

AN ANALYSIS OF PHONOLOGICAL ERROR IN THE PRONUNCIATION PRODUCED BY STUDENTS OF SMKN 7 BANDAR LAMPUNG

Bela Rizqi Maryantika Almucharomah ✉

English Education Study Program
UIN Raden Intan Lampung

Indonesia

Article Information

Received: August 24, 2024
Revised: August 28, 2024
Accepted: August 30, 2024

Abstract

This study was based on phenomena observed in vocational high schools. Students have poor pronunciation abilities. They have difficulty pronouncing English words with the segmental characteristics of English phonemes that contain consonants. The researcher focuses on the consonants /v/, /θ/, /ð/, /ʃ/, /z/, /tʃ/, and /dʒ/, which do not exist in Indonesian, so students are unfamiliar with these sounds. This study aims to classify the types of errors made by students when pronouncing consonant sounds and to pinpoint the location of sound errors in pronunciation. This study used qualitative descriptive analysis. The research subjects were female students from SMK N 7 Bandar Lampung, and the sample size was 13 students in class 12 majoring in marketing, selected using purposive sampling techniques. To collect data, this study asked students to say several words chosen by researchers based on words they frequently heard. The researcher then used Kenworthy's theory to analyze the student's pronunciation recording to determine the type of sound error the student made. After analyzing student recordings, we discovered 16 errors made by students. The most common mistakes are substitutions. The sixteen types of deviations include replacing [v] with [f] and [p], replacing [ð] with [d], [t], and [θ], replacing [θ] with [t], [d], and [th], replacing [tʃ] with [c] and [ʃ], replacing [dʒ] with [j], [d], and [g], and replacing [ʒ] with [j], [ʃ], and [dʒ].

Keywords: Consonant, error analysis, phonological error, pronunciation

Introduction

The English language can be considered difficult to master. Vernick and Nesgoda argue that language learners may struggle to speak English fluently because multiple spellings can represent the same sound (Vernick & Nesgoda, 1980). In contrast, Lanteigne believes that learning English can be difficult because some of the sounds in English are not present in the learners' native language (Alharbi, 2021).

Learners should recognize the significance of correctly pronouncing words and make an effort to mimic the pronunciation of foreign words. In today's world, good pronunciation requires both fluency and accuracy. To avoid misunderstandings during a conversation, it is critical to pronounce words accurately. Simple words spoken incorrectly can confuse those with whom you are conversing. Here are a few reasons why proper pronunciation is important when speaking: (1) Mispronouncing words or using the incorrect intonation can cause misunderstandings in communication. (2) Good pronunciation improves your communication skills and makes you appear more credible as a speaker. (3) Speaking with a standard pronunciation makes a good impression on the listener, which influences both how you see yourself as a competent speaker and how the listener perceives you.

These reasons suggest that miscommunication may occur if students mispronounce the sounds (Adam et al., 2023). Poor pronunciation has a direct impact on a learner's speaking ability. On the other hand, if the learners speak with proper pronunciation, it will be much easier for them to make positive connections with their listeners. As a result, if students have good pronunciation, they will understand the importance of pronouncing words correctly to avoid misunderstanding. Many students struggle to use their native language while learning a foreign language, which can result in incorrect pronunciation of specific English sounds (Syed & Abdelrady, 2021)..

Error analysis (EA) is a branch of applied linguistics that focuses on foreign or second languages (James, 1998). Three theorists have defined error analysis. Error analysis (EA) is the first approach to studying SLA, focusing on learners' creative ability to construct language (Saville-Troike, 2005). The making of errors as a device the learner uses in order to learn and the making of errors then is a strategy employed both by children acquiring their mother tongue and by those learning a second language.

Error analysis plays a crucial role in identifying errors as a result of the learning process. These errors, far from being a sign of incompetence, actually demonstrate the learners' lack of expert knowledge. As learners navigate the learning process, the rules of the target language emerge as a learning objective. It's important to remember that the target language is not perfect, and these errors are a natural part of the learning journey.

As previously stated, error analysis is the process of observing, analyzing, and categorizing errors made by learners. Its primary goal is to reveal the system operating within them, shedding light on the challenges students face. This understanding is critical to the process of foreign language acquisition (Hidayat & Sujarwati, 2024). Therefore, error analysis is the most effective tool for describing and explaining errors made by speakers of other languages.

