


Students' Perception of Using ELSA Speak to Improve Pronunciation Skills

 <https://doi.org/10.31004/jele.v10i5.845>

Risti Raffa Muralia, Musdizal^{ab} 

¹²Tadris Bahasa Inggris, Institut Agama Islam Negeri Kerinci, Indonesia.

Corresponding Author: mauraliaa26@gmail.com

ABSTRACT

Pronunciation is crucial while learning English, yet many students struggle to get it right. ELSA Speak and other language learning applications offer self-paced, artificial intelligence-powered pronunciation at one of the Islamic institutes in Jambi. A qualitative descriptive approach was utilized, interviewing five pupils. The findings show that users valued the app's real-time feedback and phonetic comparison capabilities, which helped them, discover and correct pronunciation mistakes. While most students felt more secure speaking informally, confidence in formal circumstances remained low due to chronic worry. Despite technical limitations, such as problems detecting particular vowel sounds, users considered the app helpful in constantly practicing pronunciation. The study finds that ELSA Speak effective in boosting pronunciation, while other treatments may be needed to address speaking anxiety in formal situations.

Keywords: *ELSA Speak, Pronunciation, Language Learning, Feedback, Confidence.*

Article History:

Received 25th April 2025

Accepted 05th October 2025

Published 08th October 2025



INTRODUCTION

In today's interconnected world, proficiency in English is referred to as an indispensable skill, especially for learners who study it as a foreign language (EFL). Learners incorporate vocabulary and grammar learning. These can as well be paired with speaking. A vital part is also placing the correct varying of sounds to words, that is, pronunciation. Subtle changes in accents or stress on syllables can distort the intended meaning being conveyed, a phenomenon that makes correct pronunciation very crucial in communication. Having intellect but not being able to express it in proper language leads to great misunderstanding comported to when being properly understood. Miscommunication can occur without effective perception and intention as articulation of concepts.

Pronunciation is one of the most basic skills in teaching English and has a profound impact on learners. The ability to speak English correctly is very important as incorrect pronunciation can lead to wrong ideas and understanding. It is necessary for learners to be able to produce English sounds properly as this enables effective communication. Research shows that pronunciation is crucial for being understood. (Derwing and Munro, 2005) report that students who pronounce words correctly are regarded as having higher abilities and skill. (Saito, 2011) shows that the teaching of pronunciation enhances clarity of spoken English. (Field, 2005) emphasizes the role of phonological knowledge in achieving clearer pronunciation. The combination of pronunciation with other skills increases overall communicative efficiency (Trofimovich and Isaacs, 2012). (Levis, 2005) argues the teaching of suprasegmental features (stress and intonation) together with segmental elements (individual sounds) increases intelligibility.

There are a number of problems with the pronunciation teaching and learning at one of the Islamic institutes in Jambi, especially for teachers who need to motivate learners to change their pronunciation. The instructors are mostly concerned with the differences in students'

pronunciation competencies, the lack of resources for their enhancement, and the time limitations for advanced training. Regardless, the advancement in smartphone technologies has enabled students to take advantage of a wide array of tools and programs, especially learning English. There are now many applications available that assist with pronunciation. ELSA Speak is a reliable educational tool designed for self-learning; it offers personalized and engaging lessons to effectively enhance students' pronunciation skills.

According to (Muamar et al. 2022), ELSA Speak is an application that aids in mastering a language by improving their grammar and vocabulary through sophisticated voice synthesis technology. This training is likely to have a major impact on talking skills, especially pronunciation. Among the best tools for learning the English language is the English learning speech assistant, or ELSA. ELSA appears to take advantage of modern artificial intelligence technology to enhance English Word pronunciation skills, in (2015) by Vu Van in San Francisco, California. ELSA speaks uses AI technology to enhance users' mastery of English word pronunciation. Users with poor pronunciation can now benefit from ELSA speak because, at more than 95% accuracy, ELSA can point out the words that are mispronounced and give useful feedback for improvement. This attribute is what makes ELSA Speak stand out amongst other learning applications and poses a great advantage for learners who wish to articulate words correctly and accurately. ELSA Speak program enables users to clearly understand consonance problems by emphasizing the correct way that every word is pronounced making it free from mispronunciation challenges. ELSA Speak aims, particularly, at helping learners speak and pronounce English words with precision and accurately. With its features and user-friendly design, it eases mastery of English and aids its learners for enhanced performance.

