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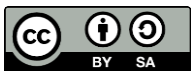

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Improving Students' Speaking Ability Through Loora As Mobile-Assisted Language Learning Application

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Abstract

This study was prompted by the importance of technology in language learning, especially in improving students' speaking abilities. One of the technologies used is the Loora application, a mobile-based language learning (MALL) application that uses AI to provide automatic feedback and simulate everyday conversations. This study investigates how the Loora application improves students' speaking ability. The study population was 9th-grade students at MTs Al-manar in Deli Serdang, North Sumatra, with a sample of 20 students selected through purposive sampling. The research method used was classroom action research, which consisted of two cycles. Data collection was conducted through a pre-test as a diagnostic test, and a post-test was conducted each cycle to measure the improvement of students' speaking ability and interviews to understand students' experience using this application. The results showed a significant improvement in accuracy (pronunciation, vocabulary, and grammar) and speaking fluency. The highest increase occurred in the vocabulary aspect, with a percentage increase of 38.49%, followed by grammar by 22.05% and pronunciation by 17.72%. Meanwhile, speaking fluency increased by 17.57%. From the analysis, the accuracy aspect experienced a higher increase than fluency, where the accuracy score increased by 21.22% and fluency by 17.57%. The interview results confirmed the students' improved speaking skills and highlighted their favorable experiences with the Loora app. They felt more confident in speaking after using Loora, and they appreciated the automatic feedback feature that helped them correct mistakes and better understand English. This positive experience underscores the app's user-friendliness, which is encouraging for both educators and app developers. This research shows that the Loora application can be a learning media that significantly improves students' speaking abilities. Educators are advised to consider using MALL-based technology when teaching languages, as it can enhance students' speaking ability. These

findings can potentially be used by application developers to increase the interactive elements of their language learning application, hence increasing their potency in developing students' speaking abilities.

Keywords: *Improving, MALL, Speaking Ability, Loora Application*

Introduction

The presence of mobile phones has had a significant impact on the educational environment, facilitating academic and professional endeavors. In education, this tool plays an important role in supporting the teaching and learning process. In recent years, language learning technology powered by mobile phones has attracted great attention in education. In the fast-paced era of the 21st century, the integration of various technological devices, especially mobile devices, has become increasingly important to improve the learning process.

The concept of mobile learning has emerged, where ever-evolving technologies, particularly mobile phones, are used to significantly enhance the learning experience of students (Mengorio & Dumlao, 2019). In the education sector, these devices have been proven to facilitate the teaching and learning process (Li, 2024). Mobile Assisted Language Learning (MALL) is a special section focusing on using mobile devices in language learning (Shortt et al., 2023). Mobile phones make mobile learning increasingly important in practice and research by providing flexibility in various aspects of life, including education (Okumuş Dağdeler, 2023).

The trend of using mobile devices in language learning has successfully established its own identity in the world of education by creating an important new environment for language learning (Morchid, 2020). MALL as a learning method supported by small, portable devices that can be adapted to the immediate situation faced by learners. Technological developments will likely provide new ways of learning languages. One way to develop the language teaching and learning process is through implementing mobile learning.

Mobile Assisted Language Learning (MALL) offers many potentials and challenges (Kukulska-Hulme, 2007). Mobile applications offer many benefits. Learners can access these apps anytime to support their language learning without being tied to a formal learning environment (Inggita et al., 2019). They can use the apps to supplement or even without formal learning. The flexibility of MALL allows it to be adapted to different learning situations, making it a versatile tool in language education (Ekoç, 2021).

MALL has significantly transformed English language education by integrating technology into traditional teaching methods (Jabbar, 2024), allowing learners to practice the language anytime and anywhere through easy access to smartphones and mobile apps (Karakaya & Bozkurt, 2022). It is important to recognize that most MALL applications developed within the industry are based on learning principles that have been validated through basic memory research

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(Roediger & Butler, 2011). MALL showed significant improvements in speaking skills, including fluency, vocabulary, pronunciation, and content delivery. An experimental study also revealed that EFL students who used MALL showed better speaking performance and self-efficacy compared to those who used traditional methods (Shadiev et al., 2023).

Teaching and learning foreign language speaking is challenging, with anxiety, vocabulary lack, and native language use hindering the learning process. (Chand, 2021). MALL, a mobile application, has been proven to reduce speaking anxiety among EFL students, enhancing confidence and perceived ability to improve their speaking skills (Putri & Degeng, 2024). Speaking is a fundamental human communication tool, involving organs like the nose, pharynx, and trachea.

Although sounds are made by animals and babies, they cannot always be considered speaking (Cornbleet & Carter, 2001). Speaking in linguistics involves oral production of written language, mastering sub-skills to express views, wishes, and the act of speaking, as defined by the Oxford Advanced Learner's Dictionary (Hornby, 2016). An expert defines speaking as the act of constructing and sharing meaning through verbal and non-verbal symbols in various contexts (Kayi, 2006).

MALL, a tool for self-directed learning, has been shown to enhance speaking skills by allowing students to identify their learning needs, set goals, and assess progress at their own pace. Technological advances have driven research into mobile apps in language learning. About 3,500 MALL-related studies have been conducted (Burston & Giannakou, 2022). MALL represents a significant shift from pre-existing patterns. Social networking applications and instructional platforms can help students enhance their speaking abilities, but their utility is still restricted to repetitive repetition (Zhao et al., 2025).

Mobile learning is more successful than face-to-face sessions because it is flexible and accessible (Aliakbari & Mardani, 2022). Research comparing WhatsApp and Duolingo in improving the speaking fluency of EFL students in Iran showed that both provided significant improvement with no notable difference (Ahmed et al., 2022). The integration of mobile devices in education can increase learning effectiveness, with the help of teacher training and administrative policy (Prasad Parajuli et al., 2024). Particularly for introverts, vlogging can foster a more relaxed learning atmosphere and boost students' self-confidence while speaking (Mahmud et al., 2021).

