CHAPTER I

INTRODUCTION

Chapter I The introduction of the research study discussed about various aspects, including the background of the study, problem identification, limitations, problem statements, purpose, significance of the study, and definitions of key terms.

1.1   Research Background

English has become globally recognized as the official language in many countries and a second language in others. It has evolved into a crucial foreign language, particularly in sectors like science, technology, trade, and literature, becoming a "lingua franca" due to its widespread use and influence. The ability to speak or communicate in English is now a global aspiration due to its esteemed status. In Indonesia, English is a mandatory subject, starting from the 4th grade of elementary school. Despite fluctuations in English language learning policies, students are required to study English using prescribed materials. However, many students still struggle with pronunciation, which is a fundamental aspect of language proficiency.

Pronunciation's crucial role in speech involves stress, articulation, and intonation. Proficiency in pronunciation is essential for effective speaking, listening, and reading. Dwiningrum (2016) observed that young learners (aged 6-12) are highly curious and motivated to learn English, showing a remarkable ability to memorize new words. Despite this, Indonesian elementary schools haven't

focused enough on pronunciation, instead prioritizing vocabulary, reading, and basic grammar. To address this, the Indonesian government introduced the Kurikulum Merdeka (Independent Curriculum), emphasizing core content, character development, and student competence. This curriculum supports project-based learning and allows teachers to adapt their methods to their students' abilities.

The implementation of Kurikulum Merdeka relies heavily on technology, particularly Information and Communication Technology (ICT), to facilitate diverse and flexible learning approaches. This integration supports innovative teaching methods and access to resources beyond the classroom. This adaptability prepares students for the future, creating an environment that is both responsive and conducive to learning. One such innovative tool is the English Speaking Assistant Application (CAKE), which employs AI and voice recognition technology to enhance pronunciation skills. Through CAKE, users receive lessons and practice materials to improve their English pronunciation.

The implementation of Kurikulum Merdeka is carried out through three categories: Independent Learning, Independent Changes, and Independent Sharing. Although implementation in primary schools has been optimal, there are still constraints and shortcomings in the teaching-learning process (Rahayu et al., 2022). Amid these challenges, the integration of technology becomes a key factor in the execution of Kurikulum Merdeka (Suweta, 2023). Online learning and technology-based approaches are integral parts of the strategy to support diverse and flexible learning (Rahayu et al., 2022).

The importance of utilizing technology, especially Information and Communication Technology (ICT), forms the primary foundation for creating meaningful learning. In efforts to support innovative teaching-learning processes, Kurikulum Merdeka recognizes the central role of technology, directing teachers to unleash creativity in choosing learning tools that align with students' development (Juhriyansyah, 2020). The advancement of technology, particularly digital products like e-books, signifies a shift from dependence on print books to more flexible and interactive learning resources (Nurdyansyah, 2017). In this view, technology not only serves as a learning aid in the classroom but also allows access to learning resources from anywhere with internet connectivity (Atmawarni, 2016). The use of electronic media and digital learning resources expands the learning space beyond the classroom, supporting Kurikulum Merdeka's emphasis on active and inclusive learning (Mukminan, 2012). The Ministry of Education and Culture highlights efforts to improve education quality by recognizing technology's role as a creative and educational learning support.

The use of technology in the context of *Kurikulum Merdeka* and the assessment of the quality of learning technology highlight technology's central role in transforming the dynamics of modern education (Widiyono et al., 2020). The utilization of technology is not only key to creating meaningful and relevant learning tailored to students' needs, but it also significantly contributes to enhancing the quality of learning. In Kurikulum Merdeka, which emphasizes teachers' freedom in selecting learning tools, technology becomes a tool that enables the development of creative, enjoyable, and student-oriented learning experiences.

The Triple E framework, developed by Professor Kolb (2017) on the foundational principle of 'Learning first, technology second.' This framework serves as a valuable guide for educators and teachers to assess and measure the effectiveness of technology tools integrated into lessons, primarily focusing on how these tools help students engage in, enhance, and extend their learning goals. The Triple E Framework offers a practical approach to evaluating how technology contributes to attaining learning objectives in a lesson. Unlike other frameworks, Triple E prioritizes learning goals over specific technology tools. It draws insights from educational research spanning the past two decades, shedding light on both practical and ineffective uses of technology in education. Structured around three key components - Engagement, Enhancement, and Extension of learning goals - the Triple E rubric provides unique definitions and outlines for each component. While not foolproof, this measurement tool offers educators a standard reference point when considering integrating technology tools for educational purposes.

