DEVELOPING PRONUNCIATION SKILLS THROUGH APPLICATION TO ENHANCE SPEAKING ABILITY: SYSTEMATIC LITERATURE REVIEW

EDY SUSENO*

Department of English Education, IKIP Widya Darma, Surabaya, Indonesia. Email: edysuseno4@gmail.com

ABSTRACT

The most crucial aspect of delivery is pronunciation. It serves as a means of explaining what is being communicated to others. Many college and high school students have pronunciation issues. It is supported by ten articles that have been collected from various articles and nations. They were gathered from the Google Scholar website and organized by year starting in 2019 and topic of pronunciation and application. The authors' findings show that using seven different pronunciation applications, such as Praat, Orai, Elsa, Tophonetics, EFP, English Pronunciation, and Mall improves students' speaking, listening, and pronunciation abilities. The students were more motivated to participate in the teaching-learning process after using such an approach. Teachers could use these kinds of discoveries to teach subjects that are connected. It also motivates other scholars to pursue related research.

Keywords: Application, Listening, Pronunciations, Speaking.

INTRODUCTION

People express their intentions through their words. The ideas in their heads are represented by the words they say. Each word's tone has a distinct meaning. People can convey information at a party by speaking to one another. Each speaker's ability to pronounce themselves clearly helps others understand what they are saying. Otherwise, if the speakers cannot create the proper pronunciation, the communication would fail. It is crucial to practice the pronunciation. It is important to guide students toward mastering accurate pronunciation (Suseno, 2020).

Many people utilize gadgets as tools for a variety of purposes. They watch videos, read articles, and many other things. They can be utilized by students for their requirements. One of them aims to improve learning. On their devices, they can install some programs. One of them is the application of pronunciation. The pupils can improve their speech skills using this program. It resembles an electronic dictionary somewhat (Krismonika *et al.*, 2021). This app's menu contains a pronunciation checker. The intended words are written on the blank space by the pupils, who then select the speaker symbol. They hear the native speaker pronounce things correctly. When used in a school setting, this technique can help pupils become more proficient communicators (Octavianita *et al.*, 2022).

In reality, pronunciation was a challenge for many students (Fadillah, 2020). They discovered that the English pronunciation is different from their own tongue's. There are various ways to pronounce each word. It requires a specific approach to be learned. They grow frustrated by it. It is one of the issues that cause them to perform poorly during speaking practice. They are unable to comprehend what others are saying. It frequently encourages misunderstandings among language users (Ammar, 2022).

According to Grandyna (2018), to improve students' pronunciation skills, teachers must adopt pronunciation norms and teaching strategies. The teacher must present the rules of pronunciation before teaching how to pronounce different words. It aids pupils in improving their command of various word pronunciations. To achieve such an objective, a strategy is required. The facilitator of the teaching-learning process is the teacher. To achieve the teaching objective, he or she must enlighten themselves using several techniques. The student's pronunciation might be improved by modifying the suggested method.

However, the pupils can correct their pronunciation issues using pronunciation software. On the application, they may mimic the native's pronunciation. The students have two options for their language. American and British English are those. To minimize misunderstanding, it is crucial to concentrate on only one kind of English. For the pupils, it is an easy way to learn pronunciation. They are not required to memorize the complicated pronunciation formula (Miqawati, 2020).

The study's objective is to demonstrate the value of using pronunciation aids to raise students' competency in speaking practice. Some research questions need to be upheld to direct the analysis in the appropriate direction. The following is mentioned,
1. Which applications were used to teach pronunciation?
2. What program was frequently used to impart pronunciation instruction?
3. Who is taking part in the study?
4. What conclusions did each study reach?

The articles' connected subjects were gathered to provide the solution to the question. Through a systematic examination of the literature, the results were examined.

METHODS

A collection of similar publications must be made to respond to the research questions. The information will be used to achieve the study's objective. The instructions on how to obtain the articles must be followed to satisfy that kind of aspectation. Before filtering the sources, it is necessary to full file several questions. To take the intended articles, they will be required. The inquiries are outlined below.
1. Was the article copied from Google Scholar?
2. Are the articles recent-2019 publications?
3. Does the article cover application and pronunciation?

The researcher must consider such questions and complete each stage based on the provided questions. The first step requires that the search page be on the Google Scholar website. The search blank needs to be

filled up with the terms after seeing that kind of page. Pronunciation, application, and speaking are all required. On entering the desired page, a number of articles will appear. The menu year must be clicked to obtain the correct published year. 2019 selection enables the desired articles to show. It is the step where the intended ones are chosen for compilation. In addition, the collected publications will be examined to respond to the research questions.