When learning English, learners should master pronunciation as one of their skills. It is widely acknowledged that the primary purpose of language is to facilitate communication. As a result, in-class language instruction must prioritize pronunciation. The learner's first language (L1) may influence their ability to learn English as a second or foreign language (Crystal, 1991). Speaking is one way we communicate. The most important aspect to consider is how to effectively use all of the language elements that students have learned, such as vocabulary, grammar, and pronunciation, to facilitate communication. After all, the primary purpose of language is to serve as a means of communication.

Pronunciation is one of the linguistic factors, but pronunciation practice receives much attention in teaching and learning because pronunciation cannot be avoided in English (Pourhosein Gilakjani & Ahmadi, 2011). As a result, it is critical to determine the correct pronunciation in EFL countries such as Indonesia, where graduates from vocational high schools are expected to be proficient in English and professionals in their fields, whether they go on to tertiary institutions or immediately begin working.

In terms of pronunciation, the English language differs from other languages. These various sounds frequently cause difficulty in pronouncing English. Lantaigne confirms that learning English is difficult because some English sounds do not exist in the learners' mother tongue (Lantaigne, 2006). It is one of the interlingual dimensions of pronunciation errors. According to Moeliono and Dardjowidjojo, English sounds like [v], [θ], [ð], [ʒ], [dʒ], and [tʃ] are not present in Indonesian (Moeliono & Dardjowidjojo, 2003). Therefore, students should practice English pronunciation. This type of error refers to students' tendency to pronounce silent letters in words. EFL learners' pronunciation of the word *calm* as [kalm] rather than /kam/ falls into this category of errors.

Based on the researcher's preliminary study in SMK N 7 Bandar Lampung, the researcher interviewed the subject teacher about the students' pronunciation errors, and the teacher revealed that the students make mistakes when producing English consonantal sounds that do not exist in the Indonesian sound system. The researcher asked SMK N 7 Bandar Lampung students to pronounce 12 words related to English consonantal sounds that do not exist in the Indonesian phonetic system. The result was in line with the teacher's opinion; they tend to make errors in pronouncing English consonantal sounds such as [v], [θ], [ð], [ʒ], [dʒ], and [tʃ]. For instance, they pronounced "think" as [tiə] instead of [θɪŋk] and "the" as [de] instead of [ðe]. The researcher discovered that pronunciation errors are a severe problem in English as a foreign language because the English sound system differs from Indonesian.

Previous studies have been conducted to analysis students' pronunciation errors, like the analysis of English pronunciation errors by English education students (Yusriati & Hasibuan, 2019), an analysis of students' consonant pronunciation errors (Maiza, 2020), and an analysis of students' diphthong pronunciation errors. However, the previous studies differ from this current research since they did not focus on the consonant sounds that do not exist in the Indonesian sound system.

Pronunciation is a fundamental skill for mastering the English language. However, students often struggle with it, prompting the researcher to delve deeper. This interest has led to a focus on identifying errors in pronouncing English consonantal sounds that do not exist in the Indonesian sound system, as made by SMK N 7 Bandar Lampung students. The need for further research in this area is urgent, as it has the potential to significantly improve English language learning in EFL contexts, particularly in Indonesia.

Methods

According to Sugiyono, the research method is fundamentally a scientific approach to data collection with specific goals and purposes (Sugiyono, 2014). The data is revealed to have been created and verified as genuine, allowing it to be used to understand, solve, and predict educational problems. This study used a qualitative descriptive research approach. According to Creswell, the qualitative method is a systematic subjective approach to describing and giving meaning to life experiences (Creswell, 2013). Qualitative research is a method for investigating and comprehending the meaning individuals or groups assign to a social human problem (Hammarberg et al., 2016). The research process entails developing questions and procedures, collecting data in a participant setting, analyzing the data inductively, progressing from specifics to general themes, and interpreting the meaning of data. According to the explanation above, the researcher can use this qualitative research to analyze the phonological errors made by students at SMK N 7 Bandar Lampung.

The researcher's study population was carefully chosen and consisted of twelve-grade vocational high school marketing major students from SMK N 7 Bandar Lampung. The rationale behind this selection was their expected proficiency in correct English pronunciation, which they were perceived to have learned about phonetically. This expectation was based on their successful completion of the English oral examination and their future academic and professional prospects.