MALL applications are an effective tool in not only enhancing EFL students' speaking abilities but also increasing their motivation, surpassing the outcomes of face-to-face instruction (Hwang et al., 2024). The integration of MALL with project-based learning (PBL) has demonstrated considerable gains in students' fluency, grammatical correctness, and pronunciation, producing a more creative learning

environment (Benlaghrissi & Ouahidi, 2024). The usage of mobile social networks (SNS) has also proven effective, notably in China. Students utilizing SNS (Papa) exhibited a considerable increase in fluency, combined with a more joyful learning experience and a feeling of community that lowered anxiety (Sun et al., 2017). One research indicates that students' speaking abilities are considerably enhanced when they utilize the Falou application. The group that employed Falou had a higher rise than the group that used traditional approaches. The findings of the investigation demonstrate how well this program enhances students' confidence in speaking English as well as their grammar and pronunciation (Saragih & Subekti, 2024). Additionally, there is a lot of promise for enhancing students' speaking abilities through the use of Mobile-Assisted Language Learning (MALL) (Pebiana & Febria, 2023).

AI-based interactive speaking activities have proven to be more effective in improving speaking skills and willingness to communicate (WTC), with positive responses from students (Fathi et al., 2024). Furthermore, the utilization of YouTube videos in mall-based learning during the COVID-19 epidemic boosted several elements of students' speaking skills (Syafiq et al., 2021). Smartphones help students study English more independently, proving that they can access a variety of educational materials and become more involved in the process.

These results highlight the fascinating role that technology may play in facilitating more efficient and engaging language acquisition (Rahmani, 2024). MALL technology, such as Rosetta Stone, can help students improve their speaking abilities, enjoy studying more, and comprehend grammar and pronunciation better. However, the study also demonstrates that the financial restrictions encountered by students might be a barrier to accessibility in terms of membership costs for such programs (Chaniago & HZ, 2024).

One of the main problems students face in speaking ability is a lack of confidence, limited vocabulary, and difficulties in pronunciation and grammar, as revealed in a study that utilized Mobile-Assisted Language Learning (MALL) to improve students' speaking skills. In this study, the researcher used the Loora application to enhance students' speaking abilities. The Loora application boasts numerous advantages. As an AI-based Mobile-Assisted Language Learning (MALL) application, it provides automatic feedback that enables students to identify and rectify errors in pronunciation, grammar, and vocabulary selection instantaneously.

Moreover, the application offers simulations of daily conversations, a feature that assists students in enhancing their speaking fluency. speaking abilities include several main aspects such as pronunciation, fluency, grammar, and vocabulary (Brown, 2007). Speaking skills can be improved with malls and mobile apps. Still, their effectiveness depends on how well they are implemented, how prepared teachers are, and how well accessibility issues are resolved. This research addresses several gaps in the study of Mobile-Assisted Language Learning (MALL) by focusing on the Loora application, which has not been extensively explored

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compared to popular applications like WhatsApp and Duolingo. While many studies report improvements in learning outcomes, few utilize action research methods to test the effectiveness of MALL applications. This study aims to integrate Loora into the action research cycle, allowing for an analysis of the impact of technology on language learning. Additionally, many MALL studies are general and do not focus on specific applications, making this research provide a deeper understanding of the unique features of Loora in the learning process.

Therefore, several research questions are formulated as follows: RQ1: How is the student's speaking ability before using the Loora application? RQ2: How is the application of the Loora application in improving students' speaking ability? RQ3: How is the student's speaking ability after using the Loora app?

Based on the above research question, the purpose of this study is to analyze students' speaking skills through the Loora application and evaluate how the app is applied in improving their speaking skills. The benefits of this research are expected to provide insight for educators and students about technology in language learning, especially in improving speaking skills. In addition, the results of this research can also be a reference for educational application developers in perfecting technology-based learning features.

The use of the Loora application makes a significant contribution in improving students' speaking skills. The study hypothesized that Loora's flagship features, such as automated feedback and AI-based daily conversation simulations, would positively affect students' speaking abilities, resulting in a measurable improvement in their oral communication skills.

Method

This research is conducted using a classroom action research approach. action research is an approach that has two main objectives, namely taking action or making improvements and building knowledge or theory about action (Coghlan & Coughlan, 2010). In this classroom, action research uses quantitative and qualitative approaches. Action research focuses on a particular action and action research as well as combination research, which uses quantitative, qualitative, or a combination of both data collection techniques (Klassen et al., 2012).

This study refers to Coats (2005) classroom action research model, where each cycle consists of four stages: Planning, Action, Observation, and Reflection. Quantitative data was taken based on a descriptive quantitative approach with the results of D-tests and post-tests in each cycle. In contrast, qualitative data was taken based on unstructured interview questions.

This research was conducted for 3 weeks in the implementation of the action. The dependent variable in this study is students' speaking ability, while the independent variable in this study is Loora application as a media in learning and the process of improving students' speaking ability. This research was conducted at MTs Swasta Al-manar Deli Serdang, North Sumatra. This study was conducted in one of the ninth-grade classes at the school, with a total population of 32 students. From this population, the researcher selected 20 students as research samples using non-random sampling techniques, specifically through a purposive sampling approach.

Purposive sampling is a method of selecting subjects based on specific criteria deemed pertinent to the study's objectives. This technique enables researchers to identify and select individuals who possess unique characteristics, thereby facilitating a more profound understanding of the subject under study. Consequently, it is anticipated that the sample obtained through this method will adequately represent the phenomenon under investigation (Lenaini, 2021).

To carry out classroom action research aimed at improving students' speaking skills. Students were given a series of actions in the form of learning activities using Loora application as a learning medium to see the improvement of their learning outcomes from cycle to cycle. This class action research used a pre-test as part of the diagnostic test to identify students' initial speaking ability. The pre-test was conducted without using Loora app, with an instrument that included several questions related to students' personal experiences and opinions, which were answered using the past tense.

In each cycle, the researcher gave students a post-test by utilizing the Loora application as a tool to measure students' speaking ability more comprehensively. Through this approach, the improvement of students' speaking ability was measured systematically and structured in each cycle. After the end of the cycle, unstructured interview questions were then asked of some students to strengthen the data obtained from the Diagnostic test results and the post-test results of each cycle.

The data collected in this study were analyzed qualitatively and quantitatively. All data collected from the diagnostic test results and the post-test results in each cycle were analyzed descriptively and quantitatively. Speaking ability was assessed based on the criteria proposed by Brown (2007). He suggests that there are several criteria to assess speaking ability, namely pronunciation, fluency, grammar, and vocabulary. In the diagnostic test, students answered Personal Experience and opinion questions without the help of Loora application.