Use of the ELSA Speak application has been proven to improve students' English-speaking skills, especially in pronunciation accuracy, attending to their needs in a constructive manner. However, some students due to a lack of comfortable technological proficiency face difficulties in engaging with the application because of no human instructor interaction (Hasbi & Nursaputri, 2024). The ELSA Speak application is beneficial for teaching English as a foreign language because it helps learners enhance their English-speaking abilities, especially pronunciation accuracy. Some students are not able to fully engage with the application due to their insufficient technological skills, and its lack of actual instructor interaction predisposes them to receive no help in addressing their specific pronunciation challenges (Anes, Syafrizal, & Nugraha, 2023).

AI-driven pronunciation improvement tools such as ELSA Speak have already been incorporated into the English learning process of some fourth semester students at one of the Islamic institutes in Jambi. As an interactive voice program, ELSA utilizes advanced AI technology to give students feedback and assist with exercises tailored to their specific needs. Students have reported that ELSA Speak has been beneficial for self-study, especially concerning self-silencing and pronunciation. However, there has been no research to examine how students perceive ELSA Speak at one of the Islamic institutes in Jambi. Most fourth semester students at one of the Islamic institutes in Jambi are already familiar with ELSA Speak and have utilized it multiple times to aid with English pronunciation lessons, but no systematic research has been conducted on their perception of the usability, effectiveness, or application challenges of ELSA Speak. These reasons brought the researcher to try to understand better the student's perception of using ELSA Speak to enhance their pronunciation skills.

The aim of this replication study is to assess student's sentiments towards the ELSA Speak app and its role in assisting them with the correct pronunciation of English words. The study focuses on the app's incorporation into English teaching, its effectiveness, and learners' perceptions regarding its role in speech and pronunciation improvement. The study analyzes the features of the app to understand how it assists learners in developing their confidence as speakers and improving their pronunciation skills. The research highlights the benefits of technology, especially artificial intelligence, in customized instruction in learning through ELSA Speak, particularly with regard to pronunciation. One of the limitations noted in the

study is the application of artificial intelligence which could not detect the intricacies of pronunciation nor provide a novel interface compare to traditional methods involving human instructors. Other challenges to the use of ELSA Speak in the classroom as a primary instructional aid include the diverse ways student's process information and the lack of social interaction with students using the app. Despite this, the study underscores the important contribution technology can have on learning and improving pronunciation when integrated with traditional teaching approaches.

In a classroom setting, the learners' ability to communicate utilizes pronunciation, which makes it as important as other aspects of a second language. Intelligibility in pronunciation, according to (Derwing and Munro ,2005), does far more than uttering a sound correctly, as achieving fluency and being understood by a native speaker is crucially important. Pronunciation, unlike other language skills, has received scant attention in teaching syllabi in spite of its importance to communicative competence.

The advancement of technology makes the role of speech instruction more important with applications such as ELSA Speak that allow learners to get real-time feedback for self-pronunciation. (Godwin-Jones, 2009) claims that the inclusion of speech recognition technology into language learning has been revolutionary. Such technologies allow learners to be given differentiated feedback addressing their individual gaps. Through these programmes, learners without regular access to native speakers, classrooms and formal instruction structures are able to improve their learning outcomes significantly.

The research conducted by (Saito, 2012) deepens the discussion on the application of form-focused instruction in L2 pronunciation teaching. A form-focused approach addresses phonetic discrimination problems for a given learner by providing sound exercises, for example, the /ɪ/ sound in English. ELSA Speak and other ASR-based programs provide this kind of practice as they enable learners to target problem sounds and receive instructional feedback. This technique enhances learners' pronunciation by giving adequate and prompt feedback concerning the speech changes that are needed.

