

CHAPTER I

INTRODUCTION

A. Background of the Problem

Achieving English proficiency necessitates a pedagogical approach that is meticulously designed to cultivate all four language skills: listening, speaking, reading, and writing. Of the four skills, speaking poses the most significant challenge for students, as it encompasses pronunciation, fluency, confidence, and the capacity to articulate ideas spontaneously. In such cases, a learning approach that is both theoretical and practical is essential. This approach should provide both intensive and enjoyable practice, thereby facilitating the acquisition of the desired skills and knowledge. As technology advances, various digital innovations have emerged that can be utilized to support the speaking learning process. One such innovation is the application of artificial intelligence (AI). AI technology provides interactive media, personalized learning, and instant feedback, thereby allowing students to practice speaking in a more flexible and adaptive environment.¹

English language proficiency is no longer merely a valuable asset but has become a fundamental necessity, especially in facing global

¹ Eva Meidi Kulsum and others, 'A Study on the Difficulties in English Speaking for EFL Students', *Journal on Education*, 7.2 (2025), 10648–59 <<https://doi.org/10.31004/joe.v7i2.8109>>.

challenges that demand cross-cultural communication skills. English serves not only as a means of international communication but also as a crucial foundation for students' academic and personal development. In the context of implementing the Independent Curriculum, English language proficiency has become an integral part of the Pancasila student profile, which is oriented toward global competence and lifelong. Therefore, innovative learning strategies are needed to enable students to actively master English language skills, particularly speaking, which has historically been the most challenging aspect and requires a more interactive and contextual approach.

However, in practice, developing students' speaking skills still faces various challenges. Many students struggle to speak English due to low self-confidence and fear of making mistakes. Furthermore, opportunities to practice speaking outside of class are very limited, preventing these skills from being optimally developed. Furthermore, time constraints and the limited number of students in a class make it difficult for teachers to provide intensive support to each individual. This situation is exacerbated by the lack of interactive learning media that can support independent and ongoing speaking practice. Therefore, learning innovations are needed to address these challenges, one of which is the use of artificial intelligence

(AI) technology designed to support the development of speaking skills in a personalized, flexible, and effective manner.

One potential solution to the challenges associated with learning to speak is the use of artificial intelligence (AI)-based technology. The role of artificial intelligence (AI) in education has seen a marked increase in recent years, as it has begun to play a significant role in providing flexible and interactive learning media that are not dependent on the physical presence of teachers. Recent studies have demonstrated the potential of artificial intelligence (AI) to enhance learning through intelligent tutoring systems, game-based learning applications, and adaptive educational software. These technologies can function as supplements or complements to classroom instruction, thereby promoting a holistic learning environment. These innovations enable students to experience personalized learning and real-time feedback, both of which are critical for developing speaking skills more effectively.²

The ability of AI to provide immediate feedback is a significant added value in the speaking learning process, as students do not have to wait for assessment from teachers to find out their mistakes. With instant correction, students can immediately improve their pronunciation,

² Christopher Nouhan, Noah Scott, and James Womack, 'Emergent Role of Artificial Intelligence in Higher Education', *IEEE Technology Policy and Ethics*, 6.3 (2022), 1–5 <<https://doi.org/10.1109/ntpe.2021.9778094>>.

sentence structure, and fluency in speaking. In addition, the use of AI allows students to practice anytime and anywhere, thereby encouraging active engagement outside of formal class hours.³

The application of this technology has begun to be introduced in various schools, including SMP Mutiara Bangsa 7 School. At this school, only a few students have used various AI-based applications to help them improve their English speaking skills, but they have not yet mastered them completely. The use of Elsa Speak has become part of their independent learning process. Through a case study of students' experiences at the school, this research aims to explore how ELSA Speak impacts students' motivation, self-confidence, and English speaking abilities. The findings from this exploration are expected to provide concrete insights into the effectiveness of ELSA Speak use in language learning, particularly in the speaking aspect at the middle school level.

