

The Effectiveness of Speech-Ace Website on Students' Pronunciation

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Abstract

Effective communication is the core of an EFL program. Therefore, having good pronunciation is crucial to achieve effective communication and to avoid misunderstanding. Speech-Ace is a tool that helps to enhance pronunciation in the form of a website. This study aims to discover the effectiveness of Speech-Ace on English Education Department student's pronunciation. Qualitative approach with case study method was used in this study, the data were gathered through pronunciation tests and interviews. The result showed that there was improvement in student's pronunciation after the implementation of Speech-Ace website. Students were helped by the feedback from the Speech-Ace website in enhancing their pronunciation skills. However, the study's generalizability is limited by the small sample size of 30 students. Further research with a larger and more representative population could strengthen the validity of the findings.

Keyword: *Speech-Ace; Pronunciation; Website*

INTRODUCTION

English is a preeminent global language, transcending borders and widely employed in diverse nations (Galloway & Rose, 2015). Its pervasive use extends across a spectrum of critical domains encompassing education, commerce, healthcare, financial, tourism, and diplomacy. Furthermore, English has entrenched itself as a fundamental lingua franca on a global scale, particularly in computing, affirming its indispensable role in the modern world (Mohammed, 2018). In contexts where English is not the native tongue, the teaching and acquisition of this language take on a distinct form known as English as a Foreign Language (EFL) (Mauludin&Lutfi, 2015). EFL is a subset of English Language Teaching (ELT) that addresses the specific needs of non-native speakers residing in countries where English is not the official language (Takahashi, 2014). These individuals seek proficiency in English for many purposes, with communication as a primary goal. EFL programs often operate in nations where English holds no official status, but it is extensively used for various forms of communication and interaction (Felix, 2020).

Effective communication is the core of an EFL program; pronunciation is crucial. According to Pardede (2018), good pronunciation is essential for speaking every language. English pronunciation is critical for English as a Foreign Language (EFL) students. It tremendously impacts their capacity to communicate successfully and be understood by native English speakers. Because of its role as a worldwide language,

English has a unique position and is the only foreign language required in schools (Lauder, 2020). The ability to articulate words accurately plays a pivotal role in ensuring smooth and unambiguous communication (Nakai et al., 2018). For foreign language learners, the proper pronunciation of words carries significant weight, influencing how comprehensible their speech is to others in a conversation (Thi-Nhu Ngo et al., 2023).

Consequently, pronunciation emerges as one of the foremost aspects of language acquisition, with communication partners forming initial impressions of speakers based on their pronunciation skills (Hendriks et al., 2021). Moreover, those embarking on learning a second language (L2) frequently acknowledge their aspirations and the compelling need to refine their pronunciation skills (Levelle & Levis, n.d.; McCrocklin & Link, 2016). This recognition underscores the enduring importance of pronunciation in the broader landscape of language acquisition and communication proficiency.

Currently, the learning process has begun to be influenced by technology, especially in the language learning process. As stated by Chapelle and Erik (2016), technology is a crucial instrument that may be implemented into the language classroom to affect language learning positively. As per Eady and Lockyer (2013), cited in Ahmadi (2018), technology has evolved into an indispensable component of the educational journey, posing a significant concern for educators throughout the entire process, starting with the creation of learning opportunities and extending into the teaching and learning phases. According to Bećirović et al. (2021), technology provides personalized language teaching and materials that allow learners to choose lessons and tailor them to their needs. Therefore, technology is considered very influential in how language learning and teaching provide broad access to learning. Not only that, but technology has also provided access to students and teachers regarding the use of technology to improve students' speaking skills. This is in line with Asratie et al. (2023) that technology has given us several technology-based tools to improve students' speaking skills. This is also supported by Diyyab et al. (2014), who stated that technology is gaining significance in English as a Foreign Language (EFL) education because nowadays, many learners want to express themselves in English without restrictions to communicate. Therefore, it is essential for students to fully understand English in terms of the structure and pronunciation of a word or phrase. This is supported by Kobilova (2022); in her study, she stated that accurate pronunciation is a crucial part of learning English.

Understanding English is difficult for Indonesians because they need to gain command of vocabulary, pronunciation, and sentence structure (Alrajafi, 2021). Pronunciation has been a focal point in language courses designed for learners at a more advanced level (Pennington, 2021). According to Monika et al. (2019), pronouncing English words for Indonesian students is difficult since they have spoken in their home tongue since childhood. Mispronunciation is one of the problems that happens when people do not master pronunciation. According to Maraden&Silalahi (2016), there is a growing apprehension regarding miscommunication in the context of English as a Foreign Language (EFL), as mispronunciations have the potential to result in miscommunication, misinterpretation, and misconceptions among individuals engaged in communication.