In addition, the existence of mobile applications enhances the attractiveness of using ASR tools for pronunciation practice. Both ELSA Speak and other mobile applications enable learners to practice at their own pace and in a stress-free environment, both of which are essential for confidence building and anxiety reduction. Moreover, the reward earning and challenges completion features of these apps add game elements which improve the chances of motivation sustaining towards practice. Despite the advantages, ASR systems also have their shortcomings. (Godwin-Jones, 2009) states that these systems can capture a myriad of pronunciation errors; however, they may not take into consideration the difficulties of regional and non-native accents. This understanding highlight that while tools such as ELSA Speak offer valuable individualized feedback, they are designed to complement—not replace—traditional methods of teaching phonetics and pronunciation.

METHOD

Research Design

This study employs a qualitative descriptive approach which is ideal for capturing in detail as well as comprehensively, the experiences, views, and perceptions of participants. A qualitative approach best suits the study's focus on how students use the ELSA Speak application to enhance their English pronunciation because it allows a rich, nuanced understanding of the phenomenon, this design approaches the description of participant's experiences to avoid being filtered through any theoretical lens biases. In this way, this approach guarantees that conclusions drawn are truly based on the data by providing a simple and direct, yet thorough account of the findings.

Respondents

The study participants included five students from the English education program at one of the Islamic institutes in Jambi who were selected through purposive sampling, which is a method where participants are selected according to certain attributes important to the

research question (Palinkas et al., 2015). These students were chosen because they had prior experience using the ELSA Speak application to improve their English pronunciation. The in-depth nature of the study is reflected in the small sample size, emphasizing the value of depth over breadth (Creswell, 2013).

The participants have different levels of English proficiency from intermediate to advanced which guarantees a variety of opinions on the app's effectiveness. All of the participants were active students who had prior experience with educational technology, particularly language learning applications. This suggests that they were adept and skilled users of these tools pedagogically.

Instruments

For this study, primary instrument for data collection was semi structured interviews. As noted previously, semi structured interviews are a common form of data collection in qualitative studies as they allow freedom without losing focus on the important themes of the study, they are flexible. In the opinion of (Klave, 2007), this approach provides an ideal blend between liberty and guidance as it allows sufficient exploration while capturing the response to all major questions set out within the research. I conducted the interviews with the use of open-ended questions so that the interviewees could give full and critical answers. The interview questions were designed to explore the following core areas: 1) what is your experience using the ELSA Speak application to improve your English pronunciation? This question serves as an introductory inquiry, encouraging participants to reflect on their overall experience with the application. 2) What do you find to be the most effective aspect of the application in helping improve your pronunciation? This question probes participants to identify the most beneficial features of the app for improving their pronunciation. 3) Do you feel an increase in your confidence when speaking English after using ELSA Speak? The question examines whether the application has helped boost participant's confidence, which is a crucial aspect of language learning. 4) Did you face any challenges or difficulties while using this application? If so, what were the most significant challenges? This question identifies any obstacles or limitations participants encountered while using app. 5) to what extent did the feedback provided by the application help you improve your English pronunciation? This question assesses the effectiveness of the feedback system, a core feature of the application, in improving pronunciation.

The questions were designed to encourage participants to share detailed, narrative responses about their experiences with the ELSA Speak app, offering insight into both the benefits and challenges of using tool.

Procedures

Data gathering commenced after all participants provided informed consent. The researcher outlined the study objectives prior to the interviews and underlined that participation was voluntary, and all information collected would be kept confidential. Ethical issues in qualitative research such as informed consent and confidentiality have been addressed by (Cohen et al., 2018) highlighting the value of these considerations in qualitative research ethics.

The interviews were conducted in person so as to allow a suitable setting where participants are able to communicate freely. This method was effective in alleviating communication hindrances, allowing participants to articulate their thoughts and experiences without reservation. Participants were willing to share their thoughts in an untimed basis, and each audio recorded interview was over 15-20 minutes. As highlighted by (Bryman, 2016), audio recording increases the accuracy of transcription, which is critical for upholding the validity of data. To enhance the effectiveness of data analysis, the researcher prepared transcripts by meticulously editing the recordings.