The utilization of ELSA Speak in this study is predicated on its capacity to facilitate the development of students' English-speaking skills, particularly their pronunciation, fluency, and confidence. ELSA Speak, an artificial intelligence-based application, utilizes Automatic Speech Recognition (ASR) technology to provide immediate and personalized

³ Vina Yuniar and others, 'Optimalisasi Pembelajaran Keterampilan Speaking Bahasa Inggris Melalui Kombinasi Strategi Daring Dan Luring', 508–16.

feedback on students' pronunciation accuracy. This feature enables students to identify errors in their speech and to enhance their performance independently, without the apprehension of making mistakes in front of others. Furthermore, ELSA Speak provides flexible learning opportunities that enable students to practice speaking at any time and in any place, which is especially beneficial for EFL learners with limited exposure to English outside the classroom. Consequently, the integration of ELSA Speak is anticipated to foster a conducive and interactive learning environment, thereby motivating students to engage in more frequent and assured spoken language practice.

Although the use of AI in English language learning continues to grow, studies that specifically highlight the experiences of junior high school students, particularly in speaking skills, are still limited. Most existing research tends to focus on the technical aspects or the effectiveness of the learning tools themselves, rather than on how students experience and respond to the use of such technology in the context of daily language practice. Sayit Abdul Karim (2023) concludes that ELSA Speak effectively supports speaking development but also highlights the need to address internal and external challenges to maximize its benefits. Muhammad Fauzi, Ryan Purnomo (2025) concludes that ELSA Speak is effective as a supporting medium in English language learning, especially

for improving students' pronunciation skills. However, the perspectives and direct experiences of students are crucial for understanding to what extent AI technology truly helps them improve their speaking skills.

The lack of studies exploring students' perceptions of comfort, motivation, and challenges when using AI-based applications in speaking learning indicates a gap that needs to be filled through further research. Therefore, it is important to conduct an in-depth exploration of students' experiences in using ELSA Speak as part of the English speaking learning process, particularly in the context of SMP Mutiara Bangsa 7. This study aims to address this need by using SMP Mutiara Bangsa 7 School as a concrete case study to directly observe how students perceive the benefits, challenges, and the impact of AI on the development of their speaking skills.

B. Problem Identification

Based on the background described above, the following problems can be identified:

1. Students' english speaking skills remain low due to limited learning time in class, lack of active practice outside the classroom, and difficulties in achieving fluency.

2. Students lack confidence in speaking English, especially when they have to speak in public or with foreign speakers.
3. Limited opportunities for students to receive individual guidance from teachers in speaking practice, due to an unbalanced student-teacher ratio and learning time.

C. Scope and Limitations of The Study

In order to make the discussion in this study more focused and in-depth, the scope of the study is limited to the following:

This study examines the use of artificial intelligence (AI) technology by students at Mutiara Bangsa 7 School specifically in learning English speaking skills. It focuses solely on speaking, excluding other language skills like reading, writing, or listening. The AI tools analyzed ELSA SPEAK. The research involves students who have direct experience using ELSA SPEAK for speaking practice and employs a case study approach, making the findings contextual rather than generalizable to other schools or educational settings.

D. Research Questions

What is the experience of students at Mutiara Bangsa 7 School in using artificial intelligence (AI) technology to improve their English-speaking skills?

1. What are the experiences of students at Mutiara Bangsa 7 School in using ELSA SPEAK app to improve their English-speaking skills?
2. How does ELSA SPEAK helps students overcome obstacles in speaking skills, such as pronunciation, confidence, and fluency?
3. What are the students' perceptions of the effectiveness of using AI in developing English speaking skills?

E. Purpose of The Study

This study aims to:

1. Describe the experiences of students at Mutiara Bangsa 7 School in using artificial intelligence (AI) technology to improve their English-speaking skills.
2. Analyze the role of AI in helping students overcome speaking skill barriers, such as pronunciation difficulties, lack of confidence, and fluency in speaking.
3. Reveal students' perceptions of the effectiveness of using AI in developing English speaking skills.

F. Benefits of Writing

This thesis is expected to provide both theoretical and practical benefits, as follows:

1. Theoretical Benefits

- a. To broaden knowledge and scientific studies related to the use of artificial intelligence (AI) technology in language learning, particularly in the development of English-speaking skills.
- b. Contribute to English language education literature that focuses on the integration of technology in the teaching and learning process.
- c. Serve as a basis for further research that seeks to develop or evaluate the effectiveness of AI use in an educational context.