Meanwhile, in the post-test of each cycle, students responded to questions directly from AI-based Loora after giving the instruction, "Ask me something about the past.": Speaking assessment was conducted using a 1-5 scale. The "Poor" category covers scores of 1.00 to 1.59, indicating minimal ability. The "Fair" category is for scores of 1.60 to 2.59, indicating less than satisfactory ability. The

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"Good" category covers grades 2.60 to 3.59, indicating moderately good ability. The "Very Good" category for grades 3.60 to 4.59, indicating excellent proficiency. Finally, the "Excellent" category covers scores of 4.60 to 5.00, indicating outstanding speaking ability. This scale gives a clear picture of the level of students' speaking ability based on the criteria that have been set.

Finding & Discussion

Finding

1. The Improvement of the Students' Speaking Accuracy

The application of the Loora application as a mobile-assisted language learning in grade IX of Mts Al-manar Deli Serdang is used as a learning medium to improve students' speaking accuracy. In this section, it will be explained in detail related to improving students' speaking skills in the aspect of accuracy. According to Harmer (1991), the aspect of accuracy in speaking includes three components, namely pronunciation, vocabulary, and grammar. Each indicator has a certain number of scores that are then calculated on average. The results of this calculation were analyzed through the initial test (d-test), cycle I, and cycle II.

a. Improving Speaking Accuracy Focusing on Pronunciation

The data presented in Table 01 clearly show the improvement of students' speaking ability focusing on pronunciation. This table compares students' average pronunciation scores based on the results of the initial test (d-test), cycle I, and cycle II. The data illustrate the improvement that occurred after the implementation of the Loora application as a technology-based learning medium.

Table 01: The Improvement of the Students' Speaking Accuracy focusing on pronunciation

Indicator	Speaking Accuracy: Pronunciation Focus			Percentage of Improvement		
	D-Test	1st Cycle	2nd Cycle	D-Test to 1st Cycle	1st Cycle to 2nd Cycle	D-Test to 2nd Cycle
Mean Score	3.16	3.64	3.72	15.19%	2.15%	17.72%

To observe the improvement in the students' pronunciation accuracy, refer to the following graph:

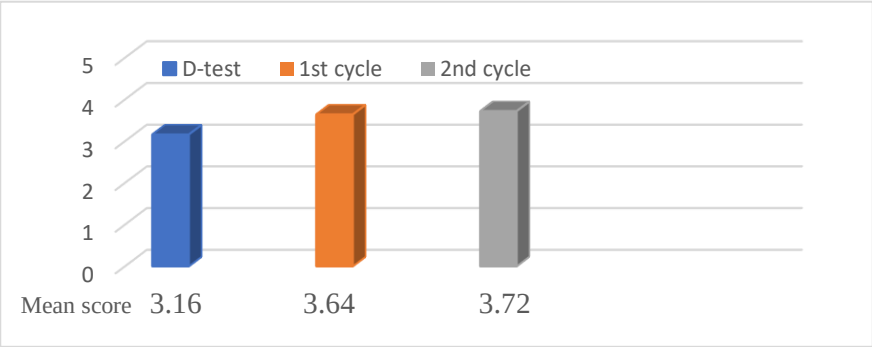

Figure 01: The Improvement of the Students' Speaking Accuracy focusing on pronunciation

The data presented in the table and graph show a clear improvement in students' speaking accuracy, especially in pronunciation, between the D-Test and the subsequent cycles. The average score increased from 3.16 in the D-Test to 3.64 in the first cycle and further to 3.72 in the second cycle. This progression shows a positive trend in student performance.

Regarding percentage improvement, the transition from the D-Test to the first cycle reflected an improvement of 15.19%, while the improvement from the first cycle to the second cycle was modest, at 2.15%. However, the overall improvement from the D-Test to the second cycle was significant, at 17.72%. This data emphasizes that using the Loora application successfully improved students' speaking ability.

The findings from this analysis show that using the Loora application as a learning media successfully improves students' speaking accuracy, especially in pronunciation. Although there was a more extensive improvement between the D-Test and the first cycle, as well as a more negligible improvement between the first and second cycle, the overall results showed that students were increasingly able to identify and correct errors in their pronunciation. This indicates that the Loora application is not only effective in measuring speaking ability but also has a sustainable positive impact on the improvement of students' speaking skills.

b. Improving Speaking Accuracy Focusing on vocabulary

The data shown in Table 2 demonstrate the improvement of students' speaking skills, with an emphasis on vocabulary. This table compares the average vocabulary scores of students based on the results from the initial test (d-test), Cycle I, and Cycle II. The information in the table highlights the progress made following the introduction of the Loora application as a technology-driven learning tool.

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Table 02: The Improvement of the Students' Speaking Accuracy focusing on vocabulary

Indicator	Speaking Accuracy: Vocabulary Focus			Percentage of Improvement		
	D-Test	1st Cycle	2nd Cycle	D-Test to 1st Cycle	1st Cycle to 2nd Cycle	D-Test to 2nd Cycle
Mean Score	2.78	3.64	3.85	30.94%	5.77%	38.49%

To observe the improvement in the students' vocabulary accuracy, refer to the following graph:

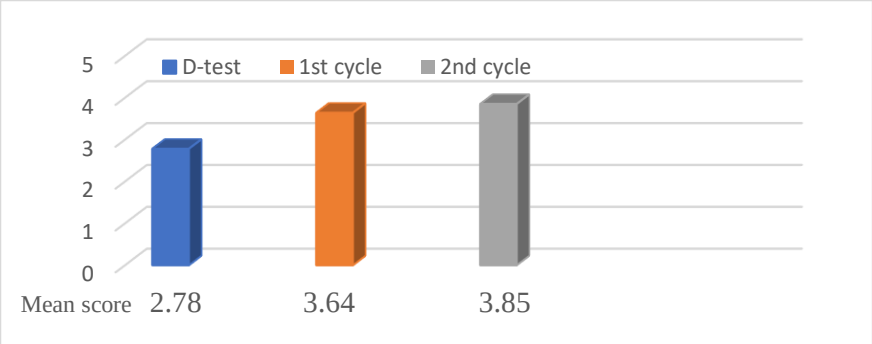

Figure 02: The Improvement of the Students' Speaking Accuracy focusing on Vocabulary

Table 02 shows the improvement of students' speaking accuracy focusing on vocabulary through several testing tests: D-Test, first cycle, and second cycle. The average score for the D-Test was 2.78, indicating that students needed improvement in their speaking ability. In the first cycle, the average score increased to 3.64, and in the second cycle, the score further increased to 3.85. This shows that the use of Loora application successfully improved students' speaking skills, especially in vocabulary, gradually.

