



*Original Research*

# ELSA Speak: Piquing Demotivated Students to Self-Improve Their Pronunciation with an AI-powered English Speaking Coach

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## Abstract

The heightened global expectation of English proficiency is equally matched with the demand for students of this generation to be adept at handling technology, leading to the boom of artificial intelligence application in education. This paper is a contribution from a local teacher's attempt to adapt and use an AI English speaking coach called ELSA Speak. This study determines the impact of using the app in enhancing junior high school students' speaking skills through a pre-experimental study and establish a state-of-the-art understanding of the extent of the collective exploration of this AI. The first research design is a pre-experimental study and utilised the quantitative analysis approach, involving 23 third-grade pupils from MTs Zia Salsabila Percut Sei Tuan as the sample. The second research design is a systematic literature review of a total of 491 papers published from 2015 to 2024. Findings from the primary data proved that ELSA Speak app effectively enhances students' speaking proficiency in five aspects (grammar, vocabulary, pronunciation, fluency, and content) and successfully held the attention of students whose history prior to the use had very low motivation to learn and practice English as a foreign language. However, the systematic review revealed that this type of study is the furthest point of current investigation on ELSA Speak app, and thus calls for the need for more robust studies to develop a better understanding of whether the short-term success of using the AI can last for long-term and in what other ways can it be integrated into the teaching syllabus.

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## 1. Introduction

In a world that is built from international cooperation and for globalisation, having proficiency in English is essential for countless job seekers. While schools uphold the ideal of valuing knowledge, it cannot be denied that every institution share the short-term and practical purpose of preparing the younger generation to secure employment and success. This study narrows its scope to Indonesia, which has made English compulsory on all levels. Although the success of implementation varies greatly due to shortages of human resources and facilities, English is officially endorsed as the most desired foreign language that students must learn. While studying English, students are expected to be proficient in their English speaking, listening, reading, and writing abilities (Kuning, 2020), with speaking skill being the most coveted as it is the most immediately recognisable way to establish one's fluency of the language. As it is vital for others to understand what the speaker utters, it is crucial that students pronounce words correctly (Muamar et al., 2022).

In addition to the heightened global expectation of English proficiency, students of this generation must also be adept at handling technology. Technology has become so essential to the point that companies in this era will never be able to thrive if they are not technologically competent. Following this logic, schools

that are not technologically advanced are also not properly preparing their students to adapt with the demands of the present and future. There is little need to argue about how big the impact technology has made on the educational sector (Ghory & Ghafory, 2021), but the stakeholders in education still face the perpetual problem of actually motivating students to face the fact that they, in many ways, must be competent in English and technology.

In light of this background, as a teacher at a junior high school in Indonesia, the first author has recognised that her own English class has the problem of student majority being uninterested in learning English as a foreign language (EFL). Using her experience in teaching the school as preliminary observation, she is aware that the students' disinterest was born from their lack of confidence to speak well in English. Even though her expectations and the curriculum's learning goals only require them to perform relatively simple English sentences, the students were very reluctant because they feel that they 'don't sound right.'

Upon discussing this matter with the second author, the teacher realises that this lack of confidence from whether one can imitate or sound similar to a 'native' English speaker (e.g. people who are born in United Kingdom, United States, and Australia) is a deep-rooted mindset that is difficult to overcome (Timmis, 2002; Subtirelu, 2011). There is a lot of contradiction in practice due to the vagueness of the term itself, such as how many students do not want to sound like a native speaker because they think it is impossible. But at the same time, the students also expect and want their English teacher to sound like a native speaker because then he or she would be a 'good' English teacher even though the person in question is also not an English native (Szymańska-Tworek, 2013) or are part of the 'discounted native' for being born and growing up in the present English-speaking countries which were not in power during the times of colonization (Panaligan & Curran, 2022). Discussions about the problematic and harmful concept of 'native and non-native speakers' are emerging, but the formal learning structure still require a degree of 'correctness', biases towards favouring native-like accents continue to be reinforced (Boonsuk & Fang, 2022; Cheng et al., 2021).