To put it differently, acquiring the ability to pronounce sounds accurately in a foreign language is especially vital in interactions, as improper pronunciation can give rise to communication breakdowns (Donal, 2016). In response to some of these problems, technology integration into the learning process is needed. As Sun (2023) pointed out, integrating technology into pronunciation activities improves students' pronunciation

ability and creates a more conducive learning environment. Accurate pronunciation leads to global achievement for students of English as a Foreign Language (EFL) (AbdAlgane&Idris, 2020). Based on the importance of pronunciation in English, it proves that improving the ability to pronounce English is important and essential to speak English well.

One type of technology that can be used to improve English pronunciation skills is an online website accessed through mobile phones. Chan et al. (2018) said that the Speech-Ace web is a tool for students and can be used to improve pronunciation skills. Speech-Ace is an online platform that provides speech therapy and pronunciation training for individuals or students learning and using English as a second language (ESL). According to Miguel (2021), the Speech-Ace website is a technology that offers pronunciation exercises in English. Through this website, students can improve pronunciation skills through interactive exercises and feedback from this website. According to Terentyeva&Ulugbek (2019), feedback is a method of delivering information to motivate the recipient to embrace it, contemplate its implications, derive insights from it, and ideally, implement improvements. Therefore, on this website, the feedback feature is one of the highlights; through this feedback, the user knows the pronunciation errors and corrects these errors when doing pronunciation exercises again. Bashori et al. (2022) say that learners who get feedback when learning a language then the feedback become the leading cause of their overall speaking proficiency. Therefore, Speech-Ace Web is considered very effective for students who want to learn a language, especially in terms of pronunciation, because this web can significantly improve the accuracy of learners' pronunciation compared to traditional classroom teaching.

A problem occurred in the first and third semester students in the English Department of a well-known university in Central Java, which face challenges in speaking English. In particular, most of these students show deficiencies in their English pronunciation skills. This problem is compounded by the lack of awareness among some students regarding the correct pronunciation of English words. This situation raises concerns about the effectiveness of current language teaching methodologies and highlights the need for targeted interventions. Addressing these pronunciation issues is crucial to improving students' overall language proficiency and preparing them for a successful academic and professional future.

Several studies about the use of Speech-ace website have proven that this website improve English pronunciation skills. Muslim et al. (2020) proved an increase in the quality and level of fluency in English pronunciation using Speech-Ace. The results showed a continuous increase in score in the use of Speech-Ace. It also briefly mentioned by Zawadzki (2022), Speech-Ace is a good tool for practice, especially in an EFL context where the interaction with English-speaking individuals is minimal. The study stated that Speech-Ace is easy to use because of its intuitive design and ease of navigation. Mayor (2021) examined accounts for the main problems that secondary school students face regarding English pronunciation. The study found that both consonant and vowel sounds presented similar mispronunciation rates before the use of Speech-Ace as well as similar improvement rates after its use. The study also found that Spanish 3-ESO bilingual students tend to mispronounce English phonemes that are not in the Spanish phonological repertoire. Moreover, a previous study conducted by Melvina et al. (2023) shows that the use of technology (Spotify) has resulted in a positive response to the student's pronunciation skill through listening to the song in the

application. This research only explained the student's voice and there was no experiment conducted by the researchers. This study was applied in senior high school which is not using English everyday in the learning and teaching process. Therefore, the researchers are interested to do this recent research in higher education which uses English as their daily learning process. By using English in their daily learning process, it will help the students to do more in improving their pronunciation skill. This recent research aims to determine how effective the use of the Speech-Ace website to improve pronunciation in English and to discover how the university students' perceive its effectiveness.

