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Improving Arabic Speaking Skills through HelloTalk in a Southern Thai Islamic School

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ABSTRACT

This study examined the implementation and effectiveness of the HelloTalk application in improving Arabic speaking skills among eighth-grade students at Ban Yaning Islamic School, Narathiwat, Thailand. The study was conducted in response to students' limited opportunities for authentic Arabic oral practice and their difficulties in pronunciation, grammar, vocabulary use, fluency, and comprehension. A quantitative pre-experimental design with a one-group pretest–posttest model was employed. The participants were 30 eighth-grade students selected through purposive sampling. Data were collected using Arabic speaking tests, classroom observation, interviews, and documentation. Students' speaking performance was assessed based on five indicators: pronunciation, grammar, vocabulary, fluency, and comprehension. The data were analyzed using descriptive statistics, the Shapiro–Wilk normality test, the Wilcoxon signed-rank test, and N-Gain analysis. The findings showed that the students' mean score increased from 49.67 in the pretest to 77.33 in the posttest. The Wilcoxon test produced a significance value of 0.000, indicating a statistically significant improvement after the intervention. However, the N-Gain score of 18.83% indicated low practical effectiveness. These findings imply that HelloTalk can support Arabic speaking practice as a supplementary digital medium, but its effectiveness depends on structured teacher guidance, stable internet access, sufficient implementation duration, and communicative speaking tasks

Informasi Artikel

Kata Kunci:

HelloTalk; Keterampilan Berbicara Bahasa Arab; Komunikasi Lisan; Mobile-Assisted Language Learning; Performa Berbicara

ABSTRAK

Penelitian ini mengkaji implementasi dan efektivitas aplikasi HelloTalk dalam meningkatkan keterampilan berbicara bahasa Arab siswa kelas VIII di Ban Yaning Islamic School, Narathiwat, Thailand. Penelitian ini dilatarbelakangi oleh terbatasnya kesempatan siswa untuk melakukan praktik komunikasi lisan bahasa Arab secara autentik serta kesulitan mereka dalam aspek pelafalan, tata bahasa, penguasaan kosakata, kelancaran, dan pemahaman. Penelitian ini menggunakan pendekatan kuantitatif dengan desain pra-eksperimental model one-group pretest–posttest. Partisipan penelitian terdiri atas 30 siswa kelas VIII yang dipilih melalui teknik purposive sampling. Data dikumpulkan melalui tes berbicara bahasa Arab, observasi kelas, wawancara, dan dokumentasi. Performa berbicara siswa dinilai berdasarkan lima indikator, yaitu pelafalan, tata bahasa, kosakata, kelancaran, dan pemahaman. Data dianalisis menggunakan statistik deskriptif, uji normalitas Shapiro–Wilk, uji Wilcoxon signed-rank, dan analisis N-Gain. Hasil penelitian menunjukkan bahwa nilai rata-rata siswa meningkat dari 49,67 pada pretest menjadi 77,33 pada posttest. Uji Wilcoxon menghasilkan nilai signifikansi 0,000, yang menunjukkan adanya peningkatan signifikan setelah intervensi. Namun, skor N-Gain sebesar 18,83% menunjukkan bahwa efektivitas praktis intervensi masih rendah. Temuan ini mengimplikasikan bahwa HelloTalk dapat mendukung latihan berbicara bahasa Arab sebagai media digital tambahan, tetapi efektivitasnya bergantung pada bimbingan guru yang terstruktur, akses internet stabil, durasi implementasi yang memadai, dan tugas berbicara komunikatif.