This study would like to stress that the researchers do not advocate for the students to sound like an 'English native.' However, this bias that many students have can at least be leveraged to trigger them to learn English rather than demotivate them with the appropriate tool. Drawing on the field of Computer Assisted Language Learning (CALL), the teacher understood that students can be motivated to learn when they are introduced with a new but easy-to-use learning technology. Therefore, the teacher decided to introduce an advanced educational technology that she is familiar with called the English Speak Learning Speech Assistant (henceforth: ELSA).

ELSA is an artificial intelligence (AI)-powered language platform designed to help non-native English learners improve their speech and pronunciation via short, app-based lessons. This software uses voice recognition and artificial intelligence (AI) which can help users pronounce words in English more accurately (Pilar et al., 2013). With the use of voice recognition technology, users may enhance their English pronunciation by speaking based on the instructions given by the AI. The app offers themed classes for users to practice pronouncing relevant clusters of words, phrases, and sentences in English (Tamala & Santosa, 2023). The app also has an interactive dictionary that teaches users how to pronounce the word or phrase they are searching for (Darsih et al., 2021).

The app was created by Vu Van, a Vietnamese who immigrated to the United States in 2015. According to Gilchrist's article (2020), Vu Van founded a company to develop a technology that "could accurately detect users' broken English and provide easy-to-follow solutions at a fraction of the cost of a tutor." The motivation of the ELSA Speak founder resonated with the researchers' motivation to help her students fix their broken English, and the app has a 95% accuracy rate in identifying users' pronunciation problems because its cutting-edge technology is focused on precisely teaching English pronunciation, thus solidifying the choice of using ELSA. Moreover, while numerous language applications exist, only a few are accessible without cost (Arbain et al., 2023), making ELSA an appropriate choice for the context of this study.

However, the researchers are also aware that there have already been a great number of published papers that have examined the use of ELSA. But upon a closer look many of these past papers are replications made by novice researchers, usually based in Indonesia, and so not all the results that came up on the research databases come from rigorous methodology or robust analysis. Therefore, this study complements its contribution of improving English pronunciation with the first systematic literature review on studies involving ELSA. Considering the popularity of this app among student teachers or pre-service teachers in undergraduate English departments, a systematic review can be extremely beneficial in selecting decent

sources of information as student researchers' first point of contact. The results of this study which (a) show how ELSA successfully motivate Indonesian students' to learn English and giving them the chance to adapt and learn with an advanced technology such as an AI that is specifically designed for the purpose of recognising and fixing users' broken English to sound correct (even if the definition of correct is based on the standard accents of a UK or US citizen) and (b) present a comprehensive review of the extent of our exploration of this AI-powered coach, are clear novelties of the study.

## 2. Method

This study is done in two-parts: first is the quantitative research design that experiments with the ELSA and the second is the systematic literature review that was carried out to critically examine the results of the first design.

The quantitative research used a pre-experimental design involving 23 pupils in a third-grade class at a junior high school in Medan. Pre- and post-testing, or the pre-experimental approach, is used in this study design (Lodico et al., 2006; Suryani et al., 2021). The pre-test, post-test, and treatment of students using the ELSA were all conducted in a classroom by the first author (henceforth, the teacher to distinguish her from the second author) who has been teaching at this school as a student-teacher for at least three months. By comparing the pre-test and post-test findings, the effectiveness of the ELSA was ascertained before and after it was used. MTs Zia Salsabila Medan third graders participated in this study during the 2022–2023 academic year. The teacher teaches English class twice a week, every Tuesday and Thursday, and this study reports the results of using the ELSA in three weeks.