This study's sample was drawn using purposive sampling. The author used a strategy to focus the study's population. According to Arikunto, Purposive sampling is the process of selecting a

sample based on a specific purpose rather than on level or area (Arikunto, 2009). Purposive sampling occurs when a researcher selects a sample based on the needs of the study (Ary et al., 2009). In this study, the researcher selects some of the twelve-grade students majoring in marketing to ensure data validity. As a result, the researcher is interested in investigating the twelve-grade students majoring in marketing by distributing documentation and conducting interviews. This method was appropriate for this study because the sample would be drawn by justifying students' pronunciation errors. In this study, 13 students will participate as respondents.

The researcher collected data through audio documentation of student pronunciation recordings and interviews. This documentation is a pronunciation task, with 30 words containing the 6 consonants [v], [θ], [ð], [ʒ], [dʒ], and [tʃ] for students to read and pronounce, and their utterances are recorded. The student recordings' results are then transcribed and analyzed.

The researcher's next step should be to analyze the data. The pronunciation test results were submitted after the students pronounced them. According to Ellis, the procedure for error analysis is identifying errors, describing the errors, identifying the errors, and error evaluation (Meunier, 2006).

Findings and Discussion

Researchers identify and describe phonological errors made by students from various words. Kenworthy's phonological error pattern (1987) was used to identify and classify phonological errors made by students after identifying Kenworthy's four phonological errors: sound substitutions, sound deletions, sound insertions, and word links. There was only one used: sound substitution. The following are the findings of the researcher's analysis. Sound substitution is the process of changing a single phoneme in a word to another phoneme to create a new word. In this theory, many students use their pronunciation instead of the original sound.

This study focused on twelve-grade vocational high school marketing majors at SMK N 7 Bandar Lampung. The researcher collected data using student audio recordings and a 30-word list for students to read. After collecting student recordings, the researcher listened to them repeatedly to determine their pronunciation and created a transcript.

[v] pronounced as [f]

More than half of all students made this particular deviation (i.e., replacing [v] with [f]) in each of the three positions of occurrence. The substitution of the sound [v] for [f] may be due to the fact that the Indonesian phonetic system lacks voiced sounds in its labiodental fricatives. As a result, most of them replaced [v] with [f], making it the only pattern of error.

[v] pronounced as [p]

The second error is that more than a few students made this particular deviation (i.e., replacing [v] with [p]) in each of the middle positions where it appears. The reason for placing the sound [v] with [p] could be that many students have difficulty pronouncing [v], so they pronounce it as [p]. Indonesian phonetics lacks a voiced sound in its labiodental fricative. As a result, most of them replace [v] with [p], making it the only error pattern.

[ð] pronounced as [d]

When articulating [ð], the voiced dental fricative [ð] was replaced by [d], a voiced alveolar stop. In this deviation, the students fulfilled one feature of the [ð] sound because [ð] and [d] share the same characteristic, that is, voiced. However, when they articulated [d], the two other essential elements of the [ð] sound deviated. The divergence was apparent due to the two sounds' different places and manners of articulation. To make the sound [ð], place the tongue tip behind the upper front teeth. However, in this case, the students pressed the front of their tongue against their alveolar ridge, resulting in an alveolar rather than a dental sound. Regarding articulation, [ð] should be produced with the almost blocked air stream pushed through the narrow opening, resulting in a 'hissing noise.' However, the students stopped the air stream before abruptly

releasing it, resulting in a very different manner of articulation: stop. The students deviated by replacing [ð] with [d].

[ð] pronounced as [t]

The second deviation in pronunciation of [ð] was the substitution of [ð] with [t], as in 'thou' [tu]. In this deviation, the students completely changed all of the elements of [ð]. For starters, their vocal cords did not vibrate properly. Second, they replaced dental sounds with alveolar sounds. Finally, in terms of articulation, they were more likely to produce a stop than a fricative sound. As a result, they produced a very distinct sound from [ð], namely [t].