2. Practical Benefits

- a. For Teachers: Providing information and inspiration regarding alternative strategies for learning English that are more interactive and adaptive through the use of AI technology.
- b. For Students: Encouraging motivation and confidence in learning speaking skills through technology-based learning media that can be used independently.
- c. For Schools: Providing input in the development of curricula or learning programs that are relevant to the needs of the 21st century, particularly in foreign language proficiency.

- d. For Educational Technology Developers: Providing empirical data related to user experience among students in using AI applications for language learning.

G. Previous Study

The first previous study is according to Siti fatimah imron (2024). With the title THE INFLUENCE OF ELSA SPEAK APPLICATION TO IMPROVE STUDENTS' SPEAKING SKILL: A PROJECT BASED LEARNING. Based on these documents, the main objective of this study is to determine the effect of using the ELSA Speak application on improving students' speaking skills and to find out their perceptions of using the application. The results of the study show that using the ELSA Speak application can significantly improve students' English-speaking skills. This is evidenced by an increase in the average pre-test score from 39.17 to 56.33 on the post-test, as well as a t-test value that shows significance (sig. (2-tailed) = 0.000 < 0.05). In addition, most students responded positively to the use of this application and considered it to be good and helpful in the process of learning to speak.

The second previous study is according to Salsabila yulmania (2024). With the title Investigating English as Foreign Language (EFL) Learners' Pronunciation Learning Experience Using Elsa Speak Application. Based on the contents of the thesis, the purpose of this study is to investigate the

learning experience of English pronunciation as a foreign language (EFL) using the ELSA Speak application and to find out what aspects of pronunciation are supported by the application. The results of the study show that users have positive experiences, such as learning flexibility, immediate feedback, and animation features that help them understand correct pronunciation. However, they also face obstacles such as limited access, the ELSA system sometimes being unable to detect the user's voice, and the need for a stable internet connection. Overall, ELSA Speak has been proven to support the development of users' pronunciation skills in terms of vowels, consonants, word stress, and intonation. This study recommends that the use of this application can be an effective learning medium for improving the English pronunciation of EFL learners.

The third previous study is according to sayit abdul karim, Annisa qotrunnada sofyana hamzah, nasywa maudyna aanjani, Juani prianti, Irene gabriella sihole (2023). With the Promoting EFL Students' Speaking Performance Through ELSA Speak: An Artificial Intelligence In English Language Learning. The purpose of the research is to examine the impact of the ELSA Speak application, an AI-based speech learning tool, on EFL students' speaking performance, perceptions, and the inhibiting factors affecting their speaking abilities. Specifically, the study aims to evaluate how ELSA Speak enhances students' pronunciation,

speaking confidence, and motivation, as well as to identify challenges that hinder their speaking progress. The results of the research indicate that using ELSA Speak significantly improves students' speaking abilities, pronunciation, and self-confidence. Quantitative data showed that most students felt more confident (90%) and perceived that their speaking performance increased (80%). Their post-test scores improved notably, with 62% categorized as very good in speaking performance after using the app. Moreover, 95% of respondents perceived that ELSA Speak boosted their motivation, and 90% believed the application had a good quality design. However, some inhibiting factors were identified, such as low vocabulary mastery, lack of practice, low motivation, and insecurity, which limited further progress despite the app's benefits. The study concludes that ELSA Speak effectively supports speaking development but also highlights the need to address internal and external challenges to maximize its benefits.

The fourth previous study is according to Pingky widyasari, Anamaghfiroh (2023). With the title *The Advantages of Artificial Intelligence Elsa Speak Application for Speaking English Learners in Improving Pronunciation Skills*. The purpose of this study is to explain the advantages of using the ELSA Speak application for English learners, particularly in improving pronunciation skills, and to compare it with

other similar applications. This study uses a literature review method from 10 articles published between 2019 and 2023. The results show that ELSA Speak is an artificial intelligence-based application with Automatic Speech Recognition (ASR) technology that can provide immediate feedback on pronunciation accuracy with up to 90% accuracy. This application also provides more than 1,200 lessons with 60+ topics, equipped with an interactive dictionary, and assessments that cover pronunciation, fluency, intonation, word stress, and listening skills. Compared to 14 other pronunciation apps, ELSA Speak has proven to be the most comprehensive and effective, as it provides more practice opportunities and increases student motivation. As such, ELSA Speak is considered one of the best apps in the world for helping English learners improve their pronunciation, accuracy, fluency, and engagement in learning.

