Vol. (10), No. (2); 2024
ISSN : 2355-2069 (Print)
ISSN:2656-5765 (Online)
PublishedbyUINFatmawatiSukarnoBengkulu

LINGUISTS
JOURNAL OF LINGUISTICS AND LANGUAGE TEACHING

ENHANCING ENGLISH ORAL COMMUNICATION SKILLS THROUGH THE USE OF ARTIFICIAL INTELLIGENCE

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DOI: http://dx.doi.org/10.29300/ling.v10i2.5270

Received: September 19th 2024 Accepted: December 12th 2024 Published: December 19th 2024

Abstract

This study aims to explore how artificial intelligence (AI) technology impacts the improvement of students' oral communication competence in English. The ELSA (English Language Speech Assistant) application, powered by AI, provided feedback to users to enhance their English speaking skills. An Action Research approach was employed, integrating both quantitative and qualitative methods to gain a holistic understanding of AI's effectiveness in English language learning. The research was conducted in three phases: pre-observation, Cycle 1, and Cycle 2. Each cycle consisted of several stages: planning, implementation, action, observation, and reflection. To assess student achievement, quantitative analysis was used to evaluate test results. Additionally, a survey was conducted to gather students' perceptions and experiences regarding the use of AI in learning. The results showed that after Cycle 1, 11 students (44%) achieved the minimum required score of 75, while 14 students (56%) scored below the success criteria (below 72). Based on the success criteria of 75% of students meeting the minimum score, the study proceeded to Cycle 2. In Cycle 2, 76% of students met the success criteria, showing significant improvement over Cycle 1. The survey also indicated positive perceptions from students regarding the ELSA app's design, interface, variety of topics, and feedback feature. Students expressed satisfaction with the app, as it allowed them to practice English conversation anytime and anywhere.

Keywords: Artificial Intelligent, ELSA Speak, Oral Communication Competence.

INTRODUCTION

Effective communication is important in social interactions and language is the key to achieve this. Language helps people to connect with each other, whether it's between individuals, groups, or nations.Teaching English aims to improve language skills, both active (speaking and writing) and passive (listening and reading). Good language skills mean being able to express yourself clearly and understand others well (Banegas et al., 2023; Hakim et al, 2022; Burns et al., 2011).

English education focuses on improving speaking skills so that people can interact effectively in a global world. However, students often struggle because of the limited opportunities for regular and self-directed practice. Traditional teaching methods may not provide the continuous practice outside the classroom for improvement(Fahrutdinova et al., 2014; Y. Zhang & Wang, 2012).

Artificial Intelligence (AI) offers a promising solution by providing ongoing practice, which is crucial for developing speaking skills. Research has shown that AI can create effective practice environments, improving language learning compared to traditional methods. AI has been used in education for many years. In the 1960s, researchers began exploring AI's potential, especially in intelligent tutoring systems. These systems aimed to offer personalized instruction and adapt to each learner's needs (Annamalai et al., 2023; Hakim & Putra, 2021; Zou et al., 2023).

Early AI systemsused rule-based algorithms to deliver content and engage learners. Studies, such as those by Niedbal et al (2023) and Z. Zhang & Huang (2024) show that using technology in language learning can improve English skills.

Today, advancements in natural language processing and machine learning have expanded AI's role in education. These technologies provided smart feedback and enhance language comprehension so it made the learning more effective. With the rise of digital technology AI has become a major part of education. It leads to the creation of learning management systems, assessment tools, and adaptive platforms. AI has been recognized as a potential tool to improve learning and teaching. It offers new ways to enhance language learning, especially by providing structured and personalized practice.

AI technology is used to provide language learning support for students. AI-based platforms and tools offer interactive exercises, real-time feedback, and adaptive content delivery based on the learner's needs and proficiency level. As Zhai & Wibowo (2023) stated, "AI-based app use machine learning algorithms to creat content and exercises to each learner and improve the efficiency and effectiveness of language learning." AI applications facilitate communication between learners and native English speakers or language partners. Virtual tutors and chatbots equipped with AI capabilities engage in conversation practice with learners, providing an immersive language learning experience. (Rejeb et al., 2024) found that "interacting with AI-based virtual tutors and chatbots enhances learners' speaking abilities and boosts their confidence in using English in real-life situations."