Data Collection

The data for this thesis were obtained from participants through semi-structured interviews. This technique was considered appropriate because it enables the researcher to pose beforehand questions but also allows participants to go more in detail than just the

questions posed to them. This type of interview is advantageous in qualitative research because it encourages detailed responses from each participant (Creswell, 2014).

Prior to conducting the interviews, the researcher explained the study to the participants and requested their informed consent. All five participants had previously used the ELSA Speak application, and they were selected through purposive sampling as their experiences aligned with the objectives of the study (Palinkas et al., 2015). Each interview was approximately 15–20 minutes long and recorded with the participants' consent.

The interviews were conducted in a quiet and comfortable setting in English or Indonesian language, depending on the preferred language of the participant. This was done to enhance response clarity. After conducting the interviews, the researcher listened to the recordings and transcribed them verbatim. These transcripts were subsequently created in preparation for the data analysis.

Data Analysis

The information collected from the interviews was analyzed using thematic analysis, which is a widely used technique in qualitative research for finding, analyzing, and presenting patterns or themes in the data (Braun and Clarke, 2013). Thematic analysis is best suited for qualitative descriptive research because it enables the researcher to arrange and make sense of the data without requiring elaborate theoretical reasoning to guide the interpretation.

The following steps were taken in conducting a thematic analysis of the data: (1) Familiarization with the data Braun and Clarke (2006): the researcher transcribed each interview and listened to the recordings several times to understand the details and the context of responses. This is important for appropriating analytics and factoring the reality of the data in its ecosystem as Braun and Clarke emphasizes. (2) Coding: The researcher extracted important excerpts which responded to the research questions and assigned them codes. For instance, codes like "app effectiveness," "confidence boost," and "challenges" were used to code important portions in the interviews. (3) Grouping coded data into themes: Thereafter, the researcher divided codes into more general themes. These pieces of information are said to constitute themes based on the order, frequency, or combination in which they appeared across the responses. In one of the themes, for example, one could address, "effectiveness of the application in improving pronunciation," while another can be, "challenges in using the application." (4) Review and refinement of theme: The analyzed themes were critically analyzed to check whether they depict the data as required. The themes were adjusted to guarantee precision and as a result, incorporate the essential elements or participant's experiences. (5) Reporting findings: From the analysis of the findings, the researcher developed the themes, and organized the resultant data logically and sequentially.

The themes were used to capture the participants' perspectives regarding the effectiveness of the ELSA Speak application on their pronunciation skills.

FINDINGS AND DISCUSSION

The purpose of this study was to investigate how one of the Islamic institutes in Jambi students felt about using the ELSA Speak application to improve their English pronunciation. Through regular use, guided practice, and real time feedback, the study sought to understand how students engage with the program as a helpful learning tool, specifically in terms of improving their pronunciation. Additionally, it looked at how using ELSA Speak affects their motivation, self-assurance, and general level of involvement with speaking English both within and outside of the classroom.

What Is Your Experience Using the ELSA Speak Application English Pronunciation?

The findings of this study demonstrate that participants generally had a positive experience using ELSA Speak application to enhance their English pronunciation. The flexibility and structured nature of the application enabled learners to engage in independent practice, a key element emphasize in language learning research. As stated by respondents 1, *"My experience with this application was very beneficial because I could practice pronunciation anytime, and its feedback helped me instantly identify my mistakes."* This aligns with existing literature that highlights the role of self-directed learning tools in fostering learner autonomy

and improving pronunciation skills. However, despite the overall positive perception, some technical limitations were noted. Respondent 4 commented, *"Sometimes, the app cannot recognize certain sounds, especially vowels with subtle differences"*, indicating an issue related to the app's speech recognition accuracy. AI based language learning applications often struggle to distinguish nuanced phonetic features. Nevertheless, most participants agreed that the app provided a consistent and supportive framework for continued pronunciation practice, contributing to gradual improvement overtime.

