER 1

INTRODUCTION

The aim of this study is to explore students' perceptions of using the Google Translate Text-to-Speech (TTS) feature as a tool for improving English pronunciation among senior high school students at SMA Negeri 4 Jember. This chapter covers the background of the study, research questions, objectives, significance, and the scope and limitation of the study.

1.1 Background

English pronunciation remains one of the most challenging aspects for high school students in Indonesia, particularly at schools like SMA Negeri 4 Jember, where students often have limited access to native English input, pronunciation-focused instruction, and individualized feedback. Despite English being a compulsory subject in the curriculum, pronunciation tends to receive minimal attention in class due to time constraints, large class sizes, and a greater focus on reading, writing, and grammar for national exams. As a result, many students are left to struggle on their own with mastering the sounds, rhythm, and intonation patterns of English.

The local linguistic environment further compounds this issue. Most students at SMA Negeri 4 Jember grow up in monolingual Indonesian-speaking communities, with little exposure to English outside of the classroom. According to Sulistiyo et al. (2024), the phonological gap between Bahasa Indonesia and English especially in terms of stress patterns, vowel distinctions, and voiced consonants makes it particularly difficult for Indonesian learners to accurately produce English sounds. Moreover, classroom-based pronunciation instruction is

often limited to teacher modeling and choral repetition, with little time for individualized correction or repeated practice.

Faced with these challenges, students are increasingly turning to digital tools to support their learning outside the classroom. One tool that has gained popularity among students for independent practice is Google Translate's Text-to-Speech (TTS) feature. Available freely on smartphones and browsers, the TTS function enables learners to type any English word or sentence and listen to its pronunciation in real time. This functionality allows students to receive instant auditory models of spoken English, repeat the input multiple times, and imitate native-like speech at their own pace. Unlike classroom environments where speaking mistakes may cause embarrassment or anxiety, TTS provides a private space for practice without judgment.

Technological improvements in TTS systems have made tools like Google Translate increasingly relevant for language learners. Recent developments in neural speech synthesis and natural language processing have enabled TTS tools to generate more realistic, contextually appropriate, and intelligible pronunciation models (Kumar & Patel, 2024; Zhang & Chen, 2024). Additionally, features such as speech rate adjustment and accent selection (e.g., American or British) further personalize the learning experience. These advancements align with growing interest in autonomous and self-directed learning, where students take more control over their pronunciation development outside formal instruction.

However, despite the technical sophistication of tools like Google Translate, there remains a significant gap in educational research particularly in Indonesia regarding how students actually perceive, use, and benefit from these

tools in real-world learning contexts. Prior studies (e.g., Khademi, 2021; Khasanah et al., 2022) have generally focused on university students, specific pronunciation features (such as -ed endings), or pandemic era online learning environments. These studies often use closed questionnaires and do not explore learners' subjective experiences in depth. In addition, little is known about how such tools affect students' confidence, motivation, or learning habits in non-urban Indonesian high schools where English instruction may still rely on traditional, teacher-centered methods.

This study aims to address that gap by exploring how students at SMA Negeri 4 Jember perceive and experience the use of Google Translate's TTS feature in their English pronunciation learning. It seeks to understand how they engage with the tool, what benefits and limitations they encounter, and how it influences their ability to pronounce English words with greater confidence and accuracy. By focusing on students' lived experiences—through interviews, observation, and qualitative analysis—this research offers new insights into how a widely available but under-researched tool is being used by learners in resource-constrained environments.

The significance of this study lies in both its context and its timing. As Indonesia moves toward more digitalized and student-centered education systems, understanding how students actually use and respond to available technologies becomes crucial. For teachers, the findings can inform classroom strategies that integrate TTS tools with guided instruction. For educational policymakers and developers, this study highlights how students utilize informal digital resources to meet their learning needs—

insights that are essential for designing equitable and scalable digital education policies.

In short, this research contributes to the fields of technology-enhanced language learning and pronunciation pedagogy by offering a focused, context-specific examination of how Google Translate's TTS feature supports pronunciation learning in a typical Indonesian high school. It combines practical classroom relevance with a timely exploration of student autonomy and technological adaptation, ultimately offering both academic and applied value.

1.2 Research Problem

1) How do students at SMA 4 Jember perceive the use of Google Translate's Text-to-Speech feature in learning English pronunciation?
2) What challenges do students face when using the Text-to-Speech feature for pronunciation practice?