AI technology enables timely and targeted feedback for learners. Through speech recognition and natural language processing, AI systems analyze learners' spoken or written results and provide feedback on pronunciation, grammar, and vocabulary use. Xu et al., (2024) and Yamat et al., (2012) emphasize that "AI-based speech recognition systems offer real-time feedback and error correction, helping learners improve their pronunciation and develop accurate speaking skills."

AI-based adaptive learning systems offer personalized instruction by tailoring content and learning activities to the needs and progress of individual learners. These systems use machine learning algorithms to analyze learners' performance data and adjust the learning path accordingly. In this case, Sosas, (2021) state that "AI-based adaptive learning systems provide personalized learning paths and adjust instructional materials based on learners' proficiency levels, optimizing their learning experience."

Current applications of AI in English language teaching demonstrate the technology's potential to enhance language learning experiences through personalized instruction, facilitating communication, and providing targeted feedback. By leveraging AI tools, language educators can create engaging and adaptive learning environments that cater to the individual needs of learners (Rokhayati & Widiyanti, 2022; Shakespeare & Anonymous, 2017).

Some related studies such as from Anggraini (2022), Sholekhah & Fakhrurriana (2023) have shown that AI systems have the potential to improve oral communication skills, such as pronunciation and fluency, in students learning English. ELSA Speak, one of many AI-powered language learning programs, has demonstrated its potential in helping learners of English as a Foreign Language by addressing pronunciation difficulties and serving as a virtual conversation partner. ELSA Speak also enables students to engage more actively in learning through features such as English conversation practice, pronunciation drills, and intonation training, focusing on pronunciation accuracy and fluency in oral communication. As a result, students can learn independently and manage their learning with the help of the app, adapting their learning style to the global world.

Based on this, several research questions arise, including: (1) How can AI improve English oral communication competence; (2) How effective is AI in enhancing English oral communication competence?; and (3) What are students' perceptions of using AI in English language learning?

This research aims to explore how AI can influence the development of English oral communication competence and to assess its effectiveness in the learning process. English oral communication competence involves not only mastery of appropriate grammar and vocabulary but also other aspects such as intonation, fluency, communication strategies, sociocultural knowledge, and the ability to adapt to various situations and audiences (Abu Bakar et al., 2019; Díaz, 2021)

The study aims not only to measure the effectiveness of AI applications in developing oral communication competence but also to explore students' perceptions and experiences regarding the use of technology in learning. Therefore, this research not only paves the way for a better understanding of AI's potential in language learning but also encourages the development of more adaptive, inclusive, and effective learning approaches in the future.

For these reasons, the researcher believes that AI has the potential to enhance students' oral communication competence and boost their motivation to learn due to its engaging features. Additionally, students' perceptions and experiences regarding the integration of AI in education are explored. This study responds to the challenge of improving English communication skills and examines the transformative potential of AI in language education (Abu Bakar et al., 2019; Díaz, 2021; Le & Phan, 2023; Mumtaz & Dr. Uzma Quraishi, 2020; Y. Zhang & Wang, 2012).

METHOD

The research process began by implementing an action research approach integrated with a mixed-methods approach, combining both quantitative and qualitative methods (Creswell & Creswell, 2018; Ivankova & Wingo, 2018). This approach, in line with theory, allows for a more comprehensive understanding of the phenomenon by simultaneously collecting and analyzing both quantitative and qualitative data (Cornish et al., 2023).

Respondents

The study involved students from the English Language Education Program at Qomaruddin University. The researcher used purposive sampling to select the participants. A representative sample of 25 students who were taking the speaking course in the second semester of the 2023/2024 academic year was chosen. The selection criteria were based on theirlanguage proficiency and also their lack of speaking competence. According to Creswell & Creswell (2018) purposive sampling is used to understand key phenomena by deliberately choosing individuals and locations.

Instruments

In implementing the strategy, the researchers used various tools. Surveys are used to gather information about students' perceptions of the usefulness and effectiveness of artificial intelligence in language learning. Quantitative analysis is conducted to determine if there is a significant difference between the oral test results of the evaluation in cycle 1 and cycle 2 after the AI intervention.Thescoring rubricused in this evalauation was adopted from Brown (2014) to assess the students' speaking competence and was presented below:

Table 1. The scoring rubric of speaking evaluation

Score	Grammar	Vocabulary	Comprehension	Fluency	Pronunciation
1	Grammar errors are frequent.	Speaking vocabulary inadequate to express anything	Can understand simple questions and statements if delivered with	No specific fluency description.	Errors in pronunciation are frequent.