During the first meeting on Tuesday, the teacher gave a brief introduction to the ELSA, specifically how the app has been designed to help improve students in five aspects: content, fluency, grammar, vocabulary and pronunciation. Since it was already embedded in the app, the teacher used these five aspects as part of the oral pre-test, focusing on the theme of “vacation” in line with the English class syllabus (Figure 2). The pre-test is calling the students one by one to the front of the class and using the ELSA’s vacation module consisting of an animated video, and as the app immediately scores them based on the mentioned five aspects, these scores are recorded and converted into the 2013 curriculum rubric as their pre-test scores. Both the introduction and pre-test served as a good teacher-focused guidance on how to use the AI. Afterwards, the students were asked to frequently practice with the ELSA at home. In the next class on Thursday, the teacher immediately saw the impact of the app’s introduction as the students were more motivated to learn English than they had ever been before. The students frequently asked questions and used the AI in the upcoming classes, and on the third week on Thursday, the teacher conducted the post-test which similarly called the students one by one to the front. Data was analysed using Excel 2021 and SPSS version 20 (Darsih et al., 2021).

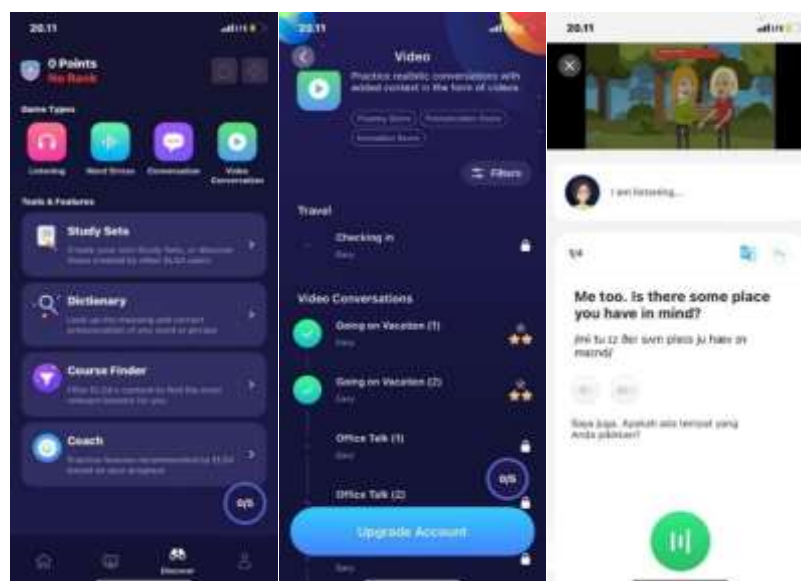


Figure 1. ELSA homepage, “vacation” module, and activity page

As for the systematic literature review, since ELSA was founded in 2015, the researchers only filtered in Google Scholar results that were published since 2015, which yielded 491 results. Starting from January to February 2024, the researchers manually screened the abstracts of the papers. The inclusion criteria are journal articles that focus on the ELSA or the use of this app, published in English or Indonesian as the languages that the authors are fluent in. In the screening process, the researchers excluded papers that were clearly of low-quality writing (indicated by extremely short abstract, numerous grammar errors, and unclear data in the full text). Google books, conference proceedings, theses, as well as self-published documents in pre-print databases, research gate, academia edu, blogs, and unclear platforms or websites are also excluded. Papers that merely included the name of the ELSA among other “AI technologies” are also deemed to be irrelevant as their focus are mainly reviewing various educational applications. Overall, 22 full-text articles were eligible to be discussed. The results of the review are presented in tables that organised the various references into common themes, and will be discussed in reference with the study’s primary results.

### 3. Results & Discussion

#### 3.1 Pre-experimental design of using ELSA to improve students’ speaking skills

The results of tests conducted to compare student performance before and after using the ELSA. These scores were automatically generated after the students finished the selected module in the app since the AI specifically categorised five aspects of the students’ utterances: grammar, vocabulary, pronunciation, content and fluency.

Table 1. The students’ score and classification in pre test

Average students pre – test score							
Classification	Number of Students	Grammar	Vocabulary	Pronunciation	Content	Fluency	Score
Poor	16	13	7	7	12	5	42.56
Fair	3	20	11	10	15	7	62.33
Good	2	25	14	15	15	8	81.50
Very Good	2	23	14	18	20	8	81.50
Excellent	-	-	-	-	-	-	-
<b>Average</b>	23	16	9	9	13	6	51.91

Table 1 illustrates how the cumulative for students works. Two students were rated as good, three as fair, sixteen as bad, two as very good, two as none, and no student received a very excellent classification score on the pre-test results. Table 1 demonstrates that out of the 23 students that took the pre-test, the average score was around 51.91, making them classified as poor.