The fifth previous study is according to Muhammad Fauzi, Ryan Purnomo(2025). With the title *The Effectiveness of Elsa Speaking Application for Enhancing Pronunciation in English Language Learners*. The purpose of this study was to determine the effectiveness of the ELSA Speaking application in improving junior high school students' English pronunciation skills, particularly in terms of articulation, accuracy, and communicative competence. The study used a one-group pretest-posttest

design, and the results showed a significant improvement, with the average pretest score of 21.00 increasing to 25.79 on the posttest, and the t-test results indicating that the difference was significant at the 0.05 level. In addition, students also reported an increase in motivation, engagement, and confidence thanks to the real-time and interactive feedback features provided by the application. Thus, this study concludes that ELSA Speak is effective as a supporting medium in English language learning, especially for improving students' pronunciation skills.

The sixth previous study was conducted by Putri Amalia & Dwi Santoso (2023) entitled *The Use of ELSA Speak Application to Improve EFL Students' Pronunciation Accuracy*. This study aimed to examine how ELSA Speak contributes to improving students' pronunciation accuracy, particularly segmental sounds. The research employed a quasi-experimental method involving pre-test and post-test. The findings revealed a significant improvement in students' pronunciation accuracy after using ELSA Speak. Students also reported that immediate feedback and visual pronunciation scoring helped them recognize and correct their errors effectively.

The seventh previous study was carried out by Rahmawati (2022) entitled *Students' Perception toward the Use of Artificial Intelligence-Based Application in Learning Speaking*. This qualitative study explored

students' perceptions of AI-based speaking applications, including ELSA Speak. The results indicated that students perceived ELSA Speak as motivating, flexible, and helpful in improving confidence and pronunciation. However, technical issues such as internet dependency and limited free features were identified as challenges.

The eighth previous study was conducted by Hidayat & Nurhasanah (2024) entitled *Artificial Intelligence in EFL Speaking Classroom: Opportunities and Challenges*. This study aimed to analyze the opportunities and challenges of integrating AI tools in EFL speaking classrooms using a descriptive qualitative approach. The findings showed that AI applications such as ELSA Speak support autonomous learning, pronunciation practice, and learner confidence. Nevertheless, teacher guidance and pedagogical integration were still required to maximize learning outcomes.

The ninth previous study was conducted by Lestari & Prabowo (2023) entitled *Improving Students' Speaking Fluency through AI-Assisted Language Learning*. Using a mixed-method approach, this study investigated the impact of AI-assisted applications on students' speaking fluency. The results showed that students experienced improvements in fluency, pronunciation, and confidence. Interview data also revealed that

students felt more comfortable practicing speaking with AI tools than speaking directly in front of peers.

The tenth previous study was conducted by Yusuf & Kurniawan (2024) entitled *Teachers' Perspectives on the Use of ELSA Speak in English Speaking Instruction*. This qualitative study focused on teachers' perspectives regarding the use of ELSA Speak in speaking instruction. The findings revealed that teachers viewed ELSA Speak as an effective supplementary tool for pronunciation practice and formative assessment. However, they emphasized the importance of combining the application with classroom interaction and communicative activities.

Table 1.1 Table comparison

No	Author & Year	Title	Research Focus	Method	Key Findings
1	Imron (2024)	The Influence of ELSA Speak Application...	Speaking skill & perception	Quantitative	Significant improvement in speaking skills
2	Yulmania (2024)	Investigating EFL Learners' Pronunciation	Pronunciation experience	Qualitative	Positive experience & pronunciation