		but the most elementary needs.	slowed speech, repetition, or paraphrasing.		
2	Can usually handle elementary constructions quite accurately but does not have confident control of grammar.	Has speaking vocabulary sufficient to express himself simply.	Can get the gist of most conversations.	Can handle with confidence but not with facility most social situations.	Accent is intelligible through often quite faulty.
3	Control of grammar is good.	Vocabulary is broad enough that he rarely has to grope for a word.	Comprehension is quite complete at a normal rate of speech	Can discuss particular interests of competence wit	Accent may be obviously foreign
4	Errors in grammar are quite rare.	Can understand and participate in any conversation.	Can understand any conversation.	Able to use the language fluently.	Errors in pronunciation are quite rare
5	Equivalent to that of an educated native speaker	Speech on all levels is fully accepted by educate native speaker	Equivalent to that of an educated native speaker.	Has complete fluency in the language.	Equivalent to that of an educated native speaker.

Procedures

The pre-observation phase of the pre-action cycle aims to assess the level of student engagement in English language learning activities, their initial speaking skills, and their oral competency level before the intervention is applied.

A. Cycle I consists of four phases:
   1. Planning: This involves directly observing the classroom, preparing the learning scenarios, teaching materials for use in class, and the final test for the end of Cycle I, along with the criteria for assessing learning outcomes.
   2. Implementation: This phase describes the activities conducted by the researcher.
   3. Action: This phase involves carrying out the planned learning scenarios from the planning stage.
   4. Observation: This focuses on the data collected in the classroom during Cycle I, observing the outcomes of teaching speaking skills (multimedia-based learning).
   5. Reflection: The researcher describes and evaluates the results of the actions taken in Cycle I and then designs the action plan for Cycle II.

B. Cycle II, based on the reflections from Cycle I, is divided into four phases:
   1. Planning: This involves preparing the learning scenarios used in Cycle II, preparing teaching materials and topics, and the final test to be given to students at the end of the cycle.
   2. Implementation: This phase involves executing the planned research activities in the classroom during Cycle II.
   3. Action: This phase involves applying the Semester Learning Plan (RPS) that has been designed.
   4. Observation: This focuses on the data collected in the classroom during Cycle II, observing the outcomes of teaching English speaking skills using AI.

5. Reflection: The lecturer describes and evaluates the results of the actions taken in Cycle II. If the results meet the target, further intervention may be concluded.

C. Survey

The survey phase is conducted to gather data on students' perceptions and experiences regarding the use of AI technology in enhancing their English speaking skills. The survey is designed to assess how students view the effectiveness of the ELSA application in improving their oral communication competence. It focuses on several key aspects, including the app's design, user-friendliness, variety of topics, and the quality of feedback provided. The survey also includes questions related to students' overall satisfaction with using the AI-based tool and whether they feel it helped them gain confidence in speaking English. The results of the survey offer valuable insights into the students' attitudes and engagement with the AI-based learning tool, providing a comprehensive understanding of the tool's impact on their language learning journey.

Data analysis

The data analysis process in this research includes three main components. Descriptive Statistics for collecting and presenting data to provide useful information. Descriptive statistics are displayed in and simple way and only describe the condition of the taken data by presenting it in tables. Additionally, evaluation was also used to gather data on students' speaking skills and learning outcomes. Survey was used to collect data on student activities during teaching - learning sessions and the students' respond toward the implementation of AI-based ELSA Speak app.

FINDINGS

Findings in Cycle 1

Planning

During the pre-observation and observation activities carried out by the researcher by directly observing the speaking class, several data were gathered. The speaking lesson began with the lecturer explaining the material to the students through a lecture. Then, the lecturer asked the students to discuss a topic about food. However, the discussion did not flow smoothly because most of them were still confuse to discuss the given topic using English.

Afterwards, since there was an awkward and quite situation, the lecturer gave the students an assignment to describe an object related to the topic being discussed. The lecturer then asked the students to present their descriptions one by one in front of the class. When the lecturer gave the opportunity to describe an object, the students appeared unenthusiastic and lacked confidence to come forward. Since no one was willing to present, the lecturer called the students by name from the attendance list to ensure they completed their description task.Based on the results of the survey distributed to 25 students in the speaking class, 15 students found it difficult to communicate in English, which means 60% of the students could not speak English. Additionally, 7 students, or 28%, said they found it easy to speak English, and 3 students, or 12%, stated that speaking English was very easy for them.

