


## Investigating Learners' Perspectives on ELSA Speak Integration to Enhance Autonomy and Oral Language Proficiency in English Classes

Tran Dang Khoi<sup>1\*</sup>, Vu Thi Kim Chi<sup>1</sup>

<sup>1</sup> Sai Gon University, Ho Chi Minh City, Vietnam

\*Corresponding author's email: [tdkhoi@sgu.edu.vn](mailto:tdkhoi@sgu.edu.vn)

\*  <https://orcid.org/0009-0007-3683-2334>

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### ABSTRACT

**Keywords:** ELSA Speak, speaking skills, autonomy, perceptions

The study highlights the integration of the ELSA Speak application, regarded as a MALL – Mobile-Assisted Language Learning tool, in a general English course for fostering learner autonomy. Initially, the application is built wholly based on the speech recognition function, which allows it to receive oral inputs from users and provide them with feedback. This paper employs qualitative and quantitative methods to examine the app's potential to bolster learner autonomy and how learners' oral language proficiency is related to their degree of autonomy. The participants are 50 sophomores from Sai Gon University whose majors are not English Linguistics. The findings highlight the significance of providing an outstanding self-access learning space, a learning environment allowing learners to control their learning process and deliver critical reflections. These findings also emphasize the playfulness of the experience and the potential to eliminate limited opportunities to find conversation partners and negative feelings of social judgment. All of these elements forge great motivation and stimulus, which greatly enhance the degree of autonomy. Consequently, participants with greater autonomy also demonstrate better speaking competence.

### Introduction

In the modern era, English serves as a means of communication worldwide and it has eventually become a universal language (Kholis, 2021). Among the four language skills, a language speaker must undergo deliberate and targeted training in speaking skills in order to develop into a highly adept communicator, demonstrating mastery over the four fundamental linguistic competencies, namely listening, speaking, reading, and listening (Kadamovna, 2019). In fact, with the innovative advancement of technology, learners can find various ways to become proficient at speaking foreign languages, especially English. A justification for this could be

that English learners may take full advantage of numerous applications and online platforms that offer a number of means to facilitate practicing and developing English. With the outbreak of English learning applications, it is unexceptional for application developers to integrate Artificial Intelligence (AI) technology as a practical tool for human support. AI represents a step toward developing computers, robots, or programs that function intelligently, mimicking human behavior (McCarthy, 2007). One of the prevalent cases of adopting AI to support the enhancement of English-speaking skills is the ELSA Speak (English Language Speech Assistant) application. ELSA Speak is a sophisticated English pronunciation application specifically designed to assist individuals in articulating the language with precision, enabling them to communicate clearly and confidently (Taay, 2021). In fact, adopting ELSA in the learning process is not a novel practice; however, with the introduction of the new feature so-called ELSA AI, allowing learners to make conversations with a language model chatbot in a real-time environment, spaces for investigations in terms of usefulness and practicality of such application are opened. Specifically, in the Vietnamese educational context, especially at the tertiary level, the employment of ELSA Speak is still uncommon.

## Literature review

### *ELSA Speak*

Cited from ELSA Corp, by leveraging advanced technology software tools, the ELSA Speak application integrates artificial intelligence (AI) for speech recognition, which is designed to enhance English learning within the educational field. This application comes highly recommended for aiding students in refining their speaking abilities, as it offers a range of advanced features and resources, a tailored and well-tested curriculum, an online dictionary, tools for evaluating pronunciation and intonation, as well as free assessment exams, making it a comprehensive solution for language improvement. Another aspect that distinguishes this application is its use of Automatic Speech Recognition Technology (ASR). This feature aims to transform the lexical content of human speech into a format that can be processed by a computer (Yu, 2012). The application then promptly offers corrections for any errors detected. Furthermore, the application renders learning English enjoyable and memorable by presenting an array of themes that can be customized to meet the users' specific preferences and training requirements. ELSA Speak additionally offers a spectrum of learning levels, ranging from beginner to advanced ones, while effectively evaluating the accuracy of the user's speech. Learners are allowed to raise their thoughts openly and pose inquiries regarding the subjects under discussion. (Hanna *et al.*, 2022). In addition, with the recent updates, the application also integrates the new feature called ELSA AI, which provides learners with opportunities to engender conversations with the language model chatbot in numerous scenarios and colloquial settings.

