



# The Effects of Using “Elsa Speak app” on the Enhancement of College Students’ English-Speaking Skills

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**Abstract**— Mobile-Assisted Language Learning (MALL) revolutionizes education by utilizing mobile devices to extend learning beyond traditional settings. This study aims to explore the effects of the ELSA Speak app on English-speaking skills and students’ attitudes towards the use of the app at a college in Ho Chi Minh City, Vietnam. The research involved fifty English students divided into control and experimental groups. It employed pretest and posttest, and a questionnaire for quantitative data collection. Both descriptive and inferential statistics methods were used for data analysis. The results indicated that ELSA Speak effectively enhanced students’ English speaking skills; it was also revealed that students had positive attitudes towards the use of the app. The study provided recommendations for both teachers and learners in utilizing mobile applications, specifically ELSA Speak to improve English speaking skills in the Vietnamese context.



**Keywords**— Mobile-Assisted Language Learning, ELSA Speak, English-speaking skills, college students, Vietnamese context

## I. INTRODUCTION

The late 20th and early 21st centuries witnessed a surge in Internet usage, leading to a significant increase in mobile phone and computer users. The multi-functionality of contemporary mobile technology, extending beyond traditional oral communication, allows users to access the Internet for information retrieval, email communication, e-book reading, and more. Mobile phones have become catalysts for self-study and education, offering flexibility in terms of time and space. The advent of mobile devices in 1993 had a profound impact on education and language learning, ushering in an era of ubiquitous learning experiences (Miangah et al., 2012). The integration of technology in education, marked by the prevalence of computer-assisted language learning (CALL) and mobile-assisted language learning (MALL), has become common in the 21st century. Teachers have embraced technologies such as speech recognition software, CD-ROMs, Internet resources, and computer-based tasks to enhance English language teaching, making it more efficient and

encouraging self-study among learners (Donaldson & Haggstrom, 2006). The demand for technology that complements traditional methods is evident, challenging educators to develop courseware for pedagogical and technological purposes.

In EFL learning, speaking skills are considered to be challenging, especially in large groups, limiting practice and correction time (Hall, 2004). At Vietnamese colleges, students are supposed to face limitations in communication and English usage. That is why they need supports from technology to enhance their speaking skills. Despite diverse studies on technology used in EFL learning, research on the impact of ELSA Speak in the Vietnamese educational context is limited, emphasizing the potential contribution to enhancing students’ English-speaking skills. The study attempts to fill this gap and aims to examine the effects of “ELSA Speak app” on college students’ enhancement of English speaking skills. It is expected that the study will offer valuable insights for enhancing speaking skills. This

study attempted to address two research questions as follows:

- a) What are the effects of using ELSA Speak app on the enhancement of students' English speaking skills?
- b) What are the students' attitudes towards the use of ELSA Speak app to enhance students' English speaking skills?

## II. A BRIEF LITERATURE REVIEW

### 2.1. Benefits and challenges of mobile application in language learning and teaching

Researchers emphasize the advantages of integrating technology into language teaching and learning. In terms of vocabulary acquisition, mobile apps, according to Chun and Plass (1996), effectively enhance L2 vocabulary acquisition through a combination of text, picture, and video, providing extensive language exposure. They assert that language input, as per SLA theories and empirical evidence, is essential for phonological features, vocabulary, and pragmatic use. Mobile applications, with audio and video series, are deemed excellent tools for frequent and automatic L2 acquisition. Regarding grammar enhancement, Donaldson and Haggstrom (2006) highlight the importance of meaningful communication tasks, with chat-rooms and discussion forums facilitating such activities. Students find online grammar exercises, video dialog, and drills beneficial, with the latter being more understandable than textbook explanations. Particularly in developing speaking skills, mobile apps may offer potential improvements of pronunciation and interaction over traditional teacher-student model. Despite these benefits, challenges in using mobile apps cannot be avoided, including teachers' confidence in technology integration, facility shortages, technical issues, and students' learning preferences and ability.