The next step, the researcher held a discussion with the lecturer in charge of the speaking course to talk about the preparation for the research action. The agreement reached in the discussion was that the researcher would act as the presenter, and a colleague would serve as the observer. The activities continued with preparing the necessary equipment, developing the syllabus, preparing the learning materials, creating the instruments, and setting the research schedule.

Implementation

There were several activities used by the researcher during the teaching of the speaking using AI powered-ELSA Speaking app. The activities were divided into three such as Opening Activity, Main Activity, and Closing Activity. The detail procedures of the implementation were listed below:

Opening Activities:	
1	The researcher introduced the topic.
2	The researcher explained the learning objectives.
3	The researcher discussed the importance of mastering oral communication in English.
4	The researcher asked students to introduce themselves to the researcher.
Main Activities:	
1	The researcher demonstrated how to use the ELSA Speak app for learning, including the way how to use it to practice pronunciation, speaking, and exercises.
2	Students were asked to practice pronouncing vocabulary from the app, focusing on the topic related to "education" and "holidays."
3	Students were asked to complete exercises individually while the instructor monitors their progress.
4	Discussion on the feedback from the app's exercises. Many of them had a lot of evaluation form the app because there were many mistakes made by the students.
5	The researcher encouraged students to use dialogue challenges or role-play scenarios available in the app.
6	Students practiced speaking based on these challenges, either individually or in pairs.
7	Students red short messages on the topics of holidays and education available in the app.
8	Students recorded their speech using the app's recording feature.
9	Evaluated the feedback provided by ELSA Speak.
10	Encouraged students to practice dialogues with peers based on the insights gained from the app.
Closing Activities:	
1	Discuss with students their experiences using AI in learning.
2	Ask students to share their experiences with learning English communication using ELSA Speak.
3	Assign additional practice with ELSA Speak to be completed before the next session

Observation

During the learning activity, observations were conducted by the lecturer and fellow colleagues. The results of the observation are as follows:

a. With a relatively small class size of 25 students, the researcher was able to memorize each student's name, allowing the observation to run smoothly.
b. When the presenter asked initial questions, many students responded with incorrect pronunciation.
c. During the English-speaking practice with AI, the students were excited and nodded as they talked directly with an avatar that spoke like a native English speaker. This helped them learn the right vocabulary, pronunciation, and intonation.
d. While discussing with their peers, 11 students were able to speak fluently, 10 students spent a longer time while having dialogue with the app, and 4 students mixed English with Indonesian.
e. Students enjoyed using the AI-powered ELSA Speak app, which they could access directly on their own smart phones.

Reflection and Evaluation

The reflection and analysis of the actions taken in the first cycle can be described as follows:

a. The researcher was able to memorize each student's name, making it easier to observe each student.

b. When answering the initial questions, many students still had strong regional accents, so they need more practice to improve pronunciation like native speakers.
c. When using the AI-based ELSA Speak, students gained new experiences learning to improve their English speaking skills through AI.
d. During peer discussions, students rarely used body language or gestures, and they often lacked vocabulary, making the conversation less smooth.
e. Additional tasks are needed for students to practice communication using AI on three more topics: Education, Holidays, and Lifestyle, with medium difficulty levels.

To determine the results of AI-based learning and the improvement of students' speaking competence, the researcher conducted an evaluation in the first cycle. The results are presented in the table below:

Table 2. The result of the evaluation from cycle 1

No	Names	Score					Total Score	Conversion	Passed/ Failed
		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation			
1	ANW	3	4	4	3	3	17	68	Failed
2	ASA	4	3	3	4	4	18	72	Failed
3	AMH	5	3	4	3	3	18	72	Passed
4	BRT	3	4	4	4	3	18	72	Failed
5	CFB	3	4	3	4	4	18	72	Failed
6	CHM	4	4	4	3	3	18	72	Failed
7	ATS	4	4	4	4	4	20	80	Passed
8	EM	4	3	3	3	5	18	72	Failed
9	AS	4	4	4	4	4	20	80	Passed
11	AHM	4	4	4	3	3	18	72	Failed
12	MUW	5	4	4	4	5	22	88	Passed
13	MFIH	4	4	4	3	3	18	72	Failed
14	K	3	3	3	3	3	15	60	Failed
15	AK	4	4	4	3	3	18	72	Passed
16	KLS	4	4	4	4	4	20	80	Passed
17	DM	4	4	4	4	4	20	80	Passed
18	TI	3	4	4	3	4	18	72	Failed
19	MAS	4	4	4	4	4	20	80	Passed
20	AL	3	4	4	3	3	17	68	Failed
21	MSA	4	4	4	4	4	20	80	Passed
22	IF	4	4	4	4	4	20	80	Passed
23	H	3	3	3	4	3	16	64	Failed
24	MJ	4	4	3	4	3	18	72	Failed
25	LM	3	3	4	4	4	18	72	Failed