FINDINGS

The discussion of pronunciation, application, and speaking is spread throughout ten articles. They were all published in 2019 overall. They were discovered on Google Scholar. The study's source data are the articles' text. The data they contain answer the study questions in their intended manner. Utilizing the collected publications, three research questions need to be addressed. The questions helped the analysis get to the conclusions. It is crucial to demonstrate the study's objectives.

As shown in Table 1, it is seen that each article was published in different publisher. The publishers derive from different countries. They are from Indonesia, Iraq, Thailand, and USA. Seven out of ten publishers work in Indonesia while the remaining work in Iraq, Thailand, and USA each. This kind of compiled articles is dominated by Indonesian publishers. Although the three publishers are from three different countries, they strengthen the validity of the results. The publishers such as Indonesian EFL Journal, journal of English language and pedagogy, JURNAL PENDIDIKAN UNSIKA, International Journal of Language Education and Cultural Review, Elite Journal, JOLLT Journal of Languages and Language Teaching, and Journal of English education and teaching derive from Indonesia, while three others such as LEARN Journal, Arab World English Journal, and Language Learning and Technology are from Thailand, Irag, and the US consecutively. Although the whole articles are published in different publishers and countries, they all discussed the same topic. It is all about pronunciation and application. They provided the data which are needed by the study. It is important to reach the goal of the study.

The applied applications in the articles

The research question 1 is asking the applied applications used in the articles. Each article implements the application differently. It is the information that is needed to gather, as seen in Table 2. There are seven different applied pronunciation applications. Mal is the one that was used by three studies in the compiled articles. It seemed that it is the most popular for teachers and students. They used their cellphones for their daily routine. Applying such an application on their gadgets does not need an extra effort. They just click the intended buttons to satisfy the necessities, while six other applications were applied by six articles individually. Those applications are Orai, Elsa, Praat, Tophonetics, EFP, and English Pronunciation.

MALL

A crucial aspect of learning a language is pronunciation. It boosts the learner's confidence and fluency in addition to their communication skills. Correct pronunciation facilitates communication between learners and native speakers and makes it easier for them to be understood. Therefore, learning proper pronunciation in any language is essential. However, learning proper pronunciation can be difficult, particularly if the student does not have access to native speakers. MALL has transformed how pronunciation practice is done.

The adaptability of MALL as a pronunciation learning tool is one of its key benefits. As long as they have access to their device, learners can practice whenever and wherever they want. This entails that learners can practice their pronunciation in an interactive setting at any time

Table 1: The compiled articles

Numbers	The titles	The publishers	Publishing years	Taken from	Contents
1	Using Orai application in teaching pronunciation (Suryani *et al.*, 2021)	Indonesian EFL Journal (IEFLJ) (Indonesia)	2019	Google Scholar website	Pronunciation and application
2	Improving students' pronunciation skill using Elsa speak application (Anggraini, 2022)	Journal of English language and pedagogy (Indonesia)	2022	Google Scholar website	Pronunciation and application
3	Using Praat for English Pronunciation Self-practice outside the Classroom: Strengths, Weaknesses, and its Application (Osatananda and Thinchan, 2021)	LEARN Journal (Thailand)	2021	Google Scholar website	Pronunciation and application
4	The Attitudes of Second Year EFL Students at Dr Moulay Tahar University toward Learning English Pronunciation through Mobile Assisted Language (Ghounane, 2019)	Arab World English Journal (Iraq)	2019	Google Scholar website	Pronunciation and application
5	Problems and strategies in teaching pronunciation on English department students (Ahmad, 2019)	JURNAL PENDIDIKAN UNSIKA (Indonesia)	2019	Google Scholar website	Pronunciation and application
6	The application of mobile assisted language learning (mall) in teaching pronunciation (Amalia, 2020)	International Journal of Language Education and Cultural Review (Indonesia)	2020	Google Scholar website	Pronunciation and application
7	English pronunciation based on the phonetic transcription application (study of tophonetics. app) (Yusuf, 2019)	Elite Journal (Indonesia)	2019	Google Scholar website	Pronunciation and application
8	Using apps for pronunciation training: An empirical evaluation of the English File Pronunciation app (Fouz-González, 2020)	Language Learning and Technology (USA)	2020	Google Scholar website	Pronunciation and application
9	Integrating "english pronunciation" app into pronunciation teaching: how it affects students' participation and learning	JOLLT Journal of Languages and Language Teaching (Indonesia)	2020	Google Scholar website	Pronunciation and application
10	The Analysis of English Pronunciation Errors by English Education Students of FKIP UMSU (Yusriati and Hasibuan, 2019)	Journal of English education and teaching (Indonesia)	2019	Google Scholar website	Pronunciation and application