### 2.2 Learners' attitudes towards mobile-assisted language learning

Learners' attitudes, strategies, and skills, as articulated by Nunan (2000), play a pivotal role in determining language proficiency. Attitude is the way that people think or behave towards something that shows how they feel. Language learning is inextricably linked to attitudes (Starks & Paltridge, 1996). Positive language attitudes enable learners to have a positive perspective toward learning as claimed by Karahan (2007). Obviously, attitudes may be very important in language acquisition as they seem to have an impact on student's success or failure in their studies. Wenden (1991) argue that attitudes consist of three aspects: cognitive, affective, and behavioral.

Cognitive aspect deals with a person's beliefs or knowledge about an attitude object. As for the cognitive component of language attitudes, it is language learners' beliefs about the knowledge they receive and their understanding during language learning. Affective aspect refers to a person's feelings and emotions towards an object. They may express their likes or dislikes towards surrounding objects or situations. And behavioral aspect refers to how the individual behaves and reacts to an object in particular situations. Masgoret and Gardner (2003) highlight the impact of attitudes toward the learning environment on motivation and achievement, reinforcing the interconnected nature of cognitive, affective, and behavioral aspects in effective language teaching and learning.

## III. METHODOLOGY

### 3.1 Research site and participants

The research was conducted at Vien Dong College (VDC) in Ho Chi Minh City, Vietnam. It has been known for its multidisciplinary training system since its establishment in 2007. Offering diverse programs, VDC focuses on quality education with experienced teachers, modern facilities, and international partnerships. Students are required to achieve a foreign language certificate, equivalent to B1 Level according to the European foreign language competency framework. To achieve that goal, apart from professional human resources, the college also invests in facilities for English language teaching and learning.

The study involved 50 students from an introductory English class. They were easily accessible and readily available for participating in the experiment. Twenty-five students were designated as the control group, and the remaining 25 students, the experimental group. They were aged from 18 to 21.

### 3.2 Research instruments

Two data collection instruments were employed in this study, including tests (pretest and posttest) and a questionnaire. The pretest and posttest scores were used to measure the effects of "ELSA Speak app" on students' English speaking skills. The structure of the pretest and post-test were the same, including 2 parts conducted to measure the students' ability to speak English before and after treatments in the study. The rating criteria for evaluating students' speaking performance was based on a five-band rating rubric including Pronunciation, Vocabulary and Grammar and then the scores were calculated and ranging from 1 as the lowest to 10 as the highest.

The questionnaire consists of two parts. Part 1 are items about the demographic information of the participants, including gender, age. Part 2 consists of 24 items about students’ attitudes towards “Elsa Speak app” concerning cognitive, affective and behavioral aspects. Furthermore, the questionnaire items are based on a four-point Likert scale: from “strongly disagree to strongly agree”. The Cronbach’s alpha indexes of the questionnaire are 0.81 for 9 cognitive items, 0.71 for 5 affective items, and 0.75 for 7 behavioral items, so the reliability of the questionnaire is acceptable.

**3.3 Procedures for data collection and analysis**

After the participants of the two groups completed the pretest, the experimental group was consecutively treated under ELSA Speak integrating activities in 8 weeks starting from November 8<sup>th</sup>, 2022. The control group, however, received the lessons without ELSA Speak integration. At the end of the course (in the tenth week), a post-test was given to both groups with the same test format and rating procedure. The questionnaire was designed in Vietnamese to make it comprehensive for learners and avoid misunderstanding. It was allocated to the participants after the experiment (in the eleventh week). The researcher explained the purpose of the questionnaire, the expected duration, and the confidentiality of the research. 25 participants in the experimental group had 30 minutes to complete it on the same day.