METHOD

To know how the Speech-Ace website improves pronunciation skills and how students perceive its effectiveness the qualitative approach was used and case study method was applied this research. The subjects of this research were 30 students from the first and third semesters of the English Department of Universitas Tidar. The data in this study were collected through two steps; first, through a standardized test using Elsa-Speak and a test using Speech-Ace to determine the effectiveness of the application. To conduct the test using Elsa-Speak website, called as pre-test in this study, students were asked to take a test through the Elsa-Speak application with an open question model where students answered the questions given based on their opinions. Furthermore, students were tested using Speech-Ace website, called as post-test in this study. The researchers could measure the students' performance in speaking by using these two tests. Furthermore, for the second step, researchers conducted interviews with questions adapted from Alamudi (2018), Rokaya (2022), and Syafrizal et al. (2022). This was done to find out how effective the application was in improving pronunciation skills based on the research subject's point of view. After the data were collected, researchers analysed the data: the data from pre- and post-test were analysed using average scores computation. For the interview results, the researcher analysed by selecting some of the same answers from each subject. Table 1 below presents the rubric for the interview to know the students' opinion about the use of Speech-Ace application in improving students' pronunciation ability.

Table 1: Rubric Interview Questions

Question	Answer
Do you think having correct pronunciation is important?	
Do you need many times to practice pronouncing your vocabulary correctly?	
Have you ever checked your pronunciation in an online dictionary or website?	
Did you know about Speech-Ace as a media for improving English skills?	
Do you think Speech-Ace may help you to improve your pronunciation ability?	
What do you think about the roles of Speech-Ace to facilitate your pronunciation accuracy?	
What Speech-Ace's features do you like the most?	

RESULTS AND DISCUSSION

Students' Pronunciation Improvement before and after using the Speech-Ace website.

The data about the students' pronunciation improvements before and after the use of the Speech-Ace were collected from pre-and post-test.

Table 2: Data of
Pre-Test and Post-Test

Participant	Pre-test	Post-test
1.	55%	70%
2.	50%	54%
3.	58%	55%
4.	53%	59%
5.	63%	63%
6.	64%	62%
7.	61%	56%
8.	64%	73%
9.	68%	80%
10.	78%	81%
11.	71%	76%
12.	57%	50%
13.	75%	87%
14.	74%	74%
15.	48%	87%
16.	55%	61%
17.	78%	68%
18.	54%	58%
19.	63%	64%
20.	62%	71%
21.	61%	43%
22.	67%	68%
23.	51%	59%
24.	64%	66%
25.	51%	56%
26.	64%	58%
27.	78%	78%

28.	62%	64%
29.	75%	58%
30.	67%	68%

The table 2 above shows the data that researchers can get by conducting a pre-test and also a post-test of an application from 30 respondents. Based on the table above, there are variations in pre-test and post-test scores between respondents. There are some respondents who experienced an increase in scores such as respondent number 13 who scored 78% in the pre-test and experienced an increase in the post-test by scoring 83%. On the other hand, some respondents also experienced a decrease in value as can be seen from respondent number 29 where the respondent scored 75% in the pre-test and then experienced a decrease in value by scoring 58% in the post-test. In addition, there are respondents who did not experience an increase and decrease in the pre-test and post-test as happened to respondent 27 who scored 75% in both the pre-test and post-test. From the table it can also be observed overall that there was an increase from the pre-test and post-test results. This can be seen from the overall average where the average of the pre-test was 59% while the post-test was 68%.

Table 3: Students Pretest Result

Classification	Mark	Freq(f)	Percentage
Native	80 >	0	0%
Advanced	80-70	7	23.3 %
Upper intermediate	70-60	13	43.3 %
Intermediate	60-50	9	30 %
Low intermediate	< 50	1	3.3 %
Total		30	100%

The table 3 above shows that there is 1 or (3.3%) student who is classified as "low intermediate" with a score of (<50). Students who fall into the "intermediate" classification (50-60) amounted to 9 students or (30%). 13 students or (43.3%) are in the "upper intermediate" classification (60-70). 7 students or (23.3%) are in the "advanced" classification with scores (80-70). In this pre-test, no one was included in the "native" classification who had a score of (80>). Therefore, based on student scores in this pre-test, it is dominated by the "upper intermediate" classification, where as many as (43.3%) students get scores of (70-60).

Furthermore, the following information summarizes the performance of students on the post-test after using the Speech-Ace website. Detailed explanations are provided in the table below:

Table 4: Students Post-test Result

Classification	Mark	Freq(f)	Percentage
Native	80 >	4	13.3 %
Advanced	80-70	6	20 %
Upper Intermediate	70-60	9	30 %
Intermediate	60-50	10	33.3 %
Low Intermediate	< 50	1	3.3 %
Total		30	100%

The data in table 4 above provides the data from 30 students after conducted tests using Speech-Ace website. There are 4 students (13.3%) who get “Native” scores above 80, the students who get “Advanced” are 6 students (20%) with scores (70-80). “Upper Intermediate” with scores (60-70) are achieved by 9 students (30%). The students who get “Intermediate scores” are 10 students (33.3%) with (50-60) scores and there are 1 student (3.3%) who get “Low Intermediate” with scores (under 50). Therefore, based on the score in the table, it is shown that some students have improved their skill from the pre-test that had no one in “Native” and in the post-test there are 4 students (13.3%) in it.