What Do You Find to Be the Most Effective Aspect of the Application in Helping Improve Your Pronunciation?

Participants unanimously identified the real time feedback feature as the most effective component of the ELSA Speak application. Respondent 2 stated, *"I could instantly understand what was wrong with my pronunciation, and the app provided concrete suggestions for improvement."* The immediacy of feedback is recognized in the literature as crucial to the acquisition of pronunciation skills, as it enables learners to make timely corrections before errors become. This insight is consistent emphasize the pedagogical value of immediate and corrective feedback in second language learning environments.

Another highly valued feature was the phonetic comparison tool. Respondent 5 noted, *"I could hear the difference between my pronunciation and that of a native speaker, so I knew what needed improvement."* This functionality reflects the principles, that comparison with native models is effective in enhancing both pronunciation accuracy and fluency. The contrastive listening experience facilitated learner's awareness of phonetic differences, thus promoting targeted pronunciation development.

Additional features such as the scoring system and personalized practice activities were also appreciated. According to respondent 3, *"The scoring system was very motivating because I could see my progress."* This indicates the motivational impact of ramified elements, which are known to increase engagement and sustain learner interest.

Do You Feel an Increase in Your Confidence When Speaking English After Using ELSA Speak?

The majority of participants reported an increase in self-confidence, particularly in informal communicative contexts. Respondent 1 shared, *"After a few weeks, I felt more confidence speaking in group discussions because I knew my pronunciation was clearer."* This finding corroborates the results of previous studies indicating that improved pronunciation contributes to increased self-assurance in speaking situations (Saito et al., 2022). The consistency of feedback and regular practice helped learners feel more prepared and articulate during everyday conversations.

Nonetheless, this enhanced confidence did not extend entirely too formal or high stakes communication settings. As respondent 4 explain, *"I still feel nervous when speaking during presentations or informal contexts, even though my pronunciation has improved."* that language anxiety can persist even when technical proficiency improves. This suggests that while pronunciation development may alleviate some communication barriers, affective factors such as anxiety must also be addressed to support learners in high pressure scenarios.

Did You Face Any Challenges During Their Use of the Application? If So, What Were the Most Significant Challenges?

Participants noted several challenges during their use of the application, the most significant being the inaccuracy of the apps voice recognition system. Respondent 4 reported, *"Sometimes the app doesn't accurately recognize my voice, so I doubt whether its feedback can be trusted."* Which critique speech recognition technologies for their limitations in reliably assessing non-native pronunciation. The perceived inaccuracy can reduce learners trust in the feedback and hinder progress.

Another challenge mentioned was the repetitive nature of some experiences. Respondent 5 observed, *"After several sessions, the exercise felt too repetitive, and I lost motivation."* This finding highlights a potential weakness in the apps ability to maintain long term user engagement, especially among intermediate and advanced learners, this observation emphasises an issue with the app's capacity to foster sustained engagement over time, particularly with users at

the intermediate and advanced levels. Existing research does support the claim that there is a need to further sustain motivation at higher levels of proficiency. Variation and proper complexity within learning materials are critical for optimal language development (Ryan and Deci, 2000).

To What Extent Did the Feedback Provided by the Application Help You Improve Your English Pronunciation?

Most participants acknowledged that the feedback provided by ELSA Speak played a critical role in helping them identify and improve their pronunciation errors. As respondent 2 started, *"The feedback was very helpful in understanding area that needed improvement, especially for certain words."* that specific and immediate feedback is instrumental in fostering accurate pronunciation.

Nevertheless, some participants including respondent 4, expressed concerns about the accuracy and reliability of the feedback, particularly for more complex or subtle phonemes. These limitations are indicative of the current constraints of AI in pronunciation assessment. The need for on-going advancements in speech recognition and artificial intelligence to ensure precise and pedagogically sound feedback in language learning technologies.