### *Aspects related to oral proficiency development*

Newton and Nation (2020) mentioned the five principles to create spaces for both aural and oral proficiency development, including focusing on meaningful and relevant language, upholding interest through a number of activities, avoiding overwhelming learners with too much

language, offering various understandable input and forging a friendly learning environment. Firstly, the author indicated that the primary emphasis should be on teaching language that learners can readily apply to their needs, rather than delving excessively into grammar explanations or introducing vocabulary that is not immediately useful. Moreover, repetition of language engagement and learner involvement are also emphasized. Secondly, activities should be brief and diverse to keep learners engaged, actively involving them in responding to or utilizing the language. Thirdly, teachers often fall into the trap of introducing an overwhelming amount of new language while not offering learners enough opportunities to fully grasp it; therefore, a straightforward principle to keep in mind is “learn a little, use a lot.” The authors also mentioned that in order to create spaces for speaking skills development, learners should be engaged in acquiring vocabulary through listening and practical activities before they enhance their understanding by using the words in structured speaking exercises. If speaking is emphasized too soon, learners may be more prone to transfer phonological patterns from their first language and focus on mechanical challenges. Ultimately, Yashima (2002) emphasized that there is substantial evidence indicating that anxiety affects learners' willingness to engage in communication in a second language. Therefore, it is crucial that learners must be engaged in low-stress learning experiences.

Pronunciation is also another vital factor affecting the oral competency of language learners since the capacity to speak is heavily reliant on accurate pronunciation. Having good pronunciation in a language enhances normal communication, especially regarding intelligibility (Derwing & Munro, 2005). Another strong piece of evidence underscores the necessity for English learners to practice the pronunciation of new vocabulary they acquire. Pronunciation is a crucial micro skill in communication, as poor pronunciation can hinder effective communication (Vasbieva *et al.*, 2016). However, developing a consistent pronunciation in a new language serves more than just that purpose. An essential mechanism in working memory, known as the phonological loop, plays a significant role. The phonological loop involves the brain repetitively reciting a word or phrase to retain it in working memory or facilitate its transition into long-term memory. If learners lack a consistent pronunciation for a word, it cannot easily be stored in long-term memory, as it cannot be maintained in the phonological loop (Ellis & Beaton, 1993; Baddeley *et al.*, 1998; Singleton, 1999). According to Jumrina (2013), pronunciation pertains to the phonetic representation of sound symbols described in alphabetical form. The alphabet comprises consonants and vowels, which differ in their sounds and symbols. As Fraenkel (1984) noted, it is widely recognized that there are two phases in acquiring language pronunciation. The first is the receptive/listening stage, where learners develop the ability to distinguish the sounds and patterns that are important in the language. This implies that the initial stage of learning pronunciation occurs through listening to the sounds and patterns of the language. The second phase is the productive/speaking stage, during which learners practice producing the sounds they have previously learned to recognize auditorily.

Lastly, fluency is also one of the factors that learners should consider if they want to improve their speaking skills. Skehan (1998) defined fluency as the rate of speech production and the count of hesitations. Newton and Nation (2010) mentioned the three conditions in which learners can foster their fluency. Firstly, learners' focus is on conveying a message and is

influenced by the pressures of "real-time" communication. Secondly, learners engage with primarily familiar subjects and forms of discourse, utilizing vocabulary and structures they already know. Lastly, learners should aim to speak and comprehend more quickly, reduce their hesitations, and utilize larger, pre-planned segments of language compared to their typical usage.

Consequently, ELSA Speak was considered a useful tool in assisting pronunciation and fluency practice; thereby, learners could obtain a better level in their speaking skills. Certain research clarified the positive aspects of applying ELSA Speak in oral proficiency development (Taqy, 2021; Indriyani *et al.*, 2024; Sholekhah *et al.*, 2023).

### *Learner autonomy*

Learner autonomy is most frequently described as the capacity of learners to take responsibility for their own learning (Holec, 1981; Little, 1990). Benson (2011) indicated two questions to assess the effectiveness of any practice aimed at promoting autonomy. The first is 'How does this practice help learners take greater control over their learning?', and the second is "How does the practice improve language learning?". However, the development of a learner's ability for autonomy does not occur independently, but rather through social interactions (Murray, 2014). Little (2000a) also indicated that the growth of autonomy is an outcome of social interaction. Without social interaction in language learning, the chances of developing autonomy and achieving any meaningful level of language proficiency are significantly reduced. Little highlighted the nature of language learning is always mediated through social interaction. In terms of the mediating factors, Hyland (2004) listed some aspects, including time management, motivation, and interest, limited chances to find conversations, negative feelings of social judgment, and face protection. Moreover, motivation enhances language learners' self-confidence. It also encourages individuals to pursue learning the target language, enjoy the process, and participate in authentic communication; thereby, learner autonomy can be formed during the learning process (Aeni, 2021; Karim *et al.*, 2023).