Table 2: The applied applications

Numbers	Articles	Frequency	Applications	Results
1	1	1	ORAI	Bettering the pronunciation and speaking practice
2	2	1	ELSA	Bettering the pronunciation skill
3	3	1	PRAAT	Bettering the pronunciation skill and motivation
4	4, 5, 6, and 10	4	MALL	Bettering the pronunciation and reading skills
5	7	1	Tophonetics	Bettering the pronunciation
6	8	1	EFP	Bettering the pronunciation and enhancing involvement
7	9	1	English pronunciation	Bettering the pronunciation and enhancing involvement

or place. MALL also gives students the option to customize their educational experience. They can select the particular pronunciation skill that they need to practice on or concentrate on. It has been demonstrated that using a tailored strategy will increase students' motivation and sense of self-efficacy, improving their pronunciation.

In addition, MALL gives students quick feedback, which is a crucial component in learning how to pronounce a language correctly. Learners have typically relied on the language teacher's input. With MALL, learners can converse with machines that offer immediate feedback on pronunciation. These feedback methods allow the learner to replay, listen to, or record their attempts in various circumstances, improving pronunciation accuracy and proficiency. They also assist the learner discover areas for growth.

ORAI

The importance of oral communication has increased significantly in modern, globalized society. It enables smooth cross-border communication, information sharing, and collaboration. However, pronunciation frequently presents substantial difficulties for English language learners, making it challenging for them to properly communicate. Fortunately, technological advancements have made it possible to help students improve their pronunciation, and the Orai application is setting the standard in this area.

Orai is a speech analysis and coaching tool created to assist users in developing their presentation, communication, and public speaking abilities. The software analyzes users' speech patterns using artificial intelligence to spot areas for development, offer feedback, and offer advice on how to improve their voice. Because it emphasizes certain components of speech including pitch, speed, enunciation, and tone that are essential for creating clear and successful communication, Orai is a good choice for learning pronunciation.

One of Orai's main advantages is its user-friendly layout, which makes it simple for English language learners to get about the app and begin their road toward pronunciation. With individualized feedback and a variety of challenges that users can accomplish at their own pace, the app encourages users to continuously practice and develop their skills. The challenges imitate real-world situations that users can run into in their personal or professional lives and cover a wide range of topics, from giving a TED-style speech to preparing for a job interview.

ELSA

An AI-powered pronunciation app called Elsa, which stands for "English Language Speech Assistant," is created to assist non-native speakers in developing their pronunciation abilities. The app analyzes learners' pronunciation using cutting-edge speech recognition technology and offers them individualized feedback to help them get better. Elsa provides a selection of tests and activities that concentrate on various aspects of pronunciation, including intonation, rhythm, stress, and vowel sounds.

Elsa's capacity to give consumers quick, precise feedback is among its most alluring aspects. After the learner records a few sentences, the software analyzes their speech, looking for any pronunciation mistakes, and giving them personalized feedback on how to get better. Even practical activities are included in the app to assist learners in

addressing any pronunciation issues they may be having. This function is quite useful for giving students quick and accurate feedback, which speeds up the learning process.

PRAAT

The University of Amsterdam's Institute of Phonetic Sciences created Praat, a free and open-source piece of software. For study in phonetics and phonology, the application is frequently used by linguists, phoneticians, and speech scientists. However, it is also a useful tool for language students who wish to work on and refine their pronunciation.

The capability of Praat to capture and analyze voice is one of its key characteristics. Users have the option of recording their own voice or any other sound, such as a conversation, and then thoroughly analyzing it. A spectrogram, which is a graphic representation of the sound wave, is shown by the application. The viewer can view and evaluate the sound's constituent parts as it displays the various frequencies and amplitudes of the sound over time.

Language learners can use Praat to assess their speech and pinpoint areas for pronunciation improvement. For instance, they can check to see if they are accurately pronouncing a certain vowel or consonant and modify their pronunciation if necessary. They can also assess where they need to improve by comparing their pronunciation to that of a native speaker.

The ability to create and manipulate sound files is another Praat feature. Users have the option to make their own recordings, edit already-existing ones, and even create speech synthesis utilizing several voices. For language learners who want to continually practice particular sounds or sentences, this function is especially helpful.