Discussion

The results suggest that the ELSA Speak application is a useful resource for improving English pronunciation because of its feedback phonetic comparison and adaptive practice capabilities. These findings are consistent with most research on self-learning strategies and mobile-assisted pronunciation training. Participants appreciated the app's ability to provide independent repetitive practice that led to gradual yet significant improvement in their pronunciation.

Furthermore, the study demonstrates the pedagogical value of interactive features like scoring and comparing the user's pronunciation with native speakers. These features not only enhanced user motivation but also fostered meta-cognitive understanding of phonetic distinctions critical for effective second language speech. But there were many notable drawbacks as well. The most prominent was the application's deficiency in recognizing speech patterns. User complaints included failure to recognize certain phonemes, especially the more nuanced ones. In this case, learners might lose confidence in feedback and thus cease making progress if they feel unsupported or ignored. This challenge aligns with critiques in the literature that AI-based recognition systems designed for non-native speakers need further enhancements.

Additionally, while learners felt more confident during formal speaking engagements, users continued to experience deep-rooted anxiety in high-stakes or formal situations. This is consistent with findings that highlight language anxiety as an enduring constant, not often related to linguistic abilities. It appears that digital resources are not enough to resolve the psychological factors related to speaking, and additional measures such as using real-life interactions or proper scaffolding may be needed.

Lastly, the monotony of repetitive exercises was noted as a reason why users became disengaged in the long term. This suggests that greater variety and adaptive levels of challenge for differing learner types, especially for mid and advanced level users, are required. Maintaining engagement through the use of evolving content is vital for language development.

To summarize, ELSA Speech offers significant advantages for developing learner's pronunciation skills, especially for learners at the beginner and intermediate level. The smoothing the technical difficulties, along with providing emotional and cognitive aid, could unlock further potential. With additional supports, ELSA Speech could evolve into a truly transformative language learning tool.

CONCLUSIONS

This research analyzed students' perceptions regarding the use of ELSA Speak to improve their English pronunciation. The results imply that the application functions as an effective

Students' Perception of Using ELSA Speak to Improve Pronunciation Skills

device for self-directed learning owing to its real-time feedback, phonetic assessments against native speakers, and individualized drills that significantly improve pronunciation accuracy. Nevertheless, some issues such as underestimation of the learner's voice including the monotony of the exercises may detract from motivation, particularly for more advanced learners. ELSA Speak did enhance informally confident speaking, but did little to reduce speaking anxiety in more formal situations. This is consistent with previous studies conducted regarding the emphasis placed on feedback and exposure to authentic speakers models, but adds the need for more technical improvements aimed at overcoming anxiety in speaking to enhance the application's efficacy.

To supplement the functional advantages, this research underscores the growing importance of modern technologies of foreign language teaching with particular focus on those that promote learner autonomy and flexibility such as the ELSA Speak application. Students can manage and monitor their pronunciation progress using the ELSA Speak application due to its engaging interface that offers instantaneous feedback on corrective measures during the learning process. Such flexibility has become increasingly important to modern educational settings where individualized instruction and advanced technology integration is efficacious. To harness its full educational possibilities, further partnership is needed between app creators and language teachers, especially regarding improvement of speech recognition accuracy and content enhancement to combat boredom. More research is necessary later to assess the extent to which consistent and prolonged use of ELSA Speak affects learners' oral skills and their self-confidence, especially when the app is used within a formal instructional setting. ELSA Speak has its limitations; however, it is still a valuable resource that enhances independent study of pronunciation and self-regulated learning.

ACKNOWLEDGEMENTS

The insight and full participation from the students using the ELSA Speak application was most valuable for this research, and it would not have been completed without their contributions which are crucial for this study. Let us also thank the developers of the ELSA Speak application for their help and for granting us access to their application. Moreover, we acknowledge the assistance from other peers as well as the academic mentor who provided relevant comments and recommendations during the course of the research.