### *Research Questions*

Therefore, this paper aims to investigate two research questions including:

1. Which aspects of oral language proficiency development can ELSA Speak provide to English learners?
2. What are the students' perceptions on the integration of ELSA Speak to help them develop learner autonomy?

## **Methods**

### *Pedagogical Setting & Participants*

We recruited 50 students from Sai Gon University, whose majors varied including business, information technology, high school pedagogy, etc... These students were chosen due to their enrollment in English-speaking courses at a comparable level, as reflected by their English entrance placement test results. Prior to participating in the study, we obtained their informed

consent, ensuring they participated voluntarily.

### *Design of the Study*

The research design of this study follows a sequential mixed methods approach, where the analysis of one dataset guides and informs the analysis of the next dataset. (Creswell, 2014).

### *Data collection & analysis*

At the commencement of the course, 50 students were gathered and given comprehensive training on how to effectively integrate ELSA Speak into their learning process. Moreover, they were required to use the application for at least one month before we collected the data from the participants. During the study's first phase, participants completed a questionnaire addressing their experiences using the ELSA Speak application. In the second phase, participants engaged in reflective tasks to provide additional insights on learners' perceptions towards the ELSA Speak. We chose to use the reflective tasks instead of interviews as we had a limited allotment of time, yet we still wanted to collect a vast set of data for a profound understanding of the examined integration of the ELSA Speak application. In our case, the statistical analysis of the survey data addressed the first research question: 'Which aspects of oral language proficiency development can ELSA Speak provide to English learners?'. With the results highlighting the role of ELSA Speak in equipping learners with meaningful input and correct articulation of sounds as well as improving fluency, we then analyzed the learners' response to the reflection to answer the second research question: 'What are the students' perceptions on the integration of ELSA Speak to help them develop learner autonomy?'. The questionnaire was initially translated into Vietnamese to enhance the study's validity, ensuring that all participants fully understood the content. A pilot test was also conducted with two English lecturers to check for spelling, meaning, and translation errors. For the reflective tasks, participants provided their responses in Vietnamese so they could express their thoughts freely without language barriers. To further ensure the validity and reliability of the qualitative data, the English-translated findings were peer-reviewed and cross-checked by members of the research team. For the quantitative part, SPSS version 26 was used to gather and analyze data of 50 participants from the questionnaire. For the qualitative part, the data was analyzed inductively (Corbin & Strauss, 2014) through a recursive process of open, axial, and selective coding.

## **Results/Findings and Discussion**

### *Questionnaire analysis*

#### *The aspects of oral language proficiency development that ELSA Speak can provide to English learners*

Learners' opinions regarding the ELSA Speak app in language learning were evaluated through a questionnaire, with a focus on how the app contributed to improving oral language proficiency. The participants' responses revealed that students perceive the ELSA Speak application as beneficial in the following aspects of speaking skills.

Table 1. Learners' answers to the questionnaire

No.	Statement (N=50; Mean = 4.19)	Mean (4.19)	Std. Deviation
1	I think the contents provided by ELSA Speak are meaningful and relevant.	4.24	0.76
2	I think the contents provided by ELSA Speak are of interest, too.	4.28	0.72
3	I think the contents provided by ELSA Speak are not overloading.	4.16	0.84
4	I think ELSA Speak provides me with plenty of comprehensible input.	4.32	0.68
5	ELSA Speak (especially the ELSA AI function) provides me with a friendly, safe learning environment.	4.30	0.70
6	ELSA Speak (especially the ELSA AI function) enhances my self-confidence.	4.12	0.88
7	I find the ELSA Speak's instruction useful in terms of individual sound articulation.	4.46	0.54
8	I find the ELSA Speak's instruction useful in terms of sound distinction.	4.28	0.72
9	I find the ELSA Speak's instruction useful in terms of stress and intonation.	4.18	0.82
10	I think the experience with ELSA Speak (especially ELSA AI) involves processing language in real-time.	4.20	0.80
11	I think my experience with ELSA Speak (especially ELSA AI) involves language items that are within my previous experience.	3.90	1.10
12	The experience with ELSA Speak (especially ELSA AI) encourages me to perform at a higher-than-normal level.	3.94	1.06

Table 1 highlights learners' perceptions of the oral language proficiency development that ELSA Speak offers to English learners. Overall, users found the app helpful in various aspects of speaking proficiency, with an average rating of  $M=4.19$ , surpassing 4 and approaching 5 (strongly agree). This suggests that learners appreciated ELSA Speak's valuable support in enhancing their speaking skills. Specifically, student users acknowledged that the app was highly useful for individual sound articulation, sound distinction, and stress and intonation, with mean scores of  $M=4.46$ ,  $M=4.28$ , and  $M=4.18$ , respectively. Participants noted that ELSA Speak provided ample comprehensible input ( $M=4.32$ ) and created a friendly, safe learning environment ( $M=4.30$ ).