The score of pre- test and post- test result can be seen in the following chart:

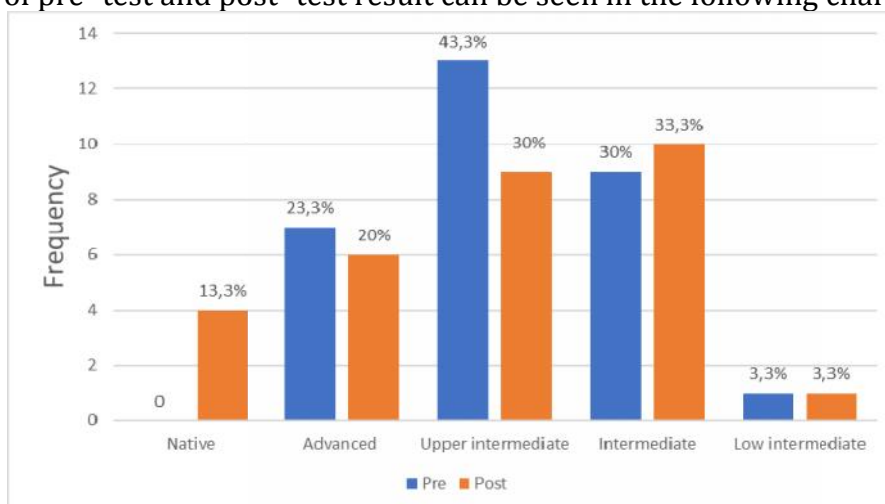


Chart 1: The Comparison between Pre-and Post-test

The pre-test results show that the majority of students (43.3%) were at the Intermediate level. A significant number of students were also at the Upper Intermediate (30%) and Low Intermediate (23.3%) levels. The post-test results show that there was a significant improvement in student performance. The number of students at the Intermediate level decreased to 13.3%, while the number of students at the Upper Intermediate and Advanced levels increased to 33.3% and 30%, respectively. The results show the effectiveness of Speech-Ace in helping students develop their skills in English speaking. From pre-test and post-test, there was a significant increase in the number of students in the two highest levels, Upper Intermediate and Advanced.

Based on data there is a significant improvement in student performance before and after using the Speech-Ace website. Using the Speech-Ace can make the participant confident in learning pronunciation accuracy (Yuniar, 2023). It can be seen by comparing the result of the pre- test and post- test. The number of students classified as "Native" and "Advanced" increased, in spite of the number of students classified as "Intermediate" and "Low Intermediate" decreased. It shows that the Speech-Ace website is effective in helping students improve the participant pronunciation of individual sounds and words. This view of knowledge has, in common with Verónica (2024), the idea that Speech-Ace can significantly aid in enhancing pronunciation, fluency and it is very useful for practicing conversation in various contexts. The website provides a native speaker pronunciation feature which gives students the opportunity to hear the correct pronunciation method, thus improving the fluency aspect of pronunciation skill over time (Andini & Zaitun, 2023). The website also offers a variety of features that can help students track their progress and stay motivated. Benito-Osorio et al. (2013) stated that the website has become a fun tool for some people to complete work and academic needs, as in universities lecturers have used the website for learning media. The findings are a line with other findings that using technology in ESL may provide a better learning atmosphere and performance (Abbasova&Mammadova, 2019).

Student's Perspectives about the Use of Speech-Ace Website

The data about the students' perspective about the use of Speech-Ace Website were obtain from the interview, the following data explain the results of the interview analysis:

Based on the interview results, for question number 1 *"Do you think having correct pronunciation is important?"* 30 participants stated that correct pronunciation is very important. As said by participant 14 in her interview:

"Yes, I think so. Having correct pronunciation makes your English sound more fluent and also make people or the native speaker understand about something that you said."

This is also reinforced by the statement said by 10 participants who stated that pronunciation is very important because it avoids misunderstandings in communication. Furthermore, for question number 2 *"Do you need many times to practice pronouncing your vocabulary correctly?"* as many as 28 participants have the same opinion that they need a long time to learn to pronounce a word correctly, as said by participant 12:

"Yes, I do. If I used to pronounce vocabulary incorrectly, then it would take at least a few times to learn and remember the correct pronunciation."