Based on the results of the evaluation for speaking competence in Cycle 1, 11 students (44%) passed the test with scores of 75 or higher. This means they successfully met the minimum required score of the speaking skills. On the other hand, 14 students (56%) did not

pass, scoring below 72. While some students were strong in areas like fluency and pronunciation, they struggled with grammar and vocabulary. This shows that more practice and personalized learning are needed to help improve the speaking skills of all students. The Criteria of success of this classroom action research is more that 75% of the students met the minimum required score of the speaking skills. However, there were only 44% of the students passed. This reason encouraged the researcher to continue to the second cycle.

Findings in Cycle 2

From the analysis and reflection on Cycle 1, there are several aspects that should be maintained, such as the students' enthusiasm, enjoyment, and growing confidence. However, there are issues that need to be addressed: students' reliance on classroom materials, their unfamiliarity with independent learning outside of class using AI-based applications, and the fact that practice in speaking English with the help of AI should be based on tasks assigned by the instructor rather than their own initiative. Moving forward, Cycle 2 will be divided into four stages, similar to Cycle 1, with each stage detailed as follows:

Planning

Based on the reflection results from Cycle 1, the preparations for Cycle 2 include developing teaching materials and topics through the AI-based ELSA Speak app to train students' speaking skills. This also involves preparing assignments for practicing English speaking using AI and preparing a final test to be given to students at the end of the cycle based on the material taught.

Implementation

In the implementation of Cycle 2, the researcher continued as the presenter, with a colleague serving as the observer. The session began with the presenter asking questions similar to those from Cycle 1, targeting students who were less active. Although their responses were slower, they were able to answer. During the core activity, students were instructed to use the ELSA Speak app to practice correct pronunciation. After completing their speaking exercises, they reviewed the feedback provided by the app. Following this, students were asked to practice the same dialogues with their peers. The conversations they had previously practiced with the AI were now applied in real-life interactions. Throughout this peer discussion, students appeared calm and engaged, speaking more fluently with improved grammar and pronunciation

The last task involved the presenter asking students to correct some incorrect expressions. The presenter intentionally asked students to identify and correct their peers' mistakes to improve their listening skills and analytical abilities. Before concluding the session, the presenter provided feedback to the students and assigned them to create a conversation video in English.A variety of activities were employed in the phase of implementation during the teaching of speaking skills using the AI-powered ELSA Speaking app. These activities were organized into three distinct phases: the Opening Activity, Main Activity, and Closing Activity. The following outlines the detailed procedures for each phase of the implementation:

Opening Activity	
1	Students reviewed the previous lesson’s objectives and activities.
2	The researcher introduced the new focus areas for the lesson, emphasizing advanced pronunciation and conversational skills.
3	Conducted a discussion students’ experiences with using ELSA Speak and any improvements or challenges they faced.

Main Activity	
1	Asked students to have more complex pronunciation exercises from the ELSA Speak app, such as tongue twisters or challenging sounds.
2	Had students to practice these exercises individually, providing feedback and support as needed.
3	Asked the students to use the app's advanced speaking challenges or real-life dialogue scenarios.
4	Asked students to practice these scenarios in pairs or small groups, focusing on natural conversation flow and appropriate intonation.
5	The researcher observed and offered guidance to improve students' conversational skills.
6	Upgrading the level of the discussion under the topic "education" by giving for a brief impromptu speech or debate from the app, encouraging students to speak spontaneously.
7	Asked students to record their speech and review the feedback provided by ELSA Speak.
8	Encouraged peer feedback and discussion on each other's performance.
Closing Activity	
1	Discuss the progress made during the lesson and any remaining challenges.
2	Ask students to reflect on their learning experience and share insights gained from the app's feedback.
3	Assign specific advanced exercises or speaking challenges on the ELSA Speak app for students to complete before the next session.
4	Encourage students to focus on areas where they need further improvement, based on their recent performance.
5	Summarize the key takeaways from the lesson.
6	Reinforce the importance of continued practice and regular use of the app to maintain and improve speaking skills.