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1. Introduction

Arabic language learning occupies a strategic position in Islamic education because Arabic functions not only as a medium of communication but also as the language of religious texts, Islamic scholarship, and transnational Muslim intellectual traditions. In many Muslim minority contexts, including Southern Thailand, Arabic is learned as a foreign language within religious and formal school systems, yet students' communicative competence often remains limited because classroom instruction tends to emphasize vocabulary memorization, grammar explanation, and reading comprehension rather than sustained oral interaction [1], [2]. Speaking skill is particularly important because it represents the productive dimension of language competence and requires learners to integrate pronunciation, vocabulary, grammatical accuracy, fluency, comprehension, confidence, and sociocultural appropriateness in real-time communication [3], [4]. In foreign language learning, speaking is frequently regarded as the most demanding skill because learners must retrieve linguistic forms rapidly, organize meaning coherently, and respond appropriately to interlocutors under communicative pressure [5], [6], [7]. For Arabic learners, these challenges are often intensified by phonological distance, unfamiliar morphological patterns, limited exposure to authentic Arabic input, insufficient opportunities to interact with native or proficient speakers, and anxiety when producing oral responses in classroom settings [8], [9], [10].

In the context of Arabic as a foreign language, speaking difficulties are commonly associated with both linguistic and non-linguistic factors. Linguistically, students often struggle with accurate pronunciation of Arabic phonemes, limited vocabulary, grammatical agreement, sentence construction, and spontaneous oral production [11], [12], [13]. Non-linguistically, students' speaking performance may be constrained by low motivation, lack of confidence, fear of making mistakes, teacher-centered classroom interaction, limited practice time, and insufficient exposure to authentic communicative situations [14], [15], [16]. These problems indicate that improving Arabic speaking skills requires more than conventional explanation-based instruction; it requires learning environments that provide repeated practice, meaningful interaction, corrective feedback, and opportunities for learners to use the target language in authentic or semi-authentic contexts [17], [18], [19]. Therefore, contemporary Arabic pedagogy needs to move toward more communicative, interactive, and technology-supported approaches that can expand learning beyond the physical classroom and create more flexible spaces for oral language practice.

The increasing use of digital technology in language education has encouraged the development of Mobile-Assisted Language Learning (MALL), which refers to language learning supported by mobile devices, applications, and networked communication platforms. MALL has been widely discussed as a promising approach because it enables learners to access learning materials anytime and anywhere, engage in autonomous practice, receive multimodal input, and interact with other language users beyond classroom boundaries [3], [20], [21]. Meta-analytic evidence shows that mobile language learning applications can generate positive learning effects, although the magnitude of these effects may vary depending on instructional design, duration of intervention, learner readiness, task structure, and teacher facilitation [14], [22], [23]. Similarly, studies on computer-mediated communication and social media-based language learning suggest that digital interaction can support oral proficiency, intercultural awareness, learner autonomy, and language-use confidence when learners are guided to participate in meaningful communication rather than passive consumption of content [24], [25], [26]. These findings imply that mobile applications should not be viewed merely as technological tools but as pedagogical environments that need to be aligned with learning objectives, communicative tasks, assessment criteria, and classroom support.

Among mobile applications used in language learning, HelloTalk has attracted increasing attention because it combines social networking, language exchange, translation, voice messaging, pronunciation support, correction tools, and opportunities to communicate with native or proficient speakers. Unlike many drill-based language applications, HelloTalk is built around interaction, allowing learners to exchange text, audio, and sometimes video messages with users from different linguistic backgrounds [27], [28], [29]. This feature is pedagogically relevant for speaking instruction because oral competence develops through repeated language use, negotiation of meaning, feedback, and exposure to diverse linguistic input. Previous studies have reported that HelloTalk may support learners' speaking confidence, vocabulary development, pronunciation practice, learner autonomy, and motivation because students can practice language in a less formal and more flexible environment [27], [30], [31]. However, the same studies also indicate that the effectiveness of HelloTalk is not automatic; learners may experience challenges such as difficulty finding serious conversation partners, inconsistent feedback, limited premium features, internet constraints, privacy concerns, and insufficient pedagogical structure [31], [32], [33]. Thus, HelloTalk can be potentially useful for speaking instruction, but its effectiveness depends on how teachers design, monitor, and integrate its use into structured classroom learning.

Previous research has provided valuable evidence regarding the use of HelloTalk and other mobile applications in foreign language education. Several studies have examined HelloTalk in English speaking instruction and found that the application can support learners' fluency, confidence, and interactional practice.