Table 2. The students’ score and classification in post test

Average students post – test score							
Classification	Number of Students	Grammar	Vocabulary	Pronunciation	Content	Fluency	Score
Poor	12	12	6	6	11	5	41.00
Fair	5	16	11	13	15	6	61.40
Good	2	23	14	15	15	7	73.00
Very Good	2	23	14	18	20	8	81.50
Excellent	2	25	15	20	25	8	93.00
<b>Average</b>	23	16	9	11	14	6	56.26

The table above shows the students' accumulative scores. 12 students had bad marks on the post-test; five received fair scores; two received good scores; two received very good scores; and two received excellent scores. As we can see, the post-test average is greater than the pre-test average at 56.26. which is higher than the pre – test section. It can be concluded that there is a significant variation in the results of the pre- test and post-test.

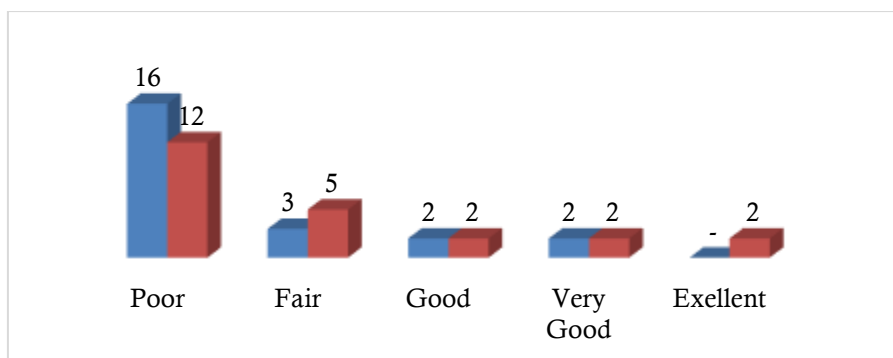


Figure 2. Graph of the pre test (blue) and post-test (red) results

The analysed data indicated a significant improvement in the English speaking ability of junior high school students to the use of the ELSA application. Prior to the implementation of the application, the majority of students were categorized in the "Poor" classification with a fairly low average score of 51.91 and an overall average score of 56.26. The aspects that were the main weaknesses were vocabulary and pronunciation, which each had an average score of 7. This condition shows that before the use of the ELSA application, students faced significant challenges in mastering these two aspects which are crucial in mastering speaking skills (Rismawati et al., 2021).

After the application of ELSA, there was a decrease in the number of students in the "Poor" classification and an increase in the higher classifications from "Fair" to "Excellent". The average score increased to 56.26, reflecting a general improvement in students' English-speaking skills. The most striking improvement was seen in the "excellent" classification, where from no students achieving the classification to two students with an average score of 93.00. The vocabulary and pronunciation aspects also showed an increase in average scores to 9 and 11.

Table 4. The result paired differences t-test

	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pre-test	-3.04348	7.17621	1.49634	-6.14671	.05975	-2.034	22	0.000
Post-test								

Table 4 shows that when the outcome of the two-tailed significance test is 0.000, the alternative hypothesis (H1) is accepted, and the hypothesis (H0) is rejected. The results of the post-test in the experiment class demonstrated this. 51.91 was the overall average score for the pre-test, and 56.26 was the overall average score for the post-test in the experimental class. It showed that students' speaking abilities had significantly improved to the Elsa application. This finding is quantitative proof that using the ELSA Speak app can improve students' English communication skills. Especially in the context of this study, the pupils' speaking abilities significantly improved with minimal teacher involvement in the six days of class sessions and self-practice at home.

### 3.2 Systematic literature review of ELSA

Results of this study echoed many previous studies that have also explored the use of ELSA Speak to improve learners' speaking skills. However, since this study carried out a literature review that systematically analysed the contents of the 491 search results from Google Scholar, the researchers can specifically compare the position of this study with past studies.