Based on preliminary observation in SMA Negeri 1 Kubutambahan many students are interested in learning English, but there are also students who find it challenging to learn the language. This makes English language learning less effective. One of them is class XI-9, based on reports from teachers at SMAN 1 Kubutambahan, one of the classes, namely class XI-9, got less English score. The main obstacle faced is the students' pronounciation skills in English, this is the factors of problem during English lessons. Despite teachers implementing innovative teaching methods, the desired effectiveness hasn't been achieved. In this context, the major issue is students' limited ability to speak English fluently. According to English teacher in SMA N 1 Kubutambahan, they introduced various

teaching innovations, but they haven't yielded the desired outcomes. In light of this, the researcher introducing CAKE App to improve students' English proficiency, particularly in peonounciation. The CAKE app can be used anytime and anywhere, and it addresses the convenience factor, especially since most students now own smartphones. By employing the CAKE application, students' speaking skills can be improved significantly. This platform offers a user-friendly interface and its accessibility makes it a valuable tool for language learning. Moreover, it addresses the issue of students' lack of focus during English lessons by providing engaging and interactive activities. To sum up, the challenges related to English language learning, such as students' limited pronounciation skills and lack of focus, can be effectively addressed by integrating the CAKE application. This innovative solution utilizes students' smartphones and provides a convenient and engaging method for enhancing English language proficiency.

There are several studies conducted the implementation of CAKE Application and showed the significant effects in improve students' speaking skills, According to Fitria (2021) "The Implementation of CAKE Application In Learning English Speaking Skills" the results showed the student response related to learning using cake application is very positive. According to Indah Sri Redjeki & R. Muhajir (2022)"The Use of Cake English Application in EFL Speaking Skill". students felt more focused and interested during learning, so it can be concluded that cake applications are able to attract interest and keep students focused during learning. According to Hamdani (2022)"Students' Perception on the Use of Cake Application to Improve Speaking Skill" found that, the majority of learners confirmed using the CAKE App provided them with more chances for developing

their speaking abilities, they were interested in using the Cake application to improve their speaking abilities. This application provides an interactive platform that engages students in practicing pronunciation improving accuracy, intonation, and rhythm when speaking English. Moreover, easy access to pronunciation exercises through the CAKE mobile app anytime, anywhere provides additional incentives for students to improve their English language skills continually. Thus, research findings show that CAKE is an effective and beneficial tool in helping students enhance their English-speaking skills through an interactive and engaging approach.

While some studies have emphasized the advantages of utilizing the CAKE App to enhance English-speaking skills, additional research is necessary to fill this gap in research. Identifying the implementation challenges of the CAKE App in the educational setting requires a comparison between its use and conventional teaching methods. Furthermore, the degree to which this technology contributes toachieving student learning objectives in specific contexts needs to be assessed. Therefore, the utilization of the CAKE App in English language learning to enhance students' speaking skills requires further investigation through this research.

This study involves eleven-grade students at SMA N 1 Kubutambahan and aims to address gaps in previous research by reexamining the same phenomenon at the senior high school level. SMA N 1 Kubutambahan was selected as the research focus to enhance our understanding of independent learning curriculum implementation, students' motivation levels, and English language learning abilities among sixth-grade students, along with potential solutions using educational technology, specifically the "CAKE Application."

The research seeks to uncover the impact of the CAKE Application on enhancing students' speaking abilities and to understand its effectiveness in English language learning. The research findings are anticipated to offer valuable insights into technology's potential to improve speaking abilities, particularly at the eleven-grade level in SMA N 1 Kubutambahan. Through this innovative educational technology, the CAKE Application could address language learning challenges in the current era of globalization and the information technology revolution.

The study will apply the Triple E approach to assess the CAKE Application's impact on students' speaking abilities. The Triple E approach prioritizes achieving student learning goals as a measure of technology success. Therefore, the research will focus on how the application assists students in achieving their goals and their motivation to learn English speaking skills. This research aims to bridge existing knowledge gaps and provide insights into technology use in the context of English language learning in SMA N 1 Kubutambahan. Consequently, it is expected that this study will enhance our understanding of the effectiveness of implementing the "CAKE Application" to enhance students' speaking abilities in SMA N 1 Kubutambahan.

1.2   Problem identification of Study

Researchers identified that grade 11⁻9 students at SMA N 1 Kubutambahan, experienced difficulties in English lessons, especially in pronounciation, and the scores they achieved this year were below the KKM determined by the school, many students only scored below 75. Speaking problem in education involve challenges and obstacles faced by students and educators in developing effective speaking skills. Speaking is one of the essential communication skills in the

teaching and learning process, as it enables students to interact with teachers and classmates and articulate their understanding and ideas. Through this problem the researcher takes the initiative to use an AI-based application to solve this issue, considering that AI can assist or facilitate students in acquiring knowledge. AI has a significant impact on the field of education, so the researcher is using an AI application to solve this problem, specifically in enhancing students' speaking abilities, using the Cake application.

In conclusion, the integration of technology with Kurikulum Merdeka is essential for creating meaningful and relevant learning experiences. It not only enhances education quality but also prepares students for the complexities of the future. Previously there have been several innovations made by several people that make it easier for students to learn to speak in English, such as by reading books, making examples of conversations using English, but not effective, so in this era of globalization using learning technology will improve and help students in the learning process, and one of them is by using cake application through triple E rubric.