Other studies have explored students' perceptions of HelloTalk and reported that learners generally perceive the application as useful, motivating, and supportive for informal language learning [22], [23], [24]. Research on broader MALL implementation has also shown that mobile applications can improve learners' speaking performance, motivation, and learning engagement when combined with appropriate pedagogical strategies [34], [35], [36]. Nevertheless, most of these studies focus on English or other foreign languages, while empirical studies examining HelloTalk for Arabic speaking instruction remain relatively limited. Furthermore, existing HelloTalk studies often emphasize learners' perceptions, informal learning experiences, or English-speaking contexts rather than measuring Arabic speaking improvement through pretest–posttest assessment and statistical effectiveness analysis.

This limitation is significant because Arabic learning in Southern Thailand has a distinct educational and sociocultural context. In Narathiwat and other areas of Southern Thailand, Arabic is closely related to Islamic education and Muslim identity, yet students often learn Arabic in environments where authentic Arabic-speaking interaction is limited. The preliminary condition identified in the present study shows that eighth-grade students at Ban Yaning Islamic School still experience difficulties in Arabic pronunciation, vocabulary mastery, grammar use, and oral communication confidence. The school context also presents practical challenges, including limited speaking practice and unstable internet access during technology-based learning activities. These contextual characteristics make it necessary to investigate whether HelloTalk can meaningfully support Arabic speaking instruction in this setting, rather than assuming that findings from English or other foreign language contexts can be directly transferred to Arabic learning in Southern Thailand.

Accordingly, the research gap addressed in this study lies in the limited empirical evidence on the effectiveness of HelloTalk for improving Arabic speaking skills among junior secondary students in a Southern Thai Islamic school context. Previous studies have examined HelloTalk for English speaking, Japanese learning, writing skills, or general learner perceptions, but few have specifically evaluated its implementation and effectiveness in Arabic speaking instruction using a quantitative pretest–posttest design. This study therefore offers novelty by situating HelloTalk within Arabic oral communication learning in Southern Thailand and by examining both the instructional process and measurable improvement in students' speaking performance. Based on this gap, the objective of this study is to investigate the implementation and effectiveness of the HelloTalk application in improving Arabic speaking skills among eighth-grade students at Ban Yaning Islamic School, Narathiwat, Thailand. The findings are expected to contribute to the development of mobile-assisted Arabic language learning by clarifying the pedagogical potential and practical limitations of HelloTalk as a supplementary medium for speaking instruction.

2. Method

2.1 Research Design

This study employed a quantitative approach with a pre-experimental design using a one-group pretest–posttest model. This design was considered appropriate because the study aimed to measure changes in students' Arabic speaking performance before and after the implementation of HelloTalk as a mobile-assisted language learning medium. Pretest–posttest designs are widely used in language learning research to examine measurable changes in learners' performance after instructional treatment, particularly when the research focuses on classroom-based intervention and learning improvement [37], [38]. However, because this study did not involve a control group, the findings were interpreted as within-group improvement rather than definitive causal evidence. This limitation was considered methodologically important because technology-assisted language learning outcomes may be influenced by intervention duration, learner readiness, task design, teacher facilitation, and learning environment [37], [38], [39].

2.2 Research Setting and Participants

The study was conducted at Ban Yaning Islamic School, Narathiwat, Thailand, during the 2024/2025 academic year. The population consisted of 78 students across three grade levels: 22 seventh-grade students, 30 eighth-grade students, and 26 ninth-grade students. The sample consisted of 30 eighth-grade students who were selected purposively because they represented the target class for the Arabic speaking intervention using HelloTalk. Purposive sampling was used because the class had relevant characteristics for the research objective, particularly students' difficulties in Arabic pronunciation, vocabulary mastery, grammatical use, and oral communication. Similar classroom-based Arabic speaking studies have emphasized that learners in non-Arabic-speaking environments often require structured interaction, repeated oral practice, and supportive language environments to develop speaking competence [40], [41], [42].