Table 1. Past studies that focused ELSA Speak's effect

Research Purpose	Research Design	Participants	Study
To use ELSA to improve students' pronunciation	Pronunciation test and interview	English Department Students of <i>Nahdlatul Ulama</i> University of Yogyakarta	Kholis (2021)

Research Purpose	Research Design	Participants	Study
To see if there is any effect on students' pronunciation from using ELSA	Experimental using pre- and post-tests	2 classes of Grade X in SMAN 15 Pandeglang, consisting of 30 students respectively (a total of 60 high school students)	Zakiah et al. (2023)
To investigate the effectiveness in improving pronunciation and describe the students' attitudes	Pre- and post-tests	Junior high school level	Rismawati et al. (2021)
To verify the effectiveness in enhancing students' pronunciation	Pre-experimental research design using pre- and post-tests	First semester English study program students of STKIP Muhammadiyah Enrekang	Samad and Ismail (2020)
To investigate the effect on students' speaking performance	Experimental using observation, pre- and post-tests and documentation	37 students of class XI SMK Taruna Bhakti Kadugede	Triwardani and Azi (2022)
To see if students can speak more fluently after using ELSA Speak	Pre-experimental research using pre- and post-tests	19 grade VIII students at SMP Negeri 8 SATAP Tondano	Masekan et al. (2024)
To train students' oral articulation to match the articulation of native speakers	Qualitative description using observation and interviews	20 students in the 9 <sup>th</sup> grade of Junior High School in Medan	Daulay (2023)
To assess students' progress from using ELSA Speak	A pre- and post-tests non-equivalent control group design (a control group that did not utilise the AI and an experimental group that did)	100 EFL college students in Oman	Al-Shallakh (2023)
To examine speaking performance and perceptions and to find the inhibiting factors influencing low performance	Mixed-method using a pre- and post-tests, 4-point Likert questionnaire and semi-structured interview	21 EFL students (5 males and 16 females) from Universitas Teknologi Yogyakarta	Karim et al. (2023)
To see whether ELSA could stimulate learners to become more autonomous	Mixed-methods using pre- and post-test, 5-point Likert questionnaire, semi-structured interview	26 students of the English Department in Politeknik Negeri Padang	Miladiyenti et al. (2022)
To develop students' self-regulated learning	Classroom action research in two cycles and four meetings, using classroom observation, interview, questionnaire and test	12 students of grade XI in MA 04 Persis Cianjur	Helmie et al. (2023)
To develop Business English communication using ELSA	A quasi-experimental research design of a 4-week intervention	99 Management students from business schools	Dhivya et al. (2023)

There are 12 studies that have also confirmed that ELSA can improve various English-related skills of students. In finding out whether the AI can improve students' English pronunciation, results continue to be unanimously positive, as this study's results are in line with [Samad and Ismail \(2020\)](#), [Kholis \(2021\)](#), [Rismawati et al. \(2021\)](#), [Triwardani and Azi \(2022\)](#), [Al-Shallakh \(2023\)](#), [Daulay \(2023\)](#), [Karim et al. \(2023\)](#), [Zakiah et al. \(2023\)](#), and [Masekan et al. \(2024\)](#).

Although the teacher reported some findings from her own observation and experience, namely about how the students' were significantly more motivated to learn English after being introduced with the AI, this study's primary data was only obtained by pre- and post-tests. The exact same scheme was also used by [Rismawati et al. \(2021\)](#), [Samad and Ismail \(2020\)](#), and [Zakiah et al. \(2023\)](#). Future researchers who would like to investigate the use of ELSA Speak in improving students' speaking skills could boast better quality if they employ multiple kinds of data, such as [Kholis \(2021\)](#) and [Miladiyenti et al. \(2022\)](#). The former specifically mentioned that the available features offered by this app like instant feedback is what really motivated the students to engage in learning to pronounce, and this present study agrees with this observation. While the above studies including the present study's data mainly spoke of the conclusion based on the t-test results, [Al-Shallakh \(2023\)](#) in particular highlighted two particular outcomes: increased learning opportunities and identified areas for improvement, which could be explored more on how they remain or are addressed in the long-term.