Observation

During the observation in cycle two, the lecturer noticed that students were able to discuss the given topic smoothly and accurately. The students demonstrated fluency and flexibility in discussing various topics.

Based on the feedback from the application, it was evident that the students' scores had significantly improved. In the first cycle, students scored an average of 400-450 on the application. After several practice sessions using ELSA Speak, their average scores increased to a range of 460-665.

Reflection and Evaluation

Based on observations from peers during the second cycle, the analysis and reflection resulted that inactive students were able to engage in fluent and accurate dialogues with the avatar in the ELSA Speak app. The Speaking lecturer observed that these students were more confidence in speaking English during discussions because they had used to practicing and found a speaking partner in the application. The result of the evaluation from cycle was presented in the table below:

Table 3.The result of the evaluation from cycle 1

No	Names	Score					Total Score	Conversion	Passed/ Failed
		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation			
1	ANW	4	4	4	5	4	21	84	passed
2	ASA	4	4	5	4	4	21	84	passed
3	AMH	5	3	4	4	4	20	80	passed

No	Names	Score					Total Score	Conversion	Passed/ Failed
		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation			
4	BRT	3	4	4	4	3	18	72	failed
5	CFB	3	4	3	4	4	18	72	failed
6	CHM	4	4	4	4	3	19	76	passed
7	ATS	4	4	4	4	4	20	80	passed
8	EM	4	4	4	3	5	20	80	passed
9	AS	4	4	4	4	4	20	80	passed
11	AHM	4	4	4	5	5	22	88	passed
12	MUW	5	4	4	4	5	22	88	passed
13	MFIH	4	4	4	3	3	18	72	failed
14	K	4	5	4	4	4	21	84	passed
15	AK	4	4	4	3	3	18	72	failed
16	KLS	4	4	4	4	4	20	80	passed
17	DM	4	4	4	4	4	20	80	passed
18	TI	3	4	4	3	4	18	72	failed
19	MAS	4	4	4	4	4	20	80	passed
20	AL	3	4	4	5	4	20	80	passed
21	MSA	4	4	4	4	4	20	80	passed
22	IF	4	4	4	4	4	20	80	passed
23	H	4	4	3	4	4	19	76	passed
24	MJ	4	4	3	4	3	18	72	failed
25	LM	3	4	4	4	4	19	76	passed

Based on the table, the results of the post-test for students' speaking skills show a mix of passing and failing scores. Out of the 25 students, the majority passed, while a few failed to meet the required threshold. Students were evaluated on five aspects: Grammar, Vocabulary, Comprehension, Fluency, and Pronunciation, with a maximum total score of 25 points.

The passing students scored between 76 and 88 points after conversion. For instance, students like AHM and MUW achieved the highest total scores of 22, resulting in an 88% score, indicating excellent performance. On the other hand, some students, like BRT, CFB, and MJ, failed with scores of 72%, indicating a need for improvement in certain areas.

Overall, the results suggest that most students demonstrated solid speaking competence, with only a few falling short of the required standard, emphasizing the need for additional practice for those who failed.

Findings in the Survey

The researcher has spread seven statements to the students' respond the use of AI-powered ELSA Speak toward the teaching and learning process. The findings were shown in the table below:

Table 4. The display of Elsa Speak is very good

Category	Frequency	Percentage
5 – strongly agree	25	100%
4 – agree	0	0%
3 - neutral	0	0%

2 - disagree	0	0%
1 – strongly disagree	0	0%

Table 2 shown that all the participants strongly agree that the design and display of ELSA Speak is very good.

Table 5. The variety of learning topics offered by ELSA Speak is vary and engaging

Category	Frequency	Percentage
5 – strongly agree	25	100%
4 – agree	0	0%
3 - neutral	0	0%
2 - disagree	0	0%
1 – strongly disagree	0	0%

Based on Table 3, all participants believed that the ELSA Speak app's learning themes are wide and engaging. Every participant totally supported the statement on the variety of themes covered by ELSA Speak, which equates to nearly 100%. This variety gives each participant reading materials to pronounce, followed by automatic feedback displayed in a sequence of colors, each indicating a distinct area for development. As is generally known, ELSA Speak provides over 1,300 courses and 70 subjects created exclusively to improve English vocabulary pronunciation. Users can choose topics that meet their needs and interests. Users can steadily enhance their vocabulary and pronunciation skills by engaging in targeted practice.