For analyzing the data collected from the tests and questionnaire, SPSS was used. Regarding the pre-test and

*Table 4.1 Descriptive Statistics of the mean scores within the control group and the experimental group before and after the treatment*

Group	Test	N	Minimum	Maximum	Mean	Std. Deviation
Control	Pre-test	25	2	7	3.560	1.386
	Post-test	25	4	7	4.640	0.907
Experimental	Pre-test	25	2	5	2.880	0.881
	Post-test	25	4	8	5.480	1.005

*Table 4.2 Comparative results of the mean scores within each group in the pre-test and post-test*

Pre-test and Post-test	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
Control	1.0800	0.9092	0.1818	0.7047	1.4553	5.939	24	0.000
Experimental	2.6000	0.9574	0.1915	2.2048	2.9952	13.578	24	0.000

post-test, the scores of each group were calculated and compared using the independent samples T-test to determine whether there are statistically significant differences between two means on a pre-test and a post-test in an experiment. Inferential statistics were used. Necessary indicators: Mean, Mean Difference, and Sig. (2-tailed) of the pre-test and post-test results of the two experimental and control groups were calculated and compared. Descriptive statistics were used for questionnaire data. Mean and standard deviation were calculated. Mean scores were categorized to interpret levels of agreement. Based on calculated interval coefficient for three intervals in four points (4-1=3), intervals with the range of 0.75 (3/4) were arranged. The following criteria in the Likert type scale were used to interpret the data: strongly disagree (1.00 - 1.75), disagree (1.76 - 2.50), agree (2.51- 3.25), and strongly agree (3.26 - 4.00).

**IV. RESULTS AND DISCUSSION**

**4.1 Result of the study**

**4.1.1 Effects of ELSA Speak app on the enhancement of English speaking skills**

The Descriptive Statistics and Paired-Samples t-test were utilized to compare the mean scores of the speaking competence within the control group and the experimental group in the pre-test and post-test. The results are depicted in the tables below:

The results of these two tests indicated that both the control and experimental group's performance on speaking skills improved after the treatment. While the Mean score of the control group was above the experimental group ( $M: 3.56 > M: 2.88$ ) in the pre-test, the results reversed since the Mean score of experimental group ( $M= 5.48$ ) was higher than the control group ( $M= 4.64$ ) in the post test.

Though there was a significant difference within two groups after the treatment, it indicated that the experimental group's speaking ability much more remarkably enhanced after the treatment. An overview of two groups’ performance of speaking ability in the pre-test and the post-test is illustrated as in figure 1 below.

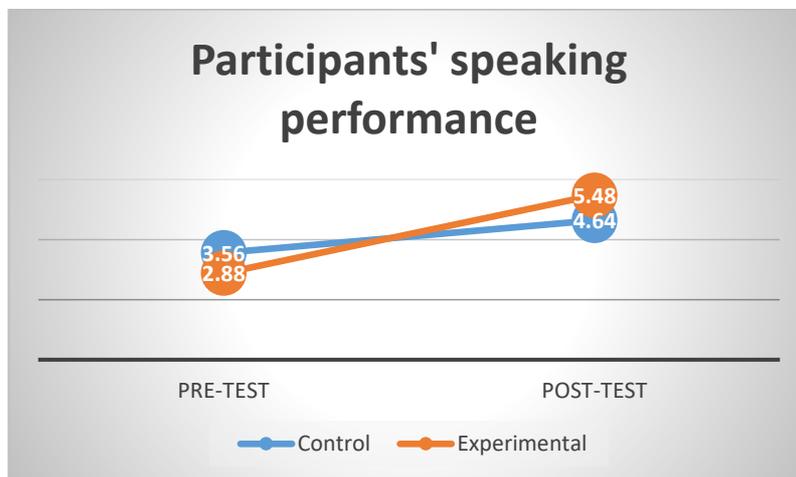


Fig.1 Speaking performance of the control group and experimental group in the pre-test and post-test