2.3 Variables and Operational Definitions

The independent variable was the use of the HelloTalk application, while the dependent variable was students' Arabic speaking skill. HelloTalk was operationally defined as a mobile-assisted language learning application that supports language exchange through text messages, voice messages, translation tools, pronunciation support, correction features, and interaction with other language users. This operational definition is aligned with the broader concept of Mobile-Assisted Language Learning, which emphasizes flexible access, multimodal interaction, learner autonomy, and communication beyond classroom boundaries [41], [42], [43]. Arabic speaking skill was defined as students' ability to express ideas orally in Arabic by using appropriate pronunciation, grammar, vocabulary, fluency, and comprehension. These indicators are consistent with speaking assessment practices in Arabic learning, which commonly evaluate oral performance through pronunciation

accuracy, linguistic control, vocabulary use, fluency, and communicative understanding [4], [43], [44].

2.4 Instrumen

The research instruments consisted of a speaking test, observation, interview, and documentation. The speaking test was used as the main instrument to measure students' Arabic speaking performance in the pretest and posttest. The assessment covered five components: pronunciation, grammar, vocabulary, fluency, and comprehension. These components were selected because speaking competence requires the integration of phonological, lexical, grammatical, and communicative abilities in oral production [4], [40], [44]. Observation was used to monitor the implementation of HelloTalk during the learning process, including students' engagement, participation, technical problems, and classroom interaction. Interviews were conducted to obtain supporting information from the teacher and students regarding their responses to the learning process. Documentation was used to collect supporting data such as school information, student participation records, learning activities, and test score records. The use of multiple data sources was intended to strengthen the interpretation of the quantitative results by providing contextual information about the implementation process and learning challenges.

2.5 Research Procedure

The research procedure consisted of three stages: pre-intervention, intervention, and post-intervention. In the pre-intervention stage, students completed a speaking pretest to identify their initial Arabic speaking ability. In the intervention stage, HelloTalk was introduced and implemented in Arabic speaking instruction. Students were guided to install the application, create an account, identify relevant features, and use the application for vocabulary practice, pronunciation exercises, guided oral responses, and simple communicative tasks. The teacher facilitated the learning process by providing examples, guiding students' use of the application, and helping them overcome linguistic and technical difficulties. This teacher-guided implementation was important because previous studies on MALL indicate that mobile applications are more effective when embedded in structured pedagogical activities rather than used as stand-alone tools [45]. In the post-intervention stage, students completed a speaking posttest using the same assessment indicators as the pretest to determine whether there was measurable improvement after the treatment.

2.6 Data Analysis

Data were analyzed using IBM SPSS version 25. Descriptive statistics were used to identify the minimum score, maximum score, mean, and standard deviation of students' pretest and posttest results. A normality test was conducted using the Shapiro–Wilk test because the sample size was below 50. Since the data were not normally distributed, the Wilcoxon signed-rank test was used to examine whether there was a statistically significant difference between pretest and posttest scores. The significance level was set at 0.05. In addition, N-Gain analysis was conducted to determine the practical effectiveness of HelloTalk by measuring students' score improvement relative to the maximum possible improvement. The use of both significance testing and gain analysis was intended to distinguish statistical improvement from practical instructional effectiveness, because a statistically significant result does not always indicate a strong educational effect [37], [38], [39].

3. Result and Discussion

1.1 Result

3.1.1 Implementation of HelloTalk in Arabic Speaking Instruction

The implementation of HelloTalk in Arabic speaking instruction was conducted through a structured classroom intervention involving eighth-grade students at Ban Yaning Islamic School, Narathiwat, Thailand. The intervention was designed to introduce students to HelloTalk as a mobile-assisted language learning medium and to provide opportunities for practicing Arabic vocabulary, pronunciation, and simple oral expressions. The learning process was carried out in several instructional meetings, beginning with the introduction of the application and followed by guided speaking activities using its available features

During the initial stage, students were introduced to the basic During the initial stage, students were introduced to the basic functions of HelloTalk, including account registration, user profile completion, feature exploration, and the use of translation, audio, and text-based communication tools. At this stage, students still required substantial guidance from the teacher and researcher because most of them were unfamiliar with the application and had limited experience using digital media for Arabic speaking practice. The teacher therefore played an important role in explaining the instructional purpose of HelloTalk, demonstrating how to use the application, and ensuring that students used it for Arabic learning activities rather than general social interaction.