Besides pronunciation, one study used ELSA's effect on students' self-regulated learning and found the results to be optimistic ([Helmie et al., 2023](#)). In terms of self-regulated learning, students have developed in their abilities and willingness which affect their speaking skills. Furthermore, based on interview and questionnaire, students gave positive responses to Elsa speak as learning medium in developing their self-regulated learning in speaking classroom by showing enthusiasm and engagement in class. They admitted that Elsa speak as learning medium facilitated them to develop their ability and willingness in speaking

classroom. Furthermore, the AI has been proven to develop communication skills for Business English students (Dhivya et al., 2023). Students could also broaden their repertoire of available practice strategies that might be useful to improve their autonomous learning ability (Miladiyenti et al., 2022).

Table 2. Past studies that described how ELSA can be used

Research Purpose	Research Design	Participants	Study
To describe the students' ability in pronouncing English words	Descriptive qualitative, field research, library research, using test, recordings and transcribed excerpts	10 second-year students of SMA Eka Prasetya Medan	Tampubolon et al. (2023)
To see the influence and potential of ELSA Speak on the acquisition of pronunciation	Library research	Unknown	Sholekhah and Fakhurriana (2023)
To explain the advantages obtained by using ELSA Speak	Library research with a range of 2019-2023 in Google Scholar	10 articles	Widyasari and Maghfiroh (2023)
To scrutinize the perspectives of non-specialized students, investigating their encounters with learning English pronunciation	Structured questionnaire	A cohort of 180 students in Can Tho University (CTU)	Ngoc and Thanh (2023)
To discuss the implementation of digital feedback	Observation and semi-structured interviews	Seventh Grade of Junior High School	Saragih and Muthmainnah (2021)

While the majority of studies on this app clearly focused on investigating its effects, the second biggest trend of investigation aims to describe students' perspectives of using the app by primary data (Saragih & Muthmainnah, 2021; Ngoc & Thanh, 2023; Tampubolon et al., 2023) or secondary data (Sholekhah & Fakhurriana, 2023; Widyasari & Maghfiroh, 2023).

Tampubolon et al. (2023) found that all students could get many words correct or almost correct after using ELSA, but 10 out of 10 students' still fail to correctly pronounce particular words despite repeated practice, e.g. creator, drunk, together. Ngoc and Thanh (2023) revealed a predominantly positive reception among students regarding the process of acquiring pronunciation skills through the ELSA, fostering positive educational experiences for non-specialized students, thereby contributing valuable data to the discourse on the integration of AI in language education within the Industry 4.0 paradigm. Similar findings were also reported by Saragih and Muthmainnah (2021).

On the other hand, a couple papers aimed to explain ELSA Speak's advantages, but only through a general research on the available literature. According to Widyasari and Maghfiroh (2023), the advantages of this application include: the application can be downloaded for free, can detect pronunciation errors with as much as 90% accuracy, the user can get feedback to correct mistakes, the application provides 1,200 lessons with more than 60 topics, besides that the application also offers an interactive dictionary. Elements of assessment and scoring of the application also include pronunciation, fluency, intonation, word stress, and listening. From these elements and aspects, it has been proven that the ELSA Speak app is the most complete in terms of stress, intonation, accuracy and fluency. Sholekhah and Fakhurriana (2023) reported similar things, but also highlighted how ELSA has excellent content design that can be efficiently used as a pedagogical and instructional lesson plan.

Table 3. Past studies that used ELSA for purposes other than improving English skills

Research Purpose	Research Design	Participants	Study
To find out what type of errors that students' make when pronouncing English words via ELSA Speak	Descriptive qualitative using ELSA Speak's pronunciation test	15 third year university students of English Department of Universitas HKBP Nommensen Medan	Simanjuntak et al. (2023)
To see students' pronunciation mistakes	Descriptive qualitative by recording students' pronunciation with ELSA	20 second year university students of English Department of Universitas HKBP Nommensen	Manurung et al. (2024)
To detect pronunciation errors in speaking skills using ELSA application	Qualitative content analysis	10 English Department students in STKIP Budidaya Binjai	Indari (2023)