Table 6. Students like the difference levels available in ELSA Speak

Category	Frequency	Percentage
5 – strongly agree	19	75%
4 – agree	6	25%
3 - neutral	0	0%
2 - disagree	0	0%
1 – strongly disagree	0	0%

The data in Table 4 highlights the participants' responses regarding the availability of different levels. The majority of participants showed a positive preference for this feature, with 75% strongly agreeing and 25% agreeing. This indicates that the variety of levels provides participants with more flexibility in selecting their preferred topics.

When participants used the application for the first time, they were guided to select a beginner level. Studentswere then presented with three types of practice sessions: Casual, Medium, and Serious. The Casual option offers a 10-minute daily session, the Medium option extends to 15 minutes per day, and the Serious option provides a 20-minute daily practice. Additionally, ELSA Speak allows users to choose specific times for their study sessions, enabling them to select a time that best fits their schedule. Participants can then install the app and begin using it according to their preferences.

Table 7. ELSA Speak assisted the students to practice English and gave feedback

Category	Frequency	Percentage
5 – strongly agree	25	100%
4 – agree	0	0%
3 - neutral	0	0%
2 - disagree	0	0%
1 – strongly disagree	0	0%

Table 5 illustrates how learning English vocabulary pronunciation or sentences through the ELSA Speak app benefits its users. On the first day, the ELSA Speak app guides participants with an illustration for reading the word "nice," which means "meeting" in Indonesian. If a participant pronounces "nice" as /naɪs/, the app will highlight it in green, indicating that the pronunciation is correct. The app assesses the pronunciation of words ending with the letter [s] and rates it as excellent if the quality resembles that of a native English speaker. All 20 participants rated this feature as "strongly agree," resulting in a 100% agreement rate. This is one of the app's strengths.

After detecting pronunciation errors, ELSA Speak provides immediate feedback to users. Users can see their mistakes and receive recommendations for improvement, which facilitates more effective and efficient learning.

According to the survey, all participants had a positive perception of the device, particularly in the area of pronunciation. Participants were enthusiastic about how the app provides accurate pronunciation guidance that closely similar to a native English speaker. ELSA Speak employs voice recognition technology to detect pronunciation errors with over 95% accuracy (Sholekhah & Fakhrurriana, 2023). It also presents English pronunciation diagrams that show the correct mouth positions for each vowel and consonant sound. This visual representation helps users understand how to position their mouths when pronouncing specific words. Clearly, these results support ELSA Speak's effectiveness in teaching vocabulary pronunciation, with automatic feedback indicating whether a pronunciation needs to be repeated or not.

DISCUSSION

Cycle 1 resulted the progress and limitation of using ELSA Speak in proving students' speaking competence. It indicated that while the students were learning with AI-based media, they found some difficulties that hindered the achievement. A detailed analysis of the implementation of the AI-based ELSA Speak application would be discussed.

The researcher noticed that one of the positive points is the integration of AI-based technology into language teaching. ELSA Speak provided direct individual feedback that helped students understand their errors in pronunciation and fluency. The feedback features offered an advantage over a traditional classroom setting where a direct correction from the lecture would spend much time if it was given to a large number of the students. Research by Anggraini et al (2023) and Sholekhah & Fakhrurriana (2023) have highlighted the effectiveness of providing personalized feedback in language learning particularly in area of speaking skills.

Other advantages of this research were the increasing of the students' engagement in learning process. The use of ELSA Speak increased their motivation which were shown by their enthusiasm in having a dialogue with the avatar. Similar findings were written by Ngoc & Thanh (2023) who noticed the increasing of the students' willingness to practice speaking English compared to those in a traditional classroom setting. The apps' interactive feature such as dialogue challenge and role play scenario have contributed the engagement.

One area where AI tools like ELSA Speak excel is in promoting independent learning. The ability to practice speaking at any time and place without relying on a teacher or classmates provides students with greater autonomy over their learning. However, the study also found that students continued to rely heavily on teacher-led instructions and did not fully engage in independent learning outside the classroom. This observation aligns with research by Zhang & Wang (2012), which emphasized that AI-based platforms, while offering

personalized learning paths, cannot replace the need for students to engage in self-directed learning outside the classroom.