The percentage improvement between the D-Test and the first cycle was 30.94%, while the improvement from the first to the second cycle was 5.77%. A significant increase was seen in comparing the D-Test to the second cycle, with a percentage of 38.49%. This shows that the intervention conducted between the first and second cycles was very effective in improving students' speaking accuracy. However, the improvement from the first cycle to the second cycle was smaller compared to the initial improvement.

The improvement in students' speaking accuracy was seen from the D-Test to the second cycle, with a percentage of 38.49%. Using Loora as mobile-assisted language learning (MALL) is proven to improve students' vocabulary. Although there was a decrease in percentage between the first and second cycles, these results show that mobile technology can significantly support the development of students' speaking skills and vocabulary.

c. Improving Speaking Accuracy Focusing on grammar

The data from Table 3 clearly shows the improvement of students' speaking skills, especially in grammar. This table shows the comparison of students' average grammar scores from the results of the initial test (d-test), Cycle I, and Cycle II. The information presented in this table emphasizes the progress achieved after the use of Loora application as a technology-based learning tool.

Table 03: The Improvement of the Students' Speaking Accuracy focusing on Grammar

Indicator	Speaking Accuracy: Grammar Focus			Percentage of Improvement		
	D-Test	1st Cycle	2nd Cycle	D-Test to 1st Cycle	1st Cycle to 2nd Cycle	D-Test to 2nd Cycle
Mean Score	3.31	3.97	4.04	19.94%	1.76%	22.05%

To observe the improvement in the student's vocabulary accuracy, refer to the following graph:

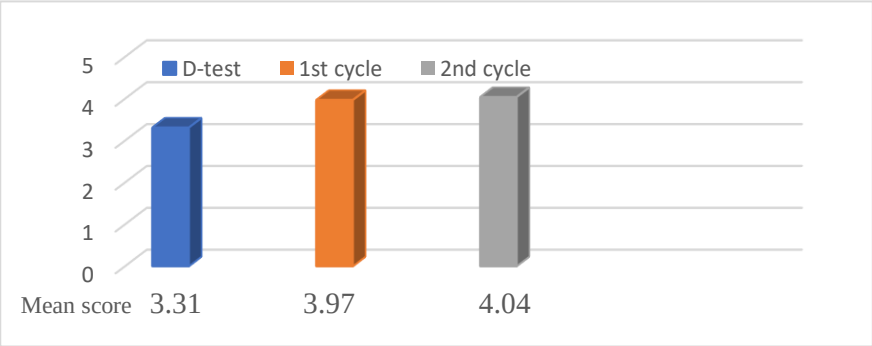

Figure 03: The Improvement of the Students' Speaking Accuracy focusing on Grammar

The data shown focuses on grammar in speaking accuracy, a measure of how accurately a person uses grammar rules in their spoken language, as measured through the D-Test and two subsequent cycles (Cycle 1 and Cycle 2). The average score for grammar ability was 3.31 for the D-Test, increasing to 3.97 in Cycle 1 and 4.04 in Cycle 2. This shows a positive grammar-ability trend as they continue to use

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the app.

The percentage improvement from the D-Test to Cycle 1 was 19.94%, showing a significant improvement in speaking accuracy in grammar after the initial cycle of using the Loora application. The improvement from Cycle 1 to Cycle 2 was 1.76%, indicating that although there was still progress, the improvement rate was slower than the first cycle. This gradual improvement is a natural part of the learning process. Overall, from the D-Test to Cycle 2, there was a 22.05% improvement in speaking accuracy, which is a substantial improvement.

The table and graph analysis demonstrate that Loora, a mobile-based language learning program, helped students improve their speaking accuracy by emphasizing grammar. Improving grammatical skills can result in improved communication and a deeper comprehension of the language. There was a significant improvement from the D-Test to the first cycle, with a 19.94% rise in average score, followed by a slower but good gain in the second cycle.

The total change from the D-Test to the second cycle was 22.05%, demonstrating that the software may considerably enhance grammatical abilities when speaking. This research reveals that the Loora application is an effective tool for language learners looking to enhance their speaking abilities through mobile learning.

2. The Percentage of the Students' Accuracy

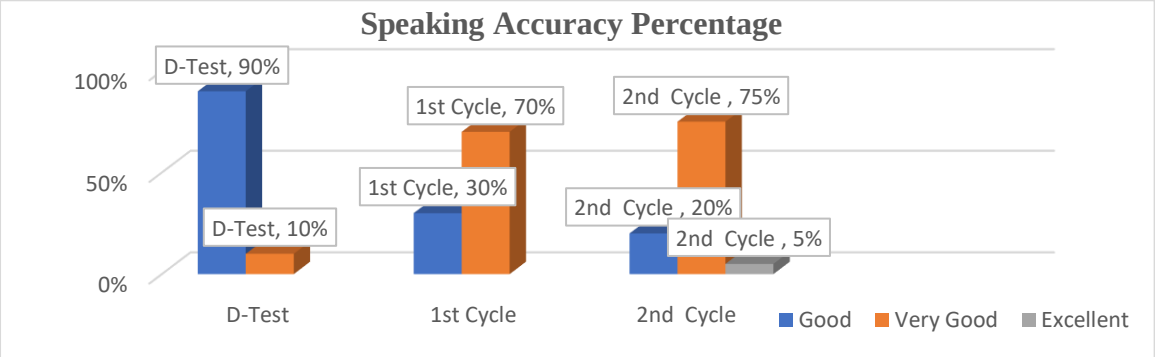
The table below illustrates the percentage improvement in students' speaking accuracy, which covers three major components: pronunciation, vocabulary, and grammar, in the d-test, cycle I, and cycle II, when the Loora application was used as a mobile aided learning application. The score for each component was derived by adding the scores of the three components.