In the following learning activities, students used HelloTalk to support vocabulary practice and simple speaking exercises. The learning materials included basic Arabic vocabulary, particularly words related to animals and numbers, as well as simple sentence patterns. Students were encouraged to observe vocabulary, repeat pronunciation, memorize selected words, answer oral questions, and participate in guided classroom practice. Observation results indicated that the use of HelloTalk attracted students' attention and increased their enthusiasm during Arabic learning. However, several challenges were also identified, particularly students' limited mastery of Arabic grammar, uneven digital readiness, and unstable internet access, which affected the smooth implementation of the application-based learning process.

3.1.2 Students' Arabic Speaking Scores before and after the Intervention

The speaking test was administered twice, namely before the intervention as a pretest and after the implementation of HelloTalk as a posttest. The pretest was used to identify students' initial Arabic speaking ability, while the posttest was used to determine students' speaking performance after receiving the treatment. The assessment focused on students' oral performance in Arabic speaking activities

Descriptive statistics in **Table 1** show that students' Arabic speaking scores increased after the implementation of HelloTalk. The mean pretest score was 49.67, while the mean posttest score increased to 77.33. The minimum score increased from 25 in the pretest to 50 in the posttest, and the maximum score increased from 65 to 90. This result indicates that students demonstrated higher speaking performance after the intervention. The standard deviation decreased slightly from 12.590 in the pretest to 11.577 in the posttest, suggesting that students' posttest scores became relatively more consistent after the learning treatment.

Table 1. Descriptive Statistics of Students' Pretest and Posttest Scores

Test	N	Minimum	Maximum	Mean	Standard Deviation
Pretest	30	25	65	49.67	12.590
Posttest	30	50	90	77.33	11.577

The increase in the mean score suggests that students' Arabic speaking performance improved after the use of HelloTalk. Before the intervention, most students were still categorized at a low to moderate level of speaking performance, as reflected in the relatively low pretest mean score. After the intervention, the posttest mean score reached 77.33, indicating that students were better able to respond orally, recognize vocabulary, and use simple Arabic expressions. Nevertheless, descriptive improvement alone was not sufficient to determine whether the increase was statistically significant; therefore, further inferential analysis was conducted.

3.1.3 Normality Test

Before conducting hypothesis testing, a normality test was performed to determine whether the pretest and posttest data were normally distributed. Because the number of participants was 30, the Shapiro–Wilk test was used as the basis for interpretation. The Shapiro-Wilk results in **Table 2** show that the significance value of the pretest was 0.013, while the significance value of the posttest was 0.003. Both values were lower than 0.05, indicating that the data were not normally distributed. Therefore, the Wilcoxon signed-rank test was selected as the appropriate non-parametric test to examine the difference between students' pretest and posttest scores.

Table 2. Shapiro–Wilk Normality Test

Test	Statistic	df	Sig.
Pretest	0.907	30	0.013
Posttest	0.881	30	0.003

The normality test result indicates that the assumption of normal distribution was not met. Since both pretest and posttest significance values were below the 0.05 threshold, parametric testing using a paired-sample t-test was not appropriate. Consequently, the Wilcoxon signed-rank test was used to determine whether the difference between pretest and posttest scores was statistically significant.

3.1.4 Wilcoxon Signed-Rank Test

The Wilcoxon signed-rank test was conducted to examine whether there was a significant difference between students' Arabic speaking scores before and after the implementation of HelloTalk. The rank summary in **Table 3** shows that all 30 students obtained higher scores in the posttest than in the pretest. There were no negative ranks and no ties, indicating that every participant experienced score improvement after the treatment.