1.3 Research Focus

This study focuses on exploring how students at SMA 4 Jember perceive and experience the use of Google Translate's Text-to-Speech (TTS) feature for learning English pronunciation. It aims to understand how students interact with the tool in both classroom and independent learning contexts, including the perceived benefits they gain and the challenges they face during its use.

1.4 Purpose of the Research

1) First, examine how students at SMA 4 Jember perceive and use Google Translate's Text-to-Speech (TTS) feature in learning English pronunciation
2) Second, the research seeks to examine the various challenges and limitations students encounter while using this technology.

1.5 Significance of the Research

1) Theoretical Benefits

This study contributes to the theoretical understanding of how digital tools, specifically Google Translate's Text-to-Speech (TTS) feature, are accepted and utilized by secondary school learners to support English pronunciation learning. Drawing on the Technology Acceptance Model (TAM), the research is expected to reveal how perceived usefulness and ease of use influence students' engagement with TTS. The findings will extend existing literature by offering empirical evidence from a high school context, which has been underrepresented in prior studies that mostly focus on tertiary-level learners or formal online instruction.

2) Practical Benefits

Practically, the study offers insights into how teachers can effectively integrate freely available TTS technology into pronunciation instruction, especially in schools with limited access to advanced digital resources. By identifying students' challenges and preferences, this research will provide concrete recommendations for teachers to support independent and low-anxiety

pronunciation practice. Furthermore, the findings can guide developers of educational technology to enhance TTS features to better align with the needs of teenage language learners in diverse learning environments.

1.6 Assumptions of the Research

1) Students have prior experience using Google Translate's TTS feature in their English learning, either inside or outside the classroom. This assumption is essential to ensure participants can provide meaningful insights regarding their perceptions and usage patterns.

2) The TTS feature of Google Translate functions consistently and accurately during the period of data collection. It is assumed that students are exposed to the same voice quality, pronunciation model, and playback speed, which are critical to assessing their pronunciation experience. Any technical disruptions, such as voice glitches or poor internet connectivity, could affect the consistency of the input and thus influence students' perceptions and reported challenges.

3) Participants respond honestly during interviews or questionnaires. Their openness is assumed to reflect their genuine opinions and experiences, which are essential for the credibility of the qualitative findings.

1.7 Scope of the Research

This research focuses on the perceptions and experiences of tenth-grade students at SMA 4 Jember in using Google Translate's Text-to-Speech (TTS)

feature to support their English pronunciation learning. The study specifically examines two learning contexts: classroom-based learning and self-directed learning. Classroom-based learning refers to students' use of the TTS feature during structured English lessons under teacher supervision, such as during pronunciation drills, reading practices, or listening activities. In contrast, self-directed learning refers to students' independent use of the TTS tool outside of formal class time, typically at home or in school environments without direct guidance, to review pronunciation or prepare for speaking tasks. Data were collected through interviews and observations conducted during the second semester of the 2024/2025 academic year (January to March 2025). The study does not assess pronunciation accuracy quantitatively but is limited to exploring students' subjective experiences, perceived benefits, and challenges related to the use of the TTS feature.

1.8 Definition of Terms

1) Google Translate's Text-to-Speech (TTS)

Refers to the automated voice output feature in Google Translate that converts written English text into spoken audio. In this study, it is used by students as a pronunciation model to imitate word stress, intonation, and articulation.

2) Pronunciation learning

The process by which students improve their ability to produce English sounds correctly, including segmental (individual sounds) and suprasegmental features (stress and intonation). In this study, pronunciation learning is observed through students' interaction with the TTS feature and their self-reported changes

in pronunciation understanding or practice before and after its use, as reflected in pre- and post-assessment discussions.

3) Pronunciation Learning

The measurable improvement in students' ability to produce English sounds, words, and sentences, as demonstrated through, accuracy scores provided by Google Translate's speech recognition, Pre and post pronunciation assessments, Recording analysis of specific phonemic features, self-assessment scores on pronunciation confidence levels

4) Student Perception

Students' attitudes, beliefs, and emotional responses toward using the TTS feature or learning pronunciation. This is captured through qualitative interviews, focusing on perceived usefulness, ease of use, and its impact on motivation and confidence.

5) Usage Pattern

Refers to how, how often, and in what context students use the TTS feature for pronunciation practice.