Most of them have the same opinion that it takes quite a long time to learn to pronounce a word. However, there are two participants who have different opinions, namely participant 18 who only needs two practices and participant 27 who learns to pronounce words through phonetics transcript, so they do not need a long time to learn to pronounce a word. From question number 3 "Have you ever checked your pronunciation in an online dictionary or website?" 29 participants stated that they had tried to check their pronunciation through several websites and applications. As stated by participant 21 in the interview session:

"Yes, I have. I usually use an online dictionary, Google translate, and an app called Cake."

This is reinforced by several other participants, namely participant 5 and also 9 who also do the same thing, namely checking their pronunciation through the same website. For question number 4 "Did you know about Speech-Ace as a media for improving English skills?" Almost all participants answered that they had never known about the Speech-Ace website. As said by participant 28: *"Yes I know, I just tried today."* That statement was reinforced by other participants who also had the same opinion that they only found out about Speech-Ace when they used it to do the pre-test in this study. Then, for question number 5 "Do you think Speech-Ace may help you to improve your pronunciation ability?" It was found that 30 participants stated that Speech-Ace has the ability to pronounce a word. As said by participant 5 that:

"Yes, I think it's really helpful. We can practice how to pronounce correctly."

Through this question, all participants also have the same statement that the Speech-Ace website can improve their ability in pronunciation. A total of 25 participants answered question 6 "What do you think about the roles of Speech-Ace to facilitate your pronunciation accuracy?" by stating that the Speech-Ace website has a fairly good impact on improving pronunciation skills. This is evidenced by the statement from participant 16 that:

"Quite an impact, because often we ignore the words in speaking and Speech-Ace can correct these small mistakes so that it can improve pronunciation."

The answer from participant 30 is further reinforced by statements from other participants who have the same opinion that Speech-Ace has an important role in improving pronunciation skills. From the last question or no 7 "What Speech-Ace's features do you like the most?" as many as 30 participants have the same statement that they like all the features on the Speech-Ace website such as the feature to practice pronunciation from various levels. After that, some of them also like the feedback feature after practicing pronunciation, because through the feedback they can find out where their mistakes are.

Based on the interview analysis, it can be seen that most of the participants paid attention to the correct pronunciation and also understand that pronunciation is an important thing in increasing fluency, delivering ideas, and also avoiding misunderstanding in conversation. As stated by Kobilova (2022), having strong pronunciation skills can help the speaker feel more confident when giving presentations or speeches in front of people. The participants discover challenges in mastering

pronunciation, such as the amount of time that needs to be taken and also the consistency of practice to achieve the correct and accurate pronunciation.

With the rapid growth of technology in this era, there are also more and more technologies in the form of websites and applications that may assist to enhance language skills, particularly pronunciation skills. One example is the Speech-Ace website, which was employed in this study as a treatment to enhance the pronunciation skills of English language education students in semesters 1 and 3. Unfortunately, this website is not commonly recognized, and after the participants utilized it as detailed in their interview responses, it was explained that this website helped them enhance their abilities. Based on the responses and answers that gathered from the interviews, it is clear that using an online website in this case is Speech-Ace, is one of effective ways to improve pronunciation skills.

Using Speech-Ace is effective because there is a feedback feature after doing the test on the website, in line with the statement from the participant that when a word or even a letter is being ignored, the website will give correct feedback and highlight the mistake, here are the example of feedback that has given to the participant:



Figure 1. Speech-Ace feedback feature Figure 2. Speech-Ace feedback feature

This feature becomes the favourite feature for some participants because it can help to know mistakes that have been made in pronouncing the word.

CONCLUSION

Based on the research conducted, the research shows that Speech-Ace website improves the students' pronunciation skills that was shown from the results of the pre-test and the post-test. The results showed that most of the students improved their pronunciation skills from the "Intermediate" category to "Upper Intermediate" and some of them even reached the "Advanced" category.

Students also found that the feedback given from the website helpful in improving their pronunciation skills. Overall, this research shows that technology, especially Speech-Ace website, is an effective tool to support the English teaching and learning process in the aspect of pronunciation. However, this research has only a minimum sample of subjects which is only 30 students. By only having a minimum sample, the

results of this research are specific to the particular group and cannot be widely generalized. Further research related to this topic can expand the scope of the subjects in order to make the data more accurate and deepen the analysis of the problem or object that is being discussed in the research.

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