Table 3. Wilcoxon Signed-Rank Test: Rank Summary

Comparison	Negative Ranks	Positive Ranks	Ties	Total
Posttest – Pretest	0	30	0	30

The rank summary demonstrates a consistent pattern of improvement across all participants. Since all students showed positive ranks, the intervention was associated with higher posttest scores for the entire sample. This pattern indicates that HelloTalk-based instruction contributed to measurable improvement in students' Arabic speaking performance.

The Wilcoxon test statistics in **Table 4** show a Z value of -4.837 with an asymptotic significance value of 0.000. Since the significance value was lower than 0.05, the difference between pretest and posttest scores was statistically significant. This result indicates that students' Arabic speaking scores improved significantly after the implementation of HelloTalk. Therefore, the alternative hypothesis was accepted, while the null hypothesis was rejected. In statistical terms, HelloTalk produced a significant difference in students' Arabic speaking performance before and after the treatment

Table 4. Wilcoxon Signed-Rank Test: Test Statistics

Comparison	Z	Asymp. Sig. 2-tailed
Posttest – Pretest	-4.837	0.000

The Wilcoxon test produced a Z value of -4.837 with an asymptotic significance value of 0.000. Since the significance value was lower than 0.05, the difference between pretest and posttest scores was statistically significant. This result indicates that the students' Arabic speaking scores improved significantly after the implementation of HelloTalk. Therefore, the alternative hypothesis was accepted, while the null hypothesis was rejected. In statistical terms, HelloTalk produced a significant difference in students' Arabic speaking performance before and after the treatment.

3.1.5 N-Gain Analysis

In addition to hypothesis testing, N-Gain analysis was conducted to determine the practical effectiveness of HelloTalk in improving students' Arabic speaking skills. This analysis was important because statistical significance does not always indicate strong instructional effectiveness. The N-Gain descriptive statistics in **Table 5** show that the average N-Gain percentage was 18.83%, with a minimum value of 3.45% and a maximum value of 32.00%. Based on the effectiveness criteria used in the study, an N-Gain percentage below 40% is categorized as ineffective.

Table 5. N-Gain Descriptive Statistics

Indicator	N	Min	Max	Mean	Standard Deviation
N-Gain Percentage	30	3.45	32.00	18.83	6.64

The N-Gain result indicates that although students' scores increased significantly from pretest to posttest, the magnitude of improvement was still relatively low. This means that HelloTalk had a positive effect on students' Arabic speaking performance, but its practical effectiveness was limited. The low N-Gain percentage may be related to the short duration of the intervention, students' initial unfamiliarity with the application, limited internet access, and persistent difficulties in Arabic grammar and vocabulary use.

3.1.6 Summary of Findings

Overall, the results show that the implementation of HelloTalk improved students' Arabic speaking scores statistically. The increase in the mean score from 49.67 to 77.33, together with the Wilcoxon significance value of 0.000, indicates a significant improvement after the intervention. However, the N-Gain percentage of 18.83% shows that the practical effectiveness of the treatment was low. Therefore, the findings suggest that HelloTalk can be used as a supplementary medium to support Arabic speaking instruction, but its effectiveness depends on sufficient implementation time, stable technological support, teacher guidance, and structured speaking tasks.

3.2 Discussion

The findings of this study indicate that the implementation of HelloTalk improved students' Arabic speaking performance, as reflected in the increase of the mean score from 49.67 in the pretest to 77.33 in the posttest. The Wilcoxon signed-rank test also confirmed a statistically significant difference between pretest and posttest scores, indicating that students performed better after the intervention. This result suggests that HelloTalk can provide a supportive digital environment for Arabic speaking practice, particularly because the application offers multimodal interaction through text, voice messages, translation tools, pronunciation support, and opportunities for language exchange. This finding is consistent with Rosilah's study, which reported that HelloTalk helped students practice speaking skills by creating more interactive and flexible learning opportunities [46]. It is also in line with Hwang et al.'s study, which found that the use of a Mobile-Assisted Language Learning (MALL) application significantly enhanced EFL learners' speaking skills, foreign language enjoyment, and language-specific grit [34]. In both studies, HelloTalk was not merely used as a digital communication tool but as a platform that encouraged learners to participate more actively in language practice, which supports the result of the present study.