1.3   Limitations of study

So in this limited time, researchers focused on implementing the use of cake application as an effort to improve the speaking skills of grade 11-9 students at SMA N 1 Kubutambahan. The purpose of this study is to analyze and evaluate the impact of using cake applications, and analyze student perceptions during learning, from this study researchers hope to prove the impact of using cake applications in English language learning.

1.4 **Research question**

Based on the research background has been describe, the author purposes some of the research problem in the following:

1. Can CAKE application improve speaking pronounciation of 11-9 grade in SMA Negeri 1 Kubutambahan?

2. How do teacher integrate CAKE Application viewed from triple E rubric?

3. How do of 11-9 grades students SMA N 1 Kubutambahan extend the use of CAKE app outside of school?

1.5 **Research objectives**

1. To assess the effectiveness of the CAKE Application in improving the pronunciation skills of 11-9 grade students at SMA N 1 Kubutambahan.

2. To identify and analyze the integration of the CAKE Application by teacher based on the Triple E rubric.

3. To examine how 11-9 grade students at SMA N 1 Kubutambahan extend the use of the CAKE Application outside the classroom and its impact on their learning

1.6 **Significance of the Study**

This study aims to offer valuable insights and practical benefits for teaching and learning English. The author hopes that through this research, they can make a significant impact both in theory and practice.

1.6.1 **Theoretical significance**

This study represents a significant advancement in technology-based learning, particularly in the realm of English language education. By examining

students' perceptions and attitudes toward the AI-driven CAKE Application, the research contributes to a better understanding of how technology integration can enhance the learning process. It also offers practical insights into utilizing AI-based learning applications to improve pronunciation and speaking skills. The findings of this study can be used as a framework for educators and language instructors to create more engaging and relevant learning experiences tailored to students' needs. Additionally, by understanding students' perceptions and motivations in using the CAKE Application, the research sheds light on the factors that influence student engagement in technology-driven learning, helping to create a supportive and motivating learning environment that encourages active participation

1.6.2   Practical Significance

Practically, this research was conducted to provide valuable insights and benefits for students, English teachers, and other researchers.

a) Students:

This study has significant practical implications for language learners at all levels and in various educational settings. Through the adoption of innovative technology-driven teaching methods like the CAKE Application, learners can engage in more interactive, stimulating, and effective language learning experiences. This app can help improve speaking skills and overall communication abilities. Additionally, the availability of technology-based learning tools allows learners to practice language skills anytime, anywhere, thereby enhancing the accessibility of language education. Learners can participate without being limited by constraints of time and location. The

ability to adjust the learning pace based on individual comprehension levels and needs can also enhance learning efficiency for learners.

b) English teacher:

This study offers valuable insights into the integration of innovative technology-driven teaching methods for English teachers. Utilizing learning apps such as CAKE can enable teachers to create more engaging and relevant learning environments for their students. As a result, technology can increase student engagement in language learning and facilitate a more positive learning atmosphere. Moreover, the use of technology-based tools allows teachers to collect and analyze student learning data more effectively. This data can help teachers identify individual student needs and tailor teaching strategies accordingly, thus enhancing the overall effectiveness of the teaching process.

c) Future Research:

While this study contributes to the understanding of AI technology in language learning, future research could explore other aspects of AI implementation across various educational fields. Subsequent studies could investigate AI technology in language learning beyond English and its application in other academic subjects and skills. Furthermore, research could expand its sample scope and geographical coverage to provide a more comprehensive understanding of the effectiveness and applicability of AI-based learning technologies. By including a diverse range of participants from various backgrounds, research can offer a more representative insight

into the benefits and challenges of utilizing AI learning apps. Future research could also examine how AI technology can enhance social and collaborative interactions in language learning. Exploring AI-based applications that promote student collaboration and discussion could be an interesting area of study to support effective and inclusive language learning in diverse educational context.

1.7 Definition of Key Terms

1.7.1 Speaking

1. Conceptual definition

    Speaking is the main way for students to convey ideas, interact with others, and participate in the teaching and learning process Brown (2001). In a modern curriculum that focuses on communication, speaking ability is an important point that is given serious attention by educators. Speaking skills not only affect verbal communication skills, but also the social, emotional, and cognitive development of students. By speaking, students can learn to convey their thoughts and feelings appropriately, understand other people's perspectives, and collaborate in teams.

2. Operational Definition

    In this study, speaking is defined as the ability of 11-9 grade students at SMA N 1 Kubutambahan to use English effectively. This ability is measured through their scores on speaking and

pronunciation tests given after they have learned to use the Cake application integrated with technology.

1.7.2 Cake application

A. Conceptual definition

According to Octavianita (2022) mentions Cake application is one of the forms of technology that is used in the education sector, to learn how to speak English in a classroom setting. TheCake application is an application based on artificial intelligence(AI) that is used to help users learn to speak foreign languages, especially English. The app provides a variety of interactive features, such as voice recognition, speaking practice, speaking ability assessment, and adaptive learning

b. Operational definition

Cake application is operationally defined as an application- based learning media equipped with videos and conversation simulations. Cake application have a interesting feature, one of the features is

speaking test, In this application there is also AI system can help students or users to practice speaking