This finding, therefore, highlights the importance of balancing AI use with other forms of instruction. AI tools can enhance language learning by providing flexible, on-demand practice, but students must also be encouraged to take responsibility for their learning and engage in activities beyond the classroom. Thus, while the integration of AI tools like ELSA Speak can certainly enhance the language learning process by providing individualized feedback, offering flexible learning opportunities, and fostering student engagement, it is clear that AI cannot fully replace traditional instructional methods. Teachers should aware of the gaps in students' understanding and for providing the necessary scaffolding to support students in achieving holistic language proficiency. So, a more integrated approach combining AI, traditional teaching, and peer collaboration may offer the most effective strategy for language development.

However, despite the positive outcomes, there were also some weaknesses in using this AI-pored application. This application mostly supported the pronunciation and fluency achievement, so several issues like grammatical and vocabulary achievement were not covered by this application. This weakness was also supported by the findings of the research from Lesmana (2022), as She noted that ELSA Speak are effective for pronunciation but it is not very effective for developing the grammar understanding.

UNESCO (2023) added that AI-based language learning tool does not always suit with the needs of the students especially for the students who have lower fundamental in English proficiency. It was indicated from the result of the test of cycle 1 that only 44% of the students passed the evaluation, while the criteria of success is 75% of the students have to pass the test. The observation also resulted that the limitation in using this AI-based application is the lack of the face-to-face interactions between peers, while Gocen & Aydemir (2020) suggested that social process needed to have interactions with other. The absence of the face-to face interaction restricted students to practice the real authentic English communication. Hence, the students still needed to mix the practice English conversation with their classmate and with the help of AI-based ELSA Speak application.

In cycle 2, there were significant improvement of the students' skills, especially compared to cycle 1. The use of AI-based application in practicing English speaking and peer communication had better result in fluency, pronunciation, and confidence. This cycle solved the problems occurred in cycle 1, such as the inactive classroom and the lack of independent learning initiative.

One of the advantages of the cycle 2 was the increasing of students' score, confidents, engagement. Students showed increased confidence, which is very important in developing communication competence. The integration of peer discussion with AI tool helped the students to learn speaking in a natural setting and improving their conversational skills. This reflected findings from Gocen & Aydemir (2020), stated that combining AI tool with peer interaction resulted a meaningful learning experience.

Moreover, giving more difficult level of task like tongue twister, role play scenario, and impromptu speech challenged the students to move one step higher from the basic exercise. The post test result showed that 76% of the students passed the speaking test, so it was better than the result of the post test from cycle 1 that only showed 44% of the students passed the test. This suggested that the selection of the suitable teaching strategy, direct feedback, and independent practice contributed this positive outcome.

Despite these improvements, there were still weaknesses. While the students become more fluent in speaking, it did not resolve the grammatical accuracy. Several students

continued to make grammar mistakes, even though their pronunciation and fluency had improved.

Another weakness was that, students still failed the post-test despite some students have engaged with the app and peer discussion. For instance, students like BRT, CFB, and MJ scored 72%, failing to meet the minimum requirement. These students, though practicing with AI, still struggled with comprehension, fluency, and pronunciation, indicating that the AI tool may not have fully addressed their specific learning needs. Additinally, the presence of AI tool did not develope the independent learning outside the class. The students continued to be the dependent learning that depent on the instructions of their lecture in the classroom.

Additinally, the result of the survey indicated that AI-based ELSA Speak app have postive perception form the students regarding its design, display, various topics, and feedback feature. Students were very happy to use this app because they could find a partner to have a converstion in English and they could also practice the conversation any time and any where.

CONCLUSION

The research concluded that the use of AI-based ELSA Speak significantly improves students' English-speaking competence especially in the aspect of fluency and pronunciation. The application was designed to be user-friendly that has various topics and instant feedback. Students highly appreciated the features of this application as proved by the result of the survey. The result of the cycle 1 and cycle 2 also noticed that there was an excellent progress in students' speaking fluency, accuracy, and confidence. Despite these benefits, some challenges were identified, one of those was the limitation of ELSA Speak to enhance the grammar competence and comprehension. Therefore, the integration this ap into language learning should be balanced with other instructional methods to support all language proficiency. In the other hand, encouraging students to take more initiative in their learning process in needed. While AI based app like ELSA Speak offer a direct feedback, students still need a motivation to practice speaking outside the classroom.

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