The findings also reflected the users' positive views on the content offered by ELSA Speak. They strongly agreed that the app delivered meaningful and engaging information without overwhelming them, with mean scores exceeding 4.0. Additionally, learners indicated that ELSA Speak's AI function boosted their confidence ( $M=4.12$ ) and encouraged better performance ( $M=3.94$ ). Finally, users reported that ELSA Speak offered practical and authentic information, further contributing to a positive learning experience ( $M=4.20$  and  $M=3.90$ )

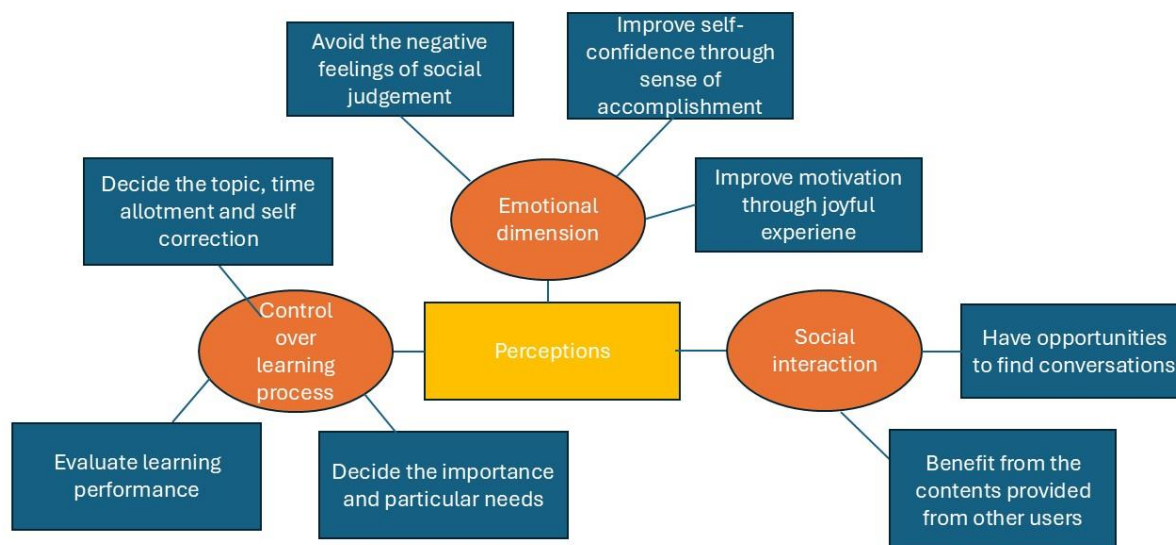
Despite the different research methods used, the findings were in line with previous studies to



reveal positive aspects of ELSA Speak in oral practice (Taqy, 2021; Indriyani *et al.*, 2024; Sholekhah *et al.*, 2023). The results underscored the Importance of high-quality content design, effective pedagogical and instructional strategies, gamified learning features, automatic voice recognition technology, a safe learning environment, and personalized digital feedback. The study suggested that ELSA Speak held significant potential for aiding students in enhancing their pronunciation and speaking proficiency. It is noteworthy that the findings were also in line with the study of Hoang & Le (2023), as they mentioned that one possible reason for learners' speaking skills improvement may be that conversational chatbots provide a limited but corrective set of responses, which allows students to control the conversation flow more easily than with human conversation partners. This helps learners develop their English-speaking skills in a safe and supportive environment provided by chatbot AI.

### *Reflective tasks analysis*

Students' perceptions obtained from the reflection sessions were synthesized to support the findings for the second research question. Therefore, the following themes were identified: 1) the effectiveness of ELSA Speak regarding the control of learners over their learning process, 2) the impacts of ELSA Speak in terms of the emotional dimension, 3) the influences of ELSA Speak regarding the social dimension. Diagram 1 shows a thematic map illustrating the themes and key findings of the reflections.



*Diagram 1: Students' perceptions on the implementation of ELSA Speak in fostering autonomy*

The diagram shows that ELSA Speak facilitates learner autonomy in terms of control over the learning process. In this case, students are allowed to make decisions on their own time management, favored learning topics, and self-correction. Moreover, they are allowed to self-evaluate and pick the learning content that meets their learning needs. Secondly, regarding the emotional dimension, learners are eager to engage in the learning process as they are eligible to get rid of social judgment as well as develop self-confidence and motivation. Lastly, in terms of social interaction, learners have various opportunities to practice and have conversations

with the AI chatbot integrated into the application. Moreover, they are allowed to learn from other users' pre-set of learning materials, which in this case can be seen as a mode of tandem learning.