**4.1.2 Students’ attitudes towards the use of ELSA Speak app in learning English speaking skills**

**Cognitive aspect**

The data displayed in Table 1 shows that most participants agreed on the effectiveness of ELSA Speak for learning English (Item 1) with  $M=3.16$  &  $St.D = 0.68$ , the enhancement of ELSA Speak (Item 2) with  $M = 2.84$  &  $St.D = 0.80$ , reflecting that students' belief that consistent time spent on ELSA contributes to their learning improvement. Additionally, Item 3 with  $M=3.12$  &  $St. D=0.80$  supports

the notion that ELSA Speak enhances English pronunciation. The convenience of accessing educational resources is highlighted in Item 4 with  $M = 3.12$  &  $St.D = 0.84$ , while trustworthiness and reliability are confirmed in Items 5 and 6 with  $M = 2.29$  &  $3.00$  and  $St. D = .75$  &  $.64$  respectively. Most of the students also reported that learning with ELSA Speak enhanced their motivation (item 7) with  $M = 2.50$  &  $St.D = 0.86$ , and helped form disciplined study routines (Item 8) with  $M=3.00$  &  $St. D = 0.64$  and emphasized gratitude for enhanced communication precision (Item 9) with  $M = 2.76$  &  $St.D = 0.72$

Table 1: Descriptive Statistics of cognitive aspect

No	Item	N	Mean	St.D
1	I believe that using ELSA Speak App in learning English speaking skills is very effective.	25	3.16	.688
2	I find that the use of ELSA Speak App has enhanced the English learning process.	25	2.84	.800
3	I realize that ELSA Speak has improved my English speaking and pronunciation.	25	3.12	.726
4	ELSA Speak has provided me the greater convenience in looking for learning materials.	25	2.72	.843
5	ELSA Speak is my trustworthy and reliable companion in the English learning journey.	25	2.92	.759
6	ELSA Speak is a trustworthy application with positive ratings and reviews.	25	3.00	.645
7	My motivation has been enhanced by using ELSA Speak App inside and outside the classroom.	25	2.60	.866
8	ELSA Speak helps me to develop a diligent English studying habit.	25	3.00	.645
9	ELSA Speak helps me express my ideas and thoughts better than before.	25	2.76	.723

**Affective aspect**

The data displayed in Table 2 points out that most students agreed on the benefits of ELSA Speak in terms of “providing interesting learning process” (Item 10) with  $M=2.88$  &  $St.D = 0.726$ , “feeling excited when learning with this application” (Item 11) with  $M=2.68$  &  $St.D =$

0.748, showing that students are eager learning on this platform, “not feeling confused while interacting on ELSA Speak” is highlighted in Item 12 with  $M = 2.92$  &  $St. D = 0.909$ ; simultaneously, “having good emotion and confidence” were also reported in Item 13 and 14, with  $M=3.00$  &  $3.04$  and  $St.D = 0.764$  &  $0.676$  respectively.

*Table 2: Descriptive Statistics of affective aspects*

No	Item	N	Mean	St.D
10	I find it interesting to use ELSA Speak App in learning process inside and outside the classroom.	25	2.88	.726
11	I feel excited when I learn English with ELSA Speak App.	25	2.68	.748
12	I do not get anxious when I learn English speaking skills and pronunciation with ELSA Speak App.	25	2.92	.909
13	Studying English speaking skills with ELSA makes me have good emotions (feelings).	25	3.00	.764
14	I feel confident to use ELSA Speak App to learn English speaking skills and pronunciation.	25	3.04	.676

**Behavioral aspect**

The provided data in Table 3 indicate that most participants eagerly “involved in the lesson with the help from ELSA Speak” (Item 15) with  $M=2.20$  &  $St.D = 0.500$ . They also admitted to “favour ELSA Speak as their main English-learning tool outside classroom” (Item 16) with  $M=2.52$  &  $St.D = 0.770$ . Moving on to Item 17 with  $M=3.04$  &  $St.D = 0.676$ , it presents the “enjoyment of practicing English speaking”. While Item 18 ( $M=3.12$ ,  $St.D = 0.600$ )

suggests that the participants were open to continuous practice using ELSA Speak beyond the duration of this course, it is also highlighted in Item 19 with  $M=2.52$  &  $St.D = 0.918$  that ELSA’s users find “motivation to start a conversation in English after using the app”. Moreover, ELSA Speak was prioritized to “use during leisure time” by participants as shown in Item 20 ( $M=2.28$ ,  $St.D = 0.843$ ). Lastly, Item 21 with  $M=3.12$  &  $St.D = 0.726$  shows that students took pride in advocating ELSA Speak as the optimal English learning application.