		...			support
3	Karim et al. (2023)	Promoting EFL Students' Speaking Performance...	Speaking, confidence, motivation	Mixed-method	Increased confidence & motivation
4	Widyasar i & Maghfiro h (2023)	The Advantages of AI Elsa Speak Application...	Advantages of ELSA Speak	Literatur e review	Most comprehensive pronunciation app
5	Fauzi & Purnomo (2025)	The Effectiveness of Elsa Speaking Application...	Pronunciati on effectiveness	Quantitat ive	Significant pronunciation improvement
6	Amalia & Santoso (2023)	The Use of ELSA Speak Application...	Pronunciati on accuracy	Quasi-experime ntal	Improved pronunciation accuracy
7	Rahmawa ti (2022)	Students' Perception toward AI-	Students' perception	Qualitati ve	High motivation & confidence

		Based Application...			
8	Hidayat & Nurhasanah (2024)	AI in EFL Speaking Classroom...	Opportunities & challenges	Qualitative	Supports autonomy & confidence
9	Lestari & Prabowo (2023)	Improving Speaking Fluency through AI...	Speaking fluency	Mixed- method	Improved fluency & comfort
10	Yusuf & Kurniawan (2024)	Teachers' Perspectives on ELSA Speak...	Teachers' perception	Qualitative	Effective as supplementary tool

Based on the comparison of previous studies, it is evident that most studies focused on measuring learning outcomes or students' perceptions using quantitative or mixed methods. Only limited studies explored the learning process in depth from both students' and teachers' perspectives within a specific school context. Therefore, a qualitative case study is needed to explore how ELSA Speak is implemented in real classroom

practice and how it contributes to the development of students' speaking skills.

H. Research Methodology

This study uses a qualitative approach with a case study design. This approach was chosen because the study aims to explore in depth the experiences of students in using ELSA SPEAK to develop English speaking skills, as well as to explore their perceptions, and the impact of its use in the context of real learning in schools.

1. Location and Subject of Research

This study was conducted at SMP Mutiara Bangsa 7 School. The research subjects were students who had used AI-based applications in English language learning, particularly for speaking skills. The subjects were selected using purposive sampling, taking into account the students' active involvement in the use of AI technology.

2. Data Collection Techniques

Data was collected through the following techniques:

- a. In-depth interviews with students to explore their experiences, perceptions, and challenges in using AI for speaking learning.

- b. Observation of student activities while using AI applications to practice speaking English.
- c. Questionnaires to collect data on students' perceptions of the use of the ELSA Speak application in speaking learning.
- d. Documentation in the form of screenshots, notes on application usage, or interaction logs in the AI platform, if available.

3. Data Analysis Techniques

The collected data were analyzed using thematic analysis techniques, namely by grouping the data based on themes relevant to the research focus, such as the benefits of using AI, obstacles faced by students, and its impact on speaking skills. The analysis process was carried out through the stages of data reduction, data presentation, and conclusion drawing.

4. Data Validity

To ensure data validity, triangulation techniques were used, namely comparing data from interviews, observations, and documentation. In addition, member checking was also carried out, namely confirming the researcher's interpretation of the results to the participants to ensure that the data obtained was in accordance with their experiences.

I. Systematic Discussion

1. CHAPTER I: INTRODUCTION

This chapter contains the background of the problem, problem formulation, research objectives, research benefits, problem identification, problem limitations, conceptual framework, research methodology, and discussion structure. This chapter explains the reasons and basis for selecting the topic as well as the direction and scope of the research.

2. CHAPTER II: LITERATURE REVIEW

This chapter outlines the theoretical basis and previous studies relevant to the research. Some of the topics discussed include: the concept of artificial intelligence in education, English speaking skills, technology-based learning approaches, language learning theories, and interactive learning media. In addition, previous research results are also presented as comparisons and to reinforce the analysis.

3. BAB III: METHODOLOGY OF RESEARCH

This chapter describes the methods used in the research, including the type and approach of the research, the location and time of the research, the subjects and objects of the research, data

collection techniques, data analysis techniques, and efforts to maintain data validity.

4. CHAPTER IV: RESEARCH RESULTS AND DISCUSSION

This chapter presents findings from field research related to students' experiences using AI in speaking learning. The data were analyzed and discussed based on main themes such as the types of AI used, students' perceptions, the impact on speaking skills, and the challenges faced by students. The discussion is also linked to previous theories and research.

5. CHAPTER V: CONCLUSION

This chapter contains conclusions from the research results and recommendations addressed to relevant parties, such as teachers, students, and educational media developers. The conclusions are based on the objectives and problem statements outlined earlier.