Tophonetics

Based on the phonetic approach to language learning, tophonetics is a platform for teaching foreign languages. To assess the user's pronunciation of particular words or phrases, the application employs a speech recognition algorithm. The algorithm examines the word sounds and compares them to how they should be spoken. This technology enables the program to assist language learners in identifying the sounds they are struggling with or saying wrong while also giving feedback on how to rectify them.

Any language can be learned with tophonetics, and there is a wide variety to pick from. Users can use the application using their PCs or mobile phones, and it is simple to use. Users can choose the language they want to study and begin practicing their pronunciation when the app has been loaded. The application walks users through word and phrase pronunciation, and as they advance through the stages, the courses get progressively harder.

Making a tailored learning plan for the user is one of Tophonetics' primary benefits. Users are questioned about their objectives for learning a language, their degree of skill, and the amount of time that they have available during the initial lesson. This data is used by the application to generate a personalized learning plan for each user that focuses on their unique pronunciation issue areas. By concentrating on the areas where users need to develop the most, this personalized approach to language learning helps users gain confidence.

EFP

EFP is a mobile program Oxford University Press created with the goal of enhancing English pronunciation. It gives students a wide range of tools and resources to aid in their learning and practice of several facets of English pronunciation, including stress, intonation, and specific sounds. The app's user-friendly interface makes it simple for language learners to utilize alone.

The fact that EFP gives the user rapid and precise feedback on their pronunciation is one of its finest characteristics. The software has a voice recognition feature that evaluates the user's pronunciation against that of a native speaker and offers suggestions for improvement. For learners, this feedback can be quite helpful because it enables them to monitor their development and pinpoint areas that require more attention.

Along with the voice recognition feature, EFP also offers a variety of listening activities that can help students get better at comprehending different English pronunciations. These activities involve listening to various English accents and typing them down as well as detecting stressed and unstressed syllables in various English sentence forms. Learners can gain a more nuanced grasp of English pronunciation and increase their confidence in their capacity to communicate successfully in a variety of English-speaking circumstances by frequently doing these exercises.

EFP has drawn criticism for being unduly prescriptive and for possibly failing to account for the inherent pronunciation differences that exist among English speakers. However, EFP's creators took special effort to make sure that the program was adaptable enough to support a variety of English accents and dialects. For instance, the app features audio snippets of speakers with various accents and invites students to experiment with various English pronunciation styles to find one that sounds natural and at ease for them.

English pronunciation application

Language learners can improve their pronouncing skills with a program called EP. The program can evaluate a learner's pronunciation accuracy in relation to the correct word pronunciation thanks to its strong speech recognition features. Through audio and visual clues, learners can use the app to learn how to pronounce any word or phrase in English. It provides quick feedback that the student can utilize to gauge their progress and pinpoint their areas of weakness.

Accessibility is one of several significant advantages of using EP. Anyone who is interested in learning English pronunciation can access and download an EP application online. Students can easily practice their pronunciation anywhere because the software can be utilized on a PC or smartphone. Users may easily explore all of the app's features thanks to the user interface's ease of use. The software is more fun for students to use since it is dynamic.

Another benefit of using EP is that it allows learners to tailor their education. The app is designed to maximize the educational value for students. The learners can choose the words or expressions that they want to learn. The user can alter all of the program's settings, including the degree of difficulty, the number of repetitions, and the speaking tempo. Students can proceed at their own pace thanks to this personalization, which is essential for effective learning.

The preference of application usage

Table 2 demonstrates that MALL dominated the usage, while each article successively applied the remaining. They favor using this application due to how user-friendly it is. By listening to the recorded voice and receiving feedback on their pronunciation practice, the students can use it to improve their accuracy. At the same time, the students are also learning pronunciation. Students can record their voices using the application's recording feature, and they can then listen to the feedback. It encourages students to be independent learners so they can improve their pronunciation. In four out of ten papers, the usage of the Mall to Learn Pronunciation was confirmed. The pupils gain advantages from using it to improve their reading and speech abilities. When reading aloud, pupils should be able to pronounce words correctly and use an understandable voice. It aids in the clear comprehension of the reader's message by the audience. It is the only program that can improve reading skills as a result of learning pronunciation.

Six more articles each examine one or more of the following applications: Orai, Elsa, Praat, Tophonetics, EFP, and English pronunciation. Every article used every application. The development of pronunciation is improved by all of the applications. Utilizing such tools to improve speech learning has varying results. The pupils could hone their speaking abilities using the Orai app. It is a side effect of learning pronunciation with the Orai app. By improving their pronunciation, they were able to talk more clearly.