*Table 3: Descriptive Statistics of behavioral aspect*

No	Item	N	Mean	St.D
15	I am actively using ELSA Speaking during the lesson.	25	2.20	.500
16	Beside homework I opt for ELSA Speak for extra practice.	25	2.52	.770
17	I really enjoy using ELSA Speak for practicing speaking skills.	25	3.04	.676
18	I am willing to continue practicing with ELSA Speak after this course.	25	3.12	.600
19	Learning through ELSA encourages me to converse with each other in English.	25	2.52	.918
20	I spend more time on ELSA Speak than other social media platforms.	25	2.28	.843
21	I have a sense of pride recommending ELSA Speak as my main English learning application.	25	3.12	.726

**4.2 Discussion**

The study identifies two key findings in investigating the impact of ELSA Speak on English-speaking skills. Firstly, there is a significant difference in

post-test scores between experimental and control groups, affirming the ELSA Speak app's positive impact on speaking skills in pronunciation, grammar, and vocabulary. ELSA Speak proves to be effective for vocabulary

acquisition, integrating texts, pictures, and videos for enhancing L2 vocabulary learning (Chun & Plass, 1996). The app facilitates contextual learning, addressing concerns about isolated vocabulary memorization. Grammar improvement, despite controversy on teaching methods, is achieved by combining textbook knowledge with contextual usage in the app. ELSA Speak also enhances pronunciation, offering personalized assessments and self-correction opportunities, addressing challenges in traditional classroom correction methods (Engwall & Bälter, 2007). Haryadi and Aprianoto (2020) already studied the impact of integrating pronunciation apps in teaching speaking and found increased participation and the boost in learning autonomy of the students; ELSA Speak also proved to be the optimized AI-based learning platform.

Secondly, regarding students' attitudes toward the ELSA Speak app, the findings provide comprehensive insights into the effectiveness of the app. It was found that cognitive attitude was prominent (62.8%), followed by affective (11.4%) and behavioral (17.1%) attitudes. Students express positive attitudes towards the use of the app in learning English speaking skills. In a similar study, Darsih et al.'s (2021) study revealed that ELSA Speak app enhanced speaking skills, notably pronunciation. The findings of the current study are consistent with those of Azar and Nasiri (2014), Rossing et al. (2012), and Ortega (2020), revealing that students showed interests and enthusiasm in learning English with this app.

## V. CONCLUSION

This study made an attempt to investigate the effects of ELSA Speak app on English speaking skills and student's attitudes towards the use of this app. Based on the findings, the study provides several recommendations. Teachers need to develop their own digital literacy skills to effectively navigate and use mobile devices and apps. In addition, they need to modify their lesson plans to integrate mobile-assisted speaking activities as mobile devices provide students with the opportunity to practice speaking skills outside the classroom. Teachers and educators can help students develop positive behaviors toward mobile-based learning by guiding them on the effective use of these apps and integrating them into a blended learning approach. As a language learning app, ELSA Speak (app) is designed to focus on specific skills. The use of ELSA Speak can increase their speaking skills and motivation as it allows learners to engage with the language in a fun and interactive way. Students should be advised to use this app not only in class but outside class as well.

This research delves into the impact of the ELSA Speak on students' speaking ability in the Vietnamese

context. Despite positive findings were explored, limitations cannot be avoided due to a small number of participants and short time for treatment. It therefore suggests that further research should have larger sample sizes, and invite teachers to participate in studies.

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