Table 04: The Percentage of the Students' Speaking Accuracy

No	Classification	Range	Non Loora application		Loora application			
			D-Test		1st Cycle		2nd Cycle	
			Freq	%	Freq	%	Freq	%
1	Excellent	4.60 – 5.00	0	0	0	0	1	5%
2	Very Good	3.60 – 4.59	2	10%	14	70%	15	75%
3	Good	2.60 – 3.59	18	90%	6	30%	4	0

4	Fair	1.60 – 2.59	0	0	0	0	0	0
5	Poor	1.00 – 1.59	0	0	0	0	0	0
Total			20	100%	20	100%	20	100%

Figure 04: The Percentage of the Students' Speaking Accuracy



The table presented shows the percentage of students' speaking accuracy based on using and without the Loora application. On the D-Test, no students reached the "Excellent" category (4.60 - 5.00), while 10% of students were in the "Very Good" category and 90% in the "Good" category. After using the Loora application, there was a significant improvement, with 5% of students reaching the "Excellent" category in the second cycle, 75% being in the "Very Good" category, and no students returning to the "Good" category. This shows that the Loora application positively improved students' speaking ability.

The graph accompanying the table compares the percentage of speaking accuracy between the D-Test, Cycle 1, and Cycle 2. In the D-Test, 90% of students were in the "Good" category, while in Cycle 1, the percentage of students in the "Very Good" category increased to 70%. In Cycle 2, 75% of students were in the "Very Good" category and 5% in the "Excellent" category. This shows that using the Loora application increased the number of students who reached higher categories and reduced the number of students in the "Good" and "Poor" categories.

From the tables and graphs analysis, it can be concluded that the Loora application significantly improved students' speaking accuracy. Although on the D-Test, the majority of students were in the "Good" category, after using the app, there was an apparent increase in the percentage of students reaching the "Very Good" and "Excellent" categories. These findings suggest that Loora, a mobile-based language learning app, can improve students' speaking ability, making it a valuable tool in learning.

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3. The Improvement of the Students' Speaking Fluency

The improvement in students' speaking fluency by implementing the Loora application as a learning medium in class IX of Mts Al-manar Deli Serdang is clearly shown in the following table:

Table 05: The Improvement of the Students' Speaking Fluency

Indicator	Speaking Fluency			Percentage of Improvement		
	D-Test	1st Cycle	2nd Cycle	D-Test to 1st Cycle	1st Cycle to 2nd Cycle	D-Test to 2nd Cycle
Mean Score	3.13	3.37	3.68	7.67%	9.20%	17.57%

The graph below is to observe students' fluency improvement in more detail. This graph shows students' speaking ability development from the Pre-cycle to the second cycle, providing a clear picture of the progress made.

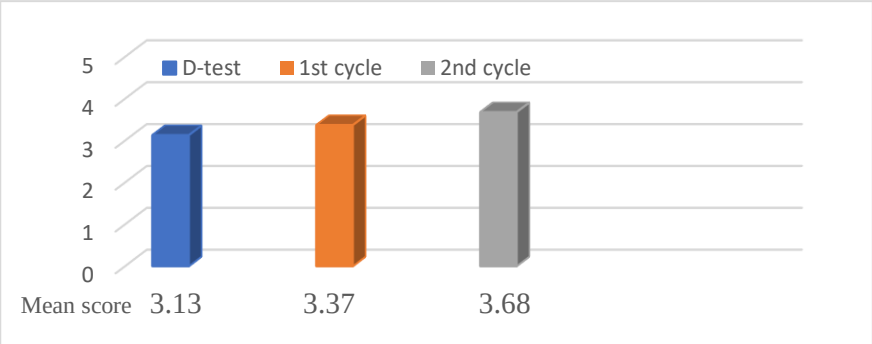

Figure 05: The Improvement of the Students' Speaking Fluency

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The table presented showcases the remarkable progress of students' speaking fluency, as measured through the D-Test and two cycles of using the Loora application. The average score for the D-Test was 3.13, which increased to 3.37 in Cycle 1, and further soared to 3.68 in Cycle 2. This substantial increase underscores the positive impact of the Loora application on students' speaking fluency. The percentage increase from D-Test to Cycle 1 was 7.67%, while from Cycle 1 to Cycle 2 was 9.20%. This data indicates that students are steadily becoming more adept and fluent in speaking over time.

The graph accompanying the table illustrates a consistent upward trend in students' speaking fluency. While the improvement from D-Test to Cycle 1 is significant, the leap from Cycle 1 to Cycle 2 shows an even better growth rate, with a percentage of 9.20%. Importantly, from D-Test to Cycle 2, there was a total

improvement of 17.57%, providing strong evidence that the Loora application enhanced students' speaking accuracy and fluency.

The comprehensive table and graph analysis can draw a robust conclusion: the Loora application is a potent tool for improving students' speaking fluency. Despite the D-Test showing a lower average score, consistent use of this application led to a gradual improvement in students' fluency, with a more significant leap in the second cycle. These findings unequivocally establish that Loora, as a mobile-based language learning application, is a valuable asset for enhancing students' speaking ability in the context of language learning.

4. The Percentage of the Students' Fluency

The following table shows the percentage improvement of students' speaking fluency in the d-test, cycle I, and cycle II, when the Loora application was used as a mobile-assisted learning app. The score for each assessment was calculated based on the overall performance.

Table 06: The Percentage of the Students' Speaking Fluency

No	Classification	Range	Non Loora application		Loora application			
			D-Test		1st Cycle		2nd Cycle	
			Freq	%	Freq	%	Freq	%
1	Excellent	4.60 – 5.00	0	0	0	0	0	0
2	Very Good	3.60 – 4.59	3	15%	8	40%	10	50%
3	Good	2.60 – 3.59	15	75%	10	50%	10	50%
4	Fair	1.60 – 2.59	2	10%	2	10%	0	0
5	Poor	1.00 – 1.59	0	0	0	0	0	0
Total			20	100%	20	100%	20	100%