The improvement found in this study also supports broader evidence from Mobile-Assisted Language Learning (MALL) research. Li's meta-analysis showed that MALL has a significant positive effect on foreign language learners' speaking skill development, particularly when mobile applications are integrated with meaningful instructional activities and sufficient learning duration [37]. Similarly, Hsu and Liu's systematic review emphasized that mobile-assisted oral communication can support authentic learning, situated communication, and learners' oral performance when technological affordances are aligned with pedagogical goals [38]. The present finding is consistent with these studies because HelloTalk enabled students to move beyond passive classroom learning and engage with vocabulary, pronunciation, and oral response activities through digital support. However, the present study also confirms that the benefit of MALL is not automatic. The low N-Gain score indicates that although students improved statistically, the magnitude of improvement was still limited. This supports Hou and Aryadoust's methodological review, which emphasized that the effectiveness of MALL depends strongly on research design quality, intervention structure, learning duration, and the way mobile applications are pedagogically implemented [39].

The results are also comparable to Mihaylova et al.'s meta-analysis, which found that mobile language applications generally have moderate-to-strong benefits for second language achievement compared with traditional learning approaches, but also highlighted risks related to publication bias, variation in learning outcomes, and differences in implementation quality [14]. In relation to the present study, HelloTalk produced a positive learning gain, but its practical effectiveness remained low. This means that the use of a mobile application alone is insufficient to ensure substantial speaking improvement. Students need sustained exposure, structured speaking tasks, teacher feedback, and repeated communicative practice to transform initial improvement into deeper oral competence. Therefore, while this study confirms the general potential of MALL, it also provides a more cautious interpretation by showing that statistical significance must be distinguished from practical effectiveness.

The findings also resonate with research on Arabic technology-assisted learning. Ritonga et al. showed that Duolingo could function as a relevant platform for beginner Arabic learning because it supports vocabulary acquisition and basic language exposure, although it still requires further development to support higher-level Arabic speaking competence [43]. This comparison is important because both Duolingo and HelloTalk are mobile-based platforms, but they offer different pedagogical affordances. Duolingo tends to support structured vocabulary and sentence-level practice, whereas HelloTalk emphasizes interaction and language exchange. The present study suggests that HelloTalk is potentially useful for Arabic speaking practice because it creates opportunities for learners to use Arabic more actively. Nevertheless, the low N-Gain indicates that Arabic speaking development requires more than exposure to digital interaction; learners also need systematic scaffolding in pronunciation, grammar, vocabulary expansion, fluency building, and comprehension practice.

This finding is consistent with Basir et al., who reported that the use of the HelloTalk application in vocational high schools contributed positively to students' English speaking development, particularly by enhancing their confidence, motivation, pronunciation, grammar, vocabulary, fluency, and comprehension during speaking activities. [47]. In the present study, observation showed that students became more enthusiastic and interested when HelloTalk was introduced into Arabic learning. This suggests that HelloTalk can increase students' engagement, especially in contexts where conventional Arabic instruction may feel monotonous or teacher-centered. However, students' enthusiasm did not fully translate into high instructional effectiveness. This indicates that motivation and engagement are necessary but not sufficient conditions for speaking improvement. Without stable internet access, adequate digital literacy, and clear teacher-designed speaking tasks, students may not use the application optimally for language development.

The novelty of this study lies in its specific focus on HelloTalk for Arabic speaking instruction among eighth-grade students in a Southern Thai Islamic school context. Previous studies have mostly examined HelloTalk in English learning, Japanese learning, writing development, or students' perceptions of digital language learning. In contrast, this study investigates HelloTalk as a mobile-assisted medium for improving Arabic speaking skills in Narathiwat, Thailand, where Arabic learning is closely connected to Islamic education but students have limited opportunities for authentic oral communication. Another novelty is the balanced interpretation of effectiveness. While many technology-based learning studies emphasize positive improvement, this study shows that HelloTalk produced statistically significant improvement but low practical effectiveness based on N-Gain analysis. This distinction provides a more rigorous contribution because it prevents overclaiming and highlights the need to evaluate both statistical and pedagogical significance.