Based on the systematic literature review, when researchers do not use ELSA to specifically improve English pronunciation or speaking skills, the scope so far has only been to identify what errors students make. Indari (2023) state that errors were detected by intonation, fluency, and pronunciation, and these errors varied among all participants as expected. Their findings detailed the errors into several aspects: TH Sounds, Nasals, Schwa, Consonant Clusters, Diphthongs, R Sounds, Ending Sounds, Intonation and etc. For the students examined by Simanjuntak et al. (2023), the common errors are located on words that contain the letter ‘i’ and the ‘k’ consonant. Phonics that are not usually present in the Indonesian language have also been proven to confuse students, such as /tʃ/, /ɔ:/, /ʊ/, /ə/, /i:/, /ɑ:/, the diphthongs /aʊ/ and /eə/, and silent letters (Manurung et al., 2024). Overall, these results point towards the need to study phonological interference even deeper.

Table 3. Past studies that compared ELSA’s performance with another technology

Research Purpose	Research Design	Participants	Study
To see the influence of high/low self-confidence on students’ speaking between ELSA Speak and English Speaking Practice (ESP) platforms	2x2 factorial design using observation, questionnaires, and speaking tests	Tenth-grade students SMA N 16 Medan	Namira and Suwandi (2023)
To discern the instructional differences of two free apps (ELSA Speak and ESP) and their subsequent impact on learners	Quasi-Experimental design using pre- and post-tests	X Pharmacy 4 (33 students) and X Medical Laboratory Technology 1 (34 students) of SMK Negeri 17 Samarinda	Arbain et al. (2023)

Despite the seemingly popularity of ELSA among pre-service teachers, it seems that very few have purposefully investigated how it can compare with other educational technologies. Only two studies, both based in Indonesia, were identified. Arbain et al. (2023) and Namira and Suwandi (2023) used similar methods and also compared the same two apps (ELSA Speak and ESP). Both also came to the same conclusion that ELSA yielded better results and helped the students’ self-confidence in speaking better than ESP.

Overall, simply from searching the term “ELSA Speak” on Google Scholar, it was very noticeable that the majority of the papers originated in Indonesia. This assessment proved to be true as the researcher continue to complete the systematic literature review. Though there are a few studies carried out by researchers from other countries, these were student theses and not journal articles (Cisneros-Brusil, 2023; Quinde & Prudente, 2023). The results of this study clearly showed that, despite the great number of search results, the extent of how researchers have explored this AI app is still very limited. As Ericsson and Johansson (2023) state, there must be more longitudinal studies to truly confirm how conversational AI can be part of the students’ learning journey. As of this moment, we have much evidence of its positive short-term effects, but whether this remains after months remains the question.

## 6. Conclusion

For many students, the aim of studying EFL is not only to be able to communicate their meanings well, but also to sound ‘right’ when speaking in the target language. Due to the frequent case of students being uninterested to use English in class due to their lack of confidence about the way they pronounce English words, this study contributes concrete evidence of how ELSA Speak app, an AI English coach, can both inspire demotivated junior high school students to learn on their own and improve their pronunciation across five aspects of speaking, namely content, fluency, grammar, pronunciation and vocabulary. The study of its effectiveness is quite limited in terms of impact since it only collected data from pre- and post-tests with a range of only three weeks for the treatment, but the significance of this study does not rely solely on the results of the pre-experimental stage since it also offers important insights from a systematic literature review of all studies related to ELSA Speak app since the year it was created. Therefore, this paper can be an excellent starting point for many novice teachers and researchers as it offers the first state-of-the-art review of the AI technology. However problematic the notion of wanting to sound like a ‘native English speaker’ and the on-going discussion about reinforcing the concept of ‘non-nativeness,’ stakeholders from the level of beginner-level students to work-overwhelmed schoolteachers can rarely accommodate such considerations. But, taking advantage of this bias by teaching students with an advanced technology such as a conversational AI can at least be the first step to make students be more motivated to learn the target language, and eventually be willing and capable to engage in discussions about the language.



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