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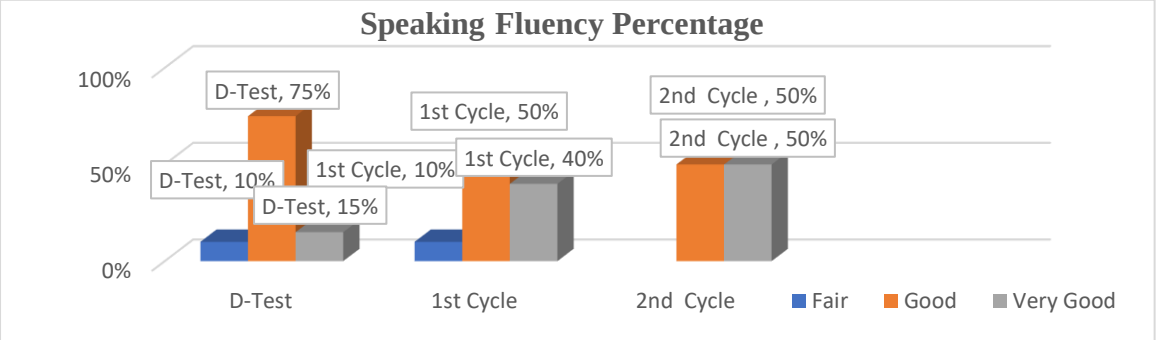
Figure 06: The Percentage of the Students' Speaking Fluency



The table shows the percentage of students speaking fluently using and without the Loora application. On the D-Test, no student reached the "Excellent" category, while 15% were in the "Very Good" category and 75% in the "Good" category. There was a significant improvement after using the Loora application, where 50% of students reached the "Very Good" category in the second cycle, and 50% remained in the "Good" category. This shows that the Loora application improved students' speaking fluency, although no students reached the "Excellent" category in all cycles.

The graph accompanying the table compares the percentage of speaking fluency between the D-Test, Cycle 1, and Cycle 2. In the D-Test, 75% of students were in the "Good" category, while in Cycle 1, the percentage of students in the "Very Good" category increased to 40%. In Cycle 2, 50% of students were in the "Very Good" category and 50% in the "Good" category. This shows that the use of the Loora application not only increased the number of students who reached higher categories but also reduced the number of students who were in the "Fair" and "Poor" categories.

From the table and graph analysis, the Loora application is practical in improving students' speaking fluency. Although no students achieved the "Excellent" category, there was an apparent increase in the percentage of students who completed the "Very Good" category after using the application. This finding confirms that Loora, a mobile-based language-learning application, can improve students' speaking ability in a language-learning context.

5. The Improvement of the Students' Speaking Ability

The application of technology-based learning media, specifically the Loora application, aims to improve students' speaking abilities in class IX 2 at MTs Al-Manar Deli Serdang. The primary focus of this implementation encompasses two essential aspects: accuracy and fluency in speaking. In terms of accuracy, there are three main components evaluated: pronunciation, which reflects students' ability to articulate words correctly and contributes to listeners' understanding; vocabulary, which demonstrates the mastery and appropriate use of words in the

proper context, thereby enriching students' communication; and grammar, which ensures the correct use of sentence structures so that the conveyed message is clear and easily understood.

Additionally, fluency in speaking reflects students' ability to speak smoothly and without disruptive pauses, allowing communication to occur effectively. The results of this learning media implementation can be seen in the following table.

Table 07: The Improvement of the Students' Speaking Ability

	Speaking ability						**Percentage of Improvement**		
	D-Test		**1st Cycle**		**2nd Cycle**		**D-Test to 1st Cycle**	**1st Cycle to 2nd Cycle**	**D-Test to 1st Cycle**
	ACC	**FLU**	**ACC**	**FLU**	**ACC**	**FLU**			
Mean Score	3.09	3.13	3.76	3.37	3.87	3.68	14.47%	5.90%	21.22%
	3.11		3.56		3.77				

The graph below shows students' speaking improvement compared to accuracy and fluency in more detail. It shows students' speaking ability development from the Pre-cycle to the second cycle, providing a clear picture of the progress made.

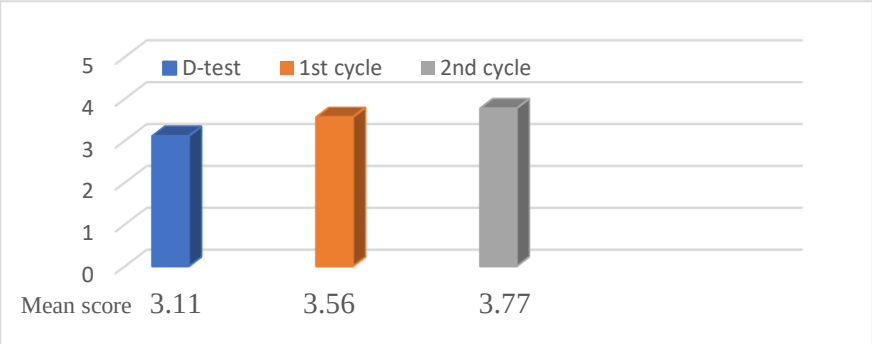


Figure 07: The Improvement of the Students' Speaking Ability

The table above shows the development of students' speaking skills measured through the D-Test, a standardized language proficiency test. The average score for the D-Test was 3.11, which increased to 3.56 in the first cycle and 3.77 in the second cycle. This increase shows that students made significant progress in their speaking ability, which includes aspects of accuracy and fluency. The percentage improvement from the D-Test to the first cycle was 14.47%, and from the first cycle to the second cycle was 5.90%, indicating that the Loora application positively contributed to the improvement of students' speaking ability.

Furthermore, the analysis revealed a consistent increase in the average scores for accuracy and fluency. In the first cycle, the average score for accuracy was 3.76 and fluency was 3.37, which saw a steady rise to 3.87 and 3.68 in the second cycle.

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This not only indicates that students became more fluent in speaking, but also more accurate in language use. The sustained improvement over the two cycles underscores the long-term effectiveness of the Loora application as a learning tool in enhancing students' speaking ability.

From the table analysis, using the Loora application significantly improved students' speaking ability in accuracy and fluency. The increase in the average score from the D-Test to the second cycle shows that students can increasingly communicate better. This finding supports the research hypothesis that Loora, as a mobile-based learning application, is effective in improving students' speaking ability, providing a sustainable positive impact on their learning process.

6. The Percentage of the Students' Speaking Ability

The following table shows the percentage improvement of students' speaking ability in the D-Test, Cycle I, and Cycle II when the Loora application was used as a mobile-assisted learning app. The score for each assessment was calculated based on the overall performance.