Elsa and Tophonetics are further applications. They are the only article out of ten to confirm the pronunciation development result. It differs from two other programs, such as Efp and an application for English pronunciation. The students' participation in the teaching-learning process was influenced by the use of these two applications. The students are motivated to passionately attempt word pronunciation. However, using the Praat application, one might increase incentive for learning pronunciation. Using such an application, the students' pronunciation skills improve even more.

The users of the applications

Students at two levels benefit from the pronunciation application's installation. The majority of users were college students, as shown in Table 3. In seven out of ten articles, they are mentioned, while three articles were occupied by seniors. No elementary or junior high students participated in any of the ten articles. To discover the cause, more study is required.

It appears that among adult language learners, the demand for pronunciation is becoming essential. It is brought on by the need for such proficiency in carrying out their speaking obligations. College students must likewise deal with this type of evidence. Three out of ten publications encouraged senior high school students to participate in the study, whereas seven out of ten involved them. The pupils' participation demonstrates the urgency of dealing with pronunciation. They appear to have difficulties finishing their speaking proficiency.

DISCUSSION

The delivery's pronunciation is its most crucial component. Having this capacity facilitates successful engagement between speakers and listeners. The language users will be able to exchange information. Lack of proficiency in producing the proper pronunciation causes misunderstandings within the group (Julfah and Megawati, 2023). It is a communication breakdown. The language users do not anticipate that such a phenomenon will occur.

A solution must be supported in advance of such a situation. Ten papers on the Google Scholar website that looked at matters of pronunciation and application were used to fulfill it. They were released by many publishers and nations, including Thailand, Iraq, the United States, and Indonesia. It demonstrates that the pronunciation issue has drawn attention on a global scale. They were released between 2019 and 2022. Problems of this nature must be resolved right away. The writers had discussed the answer to the pronunciation issue in the data they had collected. At Table 1, it is visible. It demonstrates that the articles are discussing the use of software to teach pronunciation.

Evidence was obtained based on study questions 1, 2, 3, and 4. Seven applications are utilized in ten articles, as shown in Table 2. MALL

Table 3: The level of participants

Levels	Elementary	Junior high	Senior high	College
Articles	-	-	4, 6, 8	1, 2, 3, 5, 7, 9, 10

predominated in terms of utilization. It appeared in four articles from various publishers. Three others were printed in Indonesia, while one was distributed in Iraq. It demonstrates that using MALL as a method to teach pronunciation is a global issue. Using this approach, teachers can implement a variety of applications to improve language acquisition.

On the other side, six other applications were used in each article, including English pronunciation, Praat, Orai, Elsa, Tophonetics, and EFP. They comprise the MALL. They were utilized in computers and mobile devices. They all offer both audio and text. The text is only provided by tophonetics. However, every program allows the pupils to correct their pronunciation issues. The incorporation of the pronunciation application in the collected articles benefits the students' speaking, reading, and pronunciation abilities. Their interest in studying English is also sparked.

Furthermore, students that use English pronunciation applications also improve their speaking, motivation, reading, and classroom participation skills. The teaching-learning objective can be met by the teacher by selecting the best application. It aids in the achievement of both the teacher's and the students' pronunciation learning objectives (Zakiyyah, 2022).

It appears that adult learners are the ones that use pronunciation applications. Table 3 shows that seven pieces featured college students, while three others featured high school students. Elementary and junior high pupils did not participate in the collected articles. Students in senior high school and college appear to have had pronunciation issues. Such students practice their English at this level by delivering academic material in front of the class. They discovered for themselves that the interaction between the speaker and the listener is hampered by their pronunciation issue (Khaleghi *et al.*, 2020).

The deployment of any pronunciation application helps students to improve their pronunciation by listening to the recorded audio, reading the phonetic symbols, and recording the utterances on the application, according to a survey of ten collated publications from different publishers and nations. Students in senior high school and college benefit from the implementation of such applications. The issues and remedies were communicated globally. Therefore, using such a way to teach pronunciation to their students is beneficial for the teachers. It also encourages other researchers to conduct additional research to produce different findings.

CONCLUSION

Students in late high school and college primarily experience pronunciation issues. It makes discussion difficult for them. Lack of pronunciation skills causes misunderstandings and confusion among language users. Based on the examination of ten publications from various publishers and nations, it has been determined that employing pronunciation aids can assist students in improving their speaking, listening, and pronouncing abilities. In addition, their motivation to participate in the teaching-learning process improved. To improve the relevant subjects, the teacher must use this strategy.

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