Apart from quantitative data, the qualitative data provided insights into learners' viewpoints on how ELSA Speak supports learner autonomy. The reflective task results aligned with Aeni *et al.* (2021) and Karim *et al.* (2023) to confirm that the ELSA tool motivated users to engage in speaking activities in order to correct their pronunciation, intonation, and fluency, which gradually boosted learners' motivation. While these results mostly emphasized the learning process and the social interaction through the implementation – mainly the first stage to engage and motivate learners, the present study aimed at exploring further perceptions of self-study abilities. This research explored learners' emotional responses, highlighting how prolonged use of ELSA Speak increased confidence and helped reduce negative feelings, which offers a new aspect in this field.

## Conclusion

### *Valuable findings*

In conclusion, the research findings shed light on two primary aspects: the factors that ELSA Speak can provide English learners for oral language proficiency development and students' perceptions of the integration of such an application to help them develop learner autonomy.

Regarding the first aspect, the features integrated into the ELSA Speak provide spaces for English speaking competencies as they align with the aspects that facilitate the learning process in terms of three dimensions: linguistic materials, pronunciation, and fluency. As can be inferred from the findings, we highlight that the contents provided by ELSA Speak are meaningful and of learners' interest and do not overwhelm them with overloading knowledge. Moreover, such features play a vital role in encouraging learners to develop proper sound articulation, stress, and intonation. ELSA Speak also plays a great role in developing fluency. Therefore, we can assume that ELSA Speak greatly facilitates learners' improvement of speaking skills.

Regarding the second aspect, learners forge a positive attitude towards the implementation of ELSA Speak, which fosters learners' autonomy. The application's features fit in well with numerous dimensions, demonstrating the core factors that encourage learners to develop their autonomous learning.

One highlighted implication could be that English teachers should integrate the ELSA Speak within the English-speaking course with the interference of teachers' guidance and peers' interaction in order to guarantee social interaction, which is the core value in the language learning process. Even though the application seems to ideally meet the factors for both oral competency development and autonomy fostering, we need to admit that the learning process involved with the AI chatbot generally lacks the authenticity that face-to-face interactions hold. However, students would still be able to develop both English oral proficiency and foster their own autonomy in the learning process. To explain this, one possible clarification can be that learners, in the era of technology, acquire a high level of technology self-efficacy, and they agree that the excitement provided by technological use in language learning allows them to be



eager to learn English more intentionally and therefore be able to avoid a number of mistakes in terms of pronunciation and grammatical points. On top of this, learners can also learn several vocabulary and expressions that they can apply in their daily communication (Nguyen & Pham, 2022; Pham *et al.*, 2024). Therefore, we can infer that despite the lack of authentic communication with the AI chatbot of ELSA Speak, students can still be able to develop their English oral proficiency as they develop positive attitudes over the use of technology and excitement in applying what they learn in real-life contexts.

One greatest limitation we need to mention is that the expense of upgrading accounts for extra features, along with AI's limitations on specific topics, can limit the quality of conversational content. In the end, the app's effectiveness in improving the speaking skills of learners still heavily relies on the user's input.

### *Limitations*

The greatest limitation of this research paper is the small-scale sample (only 50 participants). Moreover, the research takes place in Ho Chi Minh City, where learners have a high level of language competence and are well-prepared with numerous effective learning strategies (both metacognitive and cognitive). Therefore, the findings of this research paper might not be ideally generalized and applicable to all students throughout the nation. The call for further research with a larger scale and great diversity of participants in terms of their level of proficiency is highly recommended.

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### **Biodata**

Tran Dang Khoi currently works as a full-time lecturer at the Faculty of Foreign Languages - Sai Gon University. He achieved his M.A. degree from Victoria University of Wellington in 2021. His teaching expertise includes English language skills and linguistics courses, namely morphology, syntax, and semantics. He's always focused on the application of technological innovations and theoretical knowledge of linguistics in the classroom to boost the English competency of learners in both daily conversations and professional communications.

Vu Thi Kim Chi is currently a full-time lecturer at the Faculty of Foreign Languages - Sai Gon University. She received a Master's degree in TESOL from Victoria University, Australia, in 2017. Her teaching practice involves in language skills courses attended by non-English major students. She has aimed to apply technological innovation into the classroom in order to improve the teaching and learning outcomes.