Table 08: The Percentage of the Students' Speaking ability

No	Classification	Range	Non-Loora application		Loora application			
			D-Test		1st Cycle		2nd Cycle	
			Freq	%	Freq	%	Freq	%
1	Excellent	4.60 – 5.00	0	0	0	0	0	0
2	Very Good	3.60 – 4.59	3	15%	10	50%	15	75%
3	Good	2.60 – 3.59	15	75%	10	50%	5	25%
4	Fair	1.60 – 2.59	2	10%	0	0	0	0
5	Poor	1.00 – 1.59	0	0	0	0	0	0
Total			20	100%	20	100%	20	100%

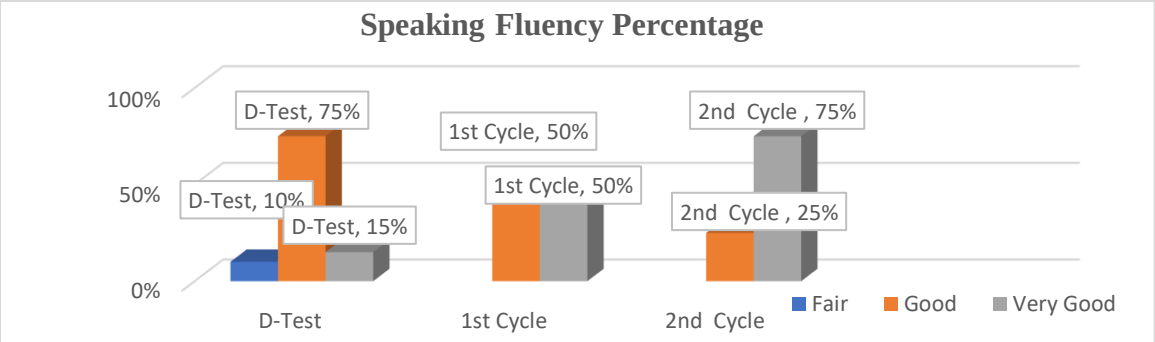

Figure 09: The Percentage of the Students' Speaking ability

The table above presents the percentage distribution of students' speaking abilities across different classifications when using the Loora application. In the D-Test, none of the students achieved the "Excellent" or "Poor" categories, indicating a need for improvement. However, the "Very Good" category showed a notable increase, with 15% of students classified as "Very Good" in the D-Test, rising to 50% in the first cycle and increasing to 75% in the second. This significant growth highlights the positive impact of the Loora application on students' speaking skills.

In the "Good" category, there was a decline in the number of students classified as "Good," dropping from 75% in the D-Test to 50% in the first cycle and further to 25% in the second cycle. This trend suggests that as students improve their speaking abilities, they move from the "Good" category to the higher "Very Good" classification. The absence of students in the "Fair" category during the first and second cycles indicates that using the Loora application has effectively minimized lower performance levels among students.

The data demonstrates a clear improvement in students' speaking abilities when utilizing the Loora application. The increase in the "Very Good" category and the elimination of students in the "Fair" and "Poor" categories reflect the effectiveness of this technology-based learning tool in enhancing students' communication skills. This positive trend suggests that continued use of the Loora application could further support students in achieving higher speaking proficiency levels.

7. The Results of the Interview

Interviews were conducted with four students in this study to explore how they utilize the Loora application in improving their English speaking abilitiy. This interview aims to find answers related to the increase in confidence after using the app, the features of the application that they like the most, as well as their motivation in learning using Loora.

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"I'm more confident because if I talk to the Lora application, no one hears it other than myself and so does Loora. I feel very confident, calmly, I can speak easily. The Loora application can make me more confident even though sometimes my speaking is not fluent and not very good."

"I feel more confident when speaking English after using Loora, because this application helps me in improving my speaking skills."

"Yes, I feel more confident when speaking English after using the Loora application. I also feel braver to speak English and more confident in my pronunciation."

"I am more confident when speaking English after using the Lora application. Now I'm more confident and quite certain in saying a rather difficult vocabulary, which I couldn't pronounce before, but now I can pronounce it quite well."

The interview results above show that the Loora application increases users' confidence in speaking English. Respondents feel more confident because they have practiced speaking without worrying that they will be criticized. This shows that the privacy and safe environment of Loora application helps them speak more comfortably and freely. They also said that the app helped them improve their speaking fluency and pronunciation of difficult words. As their speaking skills improved, they were more confident and bolder in using English in various situations. All in all, these interviews indicate that the Lora application serves not only as a learning tool, but also as a means to build users' confidence in speaking English.

"Loora *gave instant feedback. If your words aren't right, the words that come out of the Loora application don't match what you want, so you can immediately fix it with instant feedback. I was able to change my inappropriate words to be precise thanks to the instant feedback from the Loora application."*

"I like all the features in Loora, especially the instant feedback feature, because it is very helpful in my speaking practice. This feature notifies me if there is a mistake in speaking English, so I can learn and improve the way I speak better."

"This application helps me to practice my pronunciation and fluency. In addition, the Lora application has speaking exercises where the application asks a question and we answer right away. My favorite feature of the Lora app is the feedback feature, as it helps me to identify errors in my pronunciation and fluency, so I can fix my

shortcomings faster."

"In my opinion, the Lora application has helped me a lot in improving my speaking skills in English. This application gives me advice if I make mistakes in pronunciation, grammar, etc. The feature that I like is the feature of knowing the pronunciation value and daily value, because it is fun and makes me curious every time after using it. In addition, this application is also interesting because it has a feature that allows me to know my daily scores, grammar, and pronunciation."

Based on the findings of the interview above, it can be concluded that the features of Loora application help users improve their English speaking skills, especially in terms of fluency and pronunciation. One of the most favored features is instant feedback, which allows users to immediately find out their mistakes in speaking, whether in terms of pronunciation, word choice, or grammar. This feature helps them correct mistakes quickly and improve their speaking accuracy.

In addition, the speaking practice feature that provides questions and asks users to answer immediately is also considered effective in practicing speaking fluency. Some users also appreciate the evaluation feature that provides scores related to their pronunciation and grammar, thus increasing motivation in learning. Overall, the features in the Loora application not only provide an interactive and engaging learning experience, but also provide useful feedback for users to continue improving their speaking skills.

"I always use the Loora application during my room time when I am finishing studying or when I finish cleaning the house, and so on, because I want to continue to improve my speaking skills. I was able to change my inappropriate words into precise, and it gave me the encouragement to keep learning. Maybe I will continue to use it if I need it, because I believe consistent training will bring better results."

"In my opinion, the Loora application can help in improving my speaking skills, so that I can learn to speak English more fluently. I want to use the Lo0ra app to learn English, so that I can improve my English speaking even better."