Theoretically, this study contributes to the literature on mobile-assisted Arabic language learning by demonstrating that digital language exchange applications can support oral performance when used in a classroom-based intervention. It strengthens the argument that speaking skill development requires interaction, multimodal input, and opportunities for output production. Practically, the findings imply that Arabic teachers may use HelloTalk as a supplementary medium to increase students' exposure to Arabic vocabulary, pronunciation, and simple communication. However, teachers should not use HelloTalk as a stand-alone tool. The application should be embedded into structured lesson plans, guided speaking tasks, vocabulary preparation, pronunciation modeling, peer interaction, teacher feedback, and reflective learning activities. For schools, the findings imply that successful implementation of mobile-assisted Arabic learning requires sufficient internet access, digital literacy preparation, classroom monitoring, and policies that ensure safe and purposeful student interaction with digital platforms.

Pedagogically, the findings suggest that HelloTalk is most useful when positioned as an extension of classroom practice rather than a replacement for teacher instruction. Teachers can design tasks such as guided voice-message practice, vocabulary-based dialogues, pronunciation correction activities, short oral presentations, and reflective speaking journals using HelloTalk. Students may also be encouraged to record their oral responses, compare pronunciation, and revise their speaking based on teacher or peer feedback. Such structured activities can help transform HelloTalk from a general communication application into a pedagogically meaningful speaking platform. This is particularly important in Arabic learning contexts, where students may need intensive scaffolding before they can communicate independently.

This study has several limitations. First, the study used a pre-experimental one-group pretest–posttest design without a control group, which limits the ability to make strong causal claims. The improvement in students' scores may be associated with the HelloTalk intervention, but other factors such as repeated testing, teacher support, students' growing familiarity with the learning material, or short-term practice effects may also have contributed to the results. Second, the sample was limited to 30 eighth-grade students from one school, so the findings cannot be generalized to all Arabic learners in Thailand or other educational contexts. Third, the intervention was conducted within a limited number of meetings, which may explain the low N-Gain score. Speaking skills require long-term practice, repeated exposure, and continuous feedback; therefore, a brief intervention may not be sufficient to produce strong practical effectiveness. Fourth, unstable internet access and students' initial unfamiliarity with HelloTalk affected the implementation process. Fifth, this study focused mainly on overall speaking scores and did not deeply analyze each speaking component, such as pronunciation, grammar, vocabulary, fluency, and comprehension, separately. Future studies should employ a quasi-experimental or randomized controlled design, involve larger and more diverse samples, extend the intervention duration, analyze each speaking component in greater detail, and combine quantitative assessment with qualitative analysis of students' actual interaction patterns in HelloTalk.

4. Conclusion

This study concludes that the use of HelloTalk contributed to the improvement of eighth-grade students' Arabic speaking skills at Ban Yaning Islamic School, Narathiwat, Thailand. The increase in students' mean score from 49.67 in the pretest to 77.33 in the posttest, together with the Wilcoxon significance

value of 0.000, indicates that students' speaking performance improved significantly after the intervention. However, the N-Gain result of 18.83% shows that the practical effectiveness of HelloTalk remained low, suggesting that the application produced measurable improvement but was not yet sufficiently effective as a stand-alone instructional medium. These findings imply that HelloTalk can be used as a supplementary tool to support Arabic speaking practice, particularly in providing students with digital exposure, vocabulary reinforcement, pronunciation practice, and more interactive learning experiences. Nevertheless, its effectiveness depends on structured teacher guidance, stable internet access, adequate digital literacy, sufficient implementation time, and well-designed communicative tasks. Therefore, future studies are recommended to employ a stronger experimental design with a control group, involve larger and more diverse samples, extend the intervention duration, and examine the effect of HelloTalk on specific speaking components such as pronunciation, grammar, vocabulary, fluency, and comprehension.

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