REFERENCES

- Anes, M., Syafrizal, S., and Nugraha, H. "Students' Perception of the Use of ELSA Speak Application to Improve English Speaking Skills." *TELL-US Journal*, vol. 9, no. 4, 2023, pp. 1119-1130. ejournal.upgrisba.ac.id/index.php/tell-us/article/view/7649.
- Braun, Virginia, and Clarke, Victoria. *Successful Qualitative Research: A Practical Guide for Beginners*. SAGE Publications, 2013.
- Bryman, Alan. *Social Research Methods*. 5th ed., Oxford UP, 2016.
- Cohen, Louis, et al. *Research Methods in Education*. 8th ed., Routledge, 2018.
- Creswell, John W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd ed., SAGE Publications, 2013. https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf.
- Derwing, Tracey M., and Munro, Murray J. "Second Language Accent and Pronunciation Teaching: A Research-Based Approach." *TESOL Quarterly*, vol. 39, no. 3, 2005, pp. 379-397. <https://doi.org/10.2307/3588486>.
- Elsa Speak. "About Us." ELSA Speak, vn.elsaspeak.com/en/about-us/, Accessed 24 Apr. 2025.
- Field, John. "Intelligibility and the Listener: The Role of Lexical Stress." *TESOL Quarterly*, vol. 39, no. 3, 2005, pp. 399-423. <https://doi.org/10.2307/3588487>.
- Godwin-Jones, Robert. "Speech Tools and Technologies." *Language Learning & Technology*, vol. 13, no. 3, 2009, pp. 10-22. <https://www.lltjournal.org/item/10125-44186>.

- Hasbi, M., and Nursaputri, E. "Using ELSA Speak Application as a Medium to Improve English Speaking Skills." *International Journal of Language, Humanities, and Education*, vol. 7, no. 1, 2024, pp. 91-101. <https://jurnal.stkippgribl.ac.id/index.php/ijlhe/article/download/1547/1167/3263>.
- Kvale, Steinar. *Doing Interviews*. SAGE Publications, 2007.
- Levis, John M. "Changing Contexts and Shifting Paradigms in Pronunciation Teaching." *TESOL Quarterly*, vol. 39, no. 3, 2005, pp. 369-377. <https://doi.org/10.2307/3588485>.
- Muamar, M., Ampa, A. T., and Asmayanti, S. A. M. "Improving the Students' Pronunciation Using English Language Speech Assistant (ELSA) Application: A Pre-Experimental Research at the Eleventh Grade Students of SMA 9 Makassar." *Research Gate*, 2022. <https://www.researchgate.net/publication/369640464>.
- Palinkas, Lawrence A., et al. "Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research." *Administration and Policy in Mental Health and Mental Health Services Research*, vol. 42, no. 5, 2015, pp. 533-544. Springer, <https://doi.org/10.1007/s10488-013-0528-y>.
- Ryan, Richard M., and Deci, Edward L. "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions." *Contemporary Educational Psychology*, vol. 25, no. 1, 2000, pp. 54-67. <https://doi.org/10.1006/ceps.1999.1020>.
- Saito, Koji. "Examining the Role of Explicit Phonetic Instruction in Native-Like and Comprehensible Pronunciation Development: An Instructed SLA Approach to L2 Phonology." *Language Awareness*, vol. 20, no. 1, 2011, pp. 45-59. <https://doi.org/10.1080/09658416.2010.540326>.
- Saito, Koji. "Reexamining Effects of Form-Focused Instruction on L2 Pronunciation Development." *Studies in Second Language Acquisition*, vol. 35, no. 1, 2013, pp. 1-29. <https://doi.org/10.1017/S0272263112000666>.
- Saito, Kazuya, et al. "Second Language Speech Learning in the Digital Era: The Role of Feedback and Practice." *Journal of Second Language Pronunciation*, vol. 8, no. 2, 2022, pp. 145-163. <https://doi.org/10.1075/jslp.21019.sai>.
- Trofimovich, Pavel, and Isaacs, Tammy. "Disentangling Accent from Comprehensibility: A Study of L2 Pronunciation and Its Impact on Listener Perception." *Bilingualism: Language and Cognition*, vol. 15, no. 4, 2012, pp. 905-916. <https://doi.org/10.1017/S1366728912000168>