"I feel motivated and happy when using the Lora application. I am interested in learning speaking with this app because it offers an innovative and interactive way of learning. In addition, this application is very useful to help me improve my speaking skills, and I am sure this app will help me achieve my English learning target."

"I'm very happy, because Loora application can be my English speaking friend online, namely through a mobile phone. I want to continue using the Loora app to learn English, because it has become my online friend in learning."

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Based on the interview results above, it can be concluded that Loora application provides high motivation for its users in improving English speaking skills. Users feel encouraged to keep practicing because the app provides an interactive, innovative and fun learning experience. In addition, the easy access through mobile phones makes users feel like they have a "study buddy" who is always available at any time.

Their motivation is also supported by the belief that consistent practice will give better results in English language acquisition. The Loora application helps users correct speaking mistakes and makes them more confident in using English, which encourages them to continue using it in the future. This shows that Loora is not only a learning tool, but also a source of inspiration in their journey of learning English.

Discussion

The use of technology in language learning has been one of the practical innovations in improving students' speaking skills. This study analyzes the impact of the Loora application as a technology-based learning medium for enhancing the accuracy and fluency of speaking of grade IX students at MTs Al-Manar, Deli Serdang. Based on the study's results, several key findings showed a significant improvement in students' speaking skills after using this application.

The use of the Loora application significantly improves students' speaking accuracy in English, especially in the aspects of pronunciation, vocabulary, and grammar. Students show significant progress in pronunciation; this is supported by AI-based Speech Recognition Technology (AISRT), which is efficacious in improving EFL students' speaking skills (Dennis, 2024). In addition, the use of Siri as a voice aid has also proven to be more effective than classroom instruction in improving students' pronunciation skills (Alharthi, 2024).

In addition to pronunciation, the Loora application improves students' vocabulary, allowing for the use of more diverse and contextually appropriate vocabulary. This is in line with a finding that the Virtual Go Mode feature in the VocabGo application increases student engagement in vocabulary skills (Song et al., 2023). The use of game-based apps also improves the vocabulary achievement, motivation, and confidence of Chinese EFL students (Li, 2021). The use of Augmented Reality (AR) applications also showed an increase in vocabulary ability, although the performance difference between AR and traditional methods was not significant (Lo et al., 2021).

The grammatical aspect also showed a significant improvement in students' speaking ability, with an increase in the application of grammatical structures from initial testing to the first and second cycles. This aligns with WhatsApp as a

technology-based learning medium to support English grammar learning by creating an active and collaborative learning environment, allowing participants to explore ideas and improve grammar skills through quick feedback (Annamalai et al., 2025). Another division of the Busuu Application is also effective in improving students' grammar skills, with an increase in the average score of participants from pre-test to post-test (Jannah et al., 2021).

The analysis showed a significant improvement in students' speaking skills after using the Loora application, with enhancements in pronunciation, vocabulary, and grammar. This is in line with the use of mobile apps in English learning, which significantly improved the speaking accuracy of EFL students in Iran, where students who used the app showed better speaking skills than the control group (Moayeri & Khodareza, 2020). In addition, Mobile Assisted Language Learning (MALL)-based learning interventions using WhatsApp also improved the oral accuracy of EFL students in Thailand, with pre-test and post-test results showing significant improvements in students' speaking skills (Phetsut & Waemusa, 2022).

Students' speaking fluency has improved significantly after using the Loora application. Students can speak more fluently without excessive pauses, showing increased comfort and confidence in using English. These findings are in line with the use of the ChatterPix Kids app, which helps ESL students in Malaysia develop speaking fluency through 12 practice sessions (Rajendran & Yunus, 2021). In addition, the Duolingo and WhatsApp apps also improved the speaking fluency of EFL students in Iran, with WhatsApp showing the best results among the two (Ahmed et al., 2022).

The results of interviews with students support the quantitative finding that the application of Loora positively impacts their confidence in speaking. Instagram has been proven to increase students' confidence in speaking skills, where respondents feel more comfortable and confident when talking, and help improve vocabulary and speaking fluency (Utomo, 2020). Research also shows that using Instagram in English-speaking classes significantly increases student confidence, which is reflected in the improvement of pre-test and post-test results and a more interactive learning atmosphere (Mutiara et al., 2021).

Students report that instant feedback, pronunciation, and grammar correction features benefit the learning process. Research shows that mobile-assisted peer feedback improves L2 students' English performance, where real-time and anonymous feedback aids the learning process despite limitations such as small phone screen sizes (Wu & Miller, 2020). In addition, input through WhatsApp in writing and audio significantly improves students' speaking skills, helping them correct mistakes and improve vocabulary and confidence. However, the lack of direct interaction with teachers is an obstacle (Tekin & Sallabaş, 2024).

Most students use this app 3-4 times a week and state they want to continue using it as a learning aid. The Loora application improves students' accuracy and fluency in speaking and increases their motivation and interest in learning English.

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This is in line with using the Cake application and mobile-based projects, which also increases student motivation, creating a fun learning experience and encouraging them to be more active in the learning process (Benlaghrissi & Ouahidi, 2024). In addition, mobile learning significantly increased the motivation of EFL students in Iraq, with the experimental group showing higher motivation levels than the control group (Kadhim et al., 2022).

Conclusion

Taking everything into account. In this study, the Loora application, a mobile-assisted language learning media, significantly improved students' speaking ability. The unique features of the Loora application, such as instant feedback and interactive exercises, were instrumental in this improvement. The results, analyzed using a classroom action research approach, demonstrated a marked increase in students' speaking accuracy and fluency from the D-Test to the second cycle. This indicates that the Loora application improved students' overall speaking ability and improved their grammar and pronunciation.

The results of the study indicated that students reported increased comfort in speaking practice after using the Loora application. They also noted that the instant feedback feature was a key element in their learning process, as it helped them identify and correct mistakes. This research is expected to provide valuable insights for educators and educational application developers regarding the potential of technology in language learning, particularly in improving students' speaking skills.

To further expand upon these findings, it is crucial to extend the scope of the study by incorporating a more diverse population and sample, as well as by considering additional factors that may influence the outcomes. Additionally, a comparative analysis with other analogous applications can offer a more comprehensive perspective on the efficacy of Loora application in enhancing students' speaking abilities.

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