[ð] pronounced as [θ]

Another deviation of [ð] occurred when students articulated [θ] for the sound [ð], as in the pronunciation of 'with' [wiθ]. The students produced the dental fricative sound with the slightest alteration of all four deviations of [ð]. In this identifiable deviation, they only deviated from the state of the vocal cords by not vibrating them in producing the [ð] sound, resulting in the occurrence of the nearest sound with the equivalent result, that is, [θ].

[θ] pronounced as [t]

[θ] frequently deviated to [t] in the initial and final positions. Both [θ] and [t] are voiceless sounds, making this possible. When students replaced [θ] with [t], they diverged two essential features of [θ]: they changed the place of articulation from dental to alveolar, and they stopped the air stream for a brief period and then abruptly released it, creating stop instead of fricative. Students made their first deviation by replacing [θ] with [t].

[θ] pronounced as [tʰ]

Students changed the sound of [θ] to [tʰ], causing the deviation. This deviation was similar to one of the deviations of [ð], namely the substitution of [ð] with [tʰ]. Both deviations were similar because the students replaced the required sound, [θ] and [ð], with the allophone [t]. In both cases, the students aspirated the [t] sound they produced. Despite this deviation, the students did not change all features of [θ]. They still produced the correct vocal cord state for the required sound, which was voiceless. However, they continued to deviate in the place and manner of articulation, from dental to alveolar and fricative to stop. Thus, by producing [tʰ], they deviated from [θ].

[θ] pronounced as [d]

The second deviation in the articulation of [θ] was the substitution of [θ] with [d]. The students altered the pronunciation of [θ]. First and foremost, they altered the sound by vibrating the vocal cords when they should not have. They then changed the location of articulation from dental to alveolar. In the end, they produced a stop instead of a fricative. As a result, the students created the subsequent deviation in the pronunciation of [θ] by replacing [θ] with [d].

[tʃ] pronounced as [c]

In this deviation, students replaced the voiceless palatal affricate sound with a voiceless palatal stop sound. It means that by replacing the required sound with [c], they only deviated from one characteristic of [tʃ]. In this deviation, they changed the manner of articulation from affricate (friction) to stop (sudden release of the blocked air stream). As a result, it is clear that by replacing [tʃ] with [c], the students caused a deviation.

[tʃ] pronounced as [ʃ]

The deviation occurred when students replaced [tʃ] with [ʃ]. This deviation shares many similarities with the third deviation (the substitution of [tʃ] for [h]). In both deviations, students deviated from two elements of [tʃ]: the place and manner of articulation. Then, regarding articulation, the two sounds [s] and [h] are classified as fricative. It means that they replaced the affricate sound with the fricative in both deviations. The only difference is that [ʃ] is an alveolar

sound while [h] is a glottal sound. Overall, replacing [tʃ] with [ʃ] resulted in another deviation of [tʃ], as voiced palatal fricative sounds differ from voiceless alveolar fricatives.

[dʒ] pronounced as [j]

The deviation was the substitution of [dʒ] with [j]. In this deviation, students only deviated one element of the sound [dʒ], unlike the first deviation, which involved replacing [dʒ] with [g]. The sounds of [dʒ] and [j] can be considered the same, mainly when observed from the state of the vocal cords and the place of articulation. These two sounds are voiced, meaning the vocal cords' vibration produces them. When the front part of the tongue is raised to the hard palate, the sounds [dʒ] and [j] are produced, indicating that they are palatals. Nonetheless, the manners of articulation distinguish these two sounds. The constriction of sound production distinguishes [dʒ] as an affricate and [j] as a stop, resulting in distinct sounds. The deviation occurred when students replaced the sound [dʒ] with [j].

[dʒ] pronounced as [d]

The subsequent deviation involved replacing [dʒ] with [d]. First, [dʒ] and [d] have the same vocal cord state, i.e., voiced. Second, in this replacement of [dʒ], the place and manner of articulation of the two sounds are different. The palatal sound [dʒ] is produced by raising the front part of the tongue to the hard palate, while the alveolar sound [d] is produced by placing the front part of the tongue on the alveolar ridge. Meanwhile, based on the manner of articulation, [dʒ] is made with friction, which is the characteristic of the affricate sound, and [d] is produced by briefly stopping the air stream, thus known as a stop. As a result of replacing [dʒ] with [d], students made a deviation.

[dʒ] pronounced as [g]

The incorrect pronunciation of [dʒ] involved replacing it with [g]. The students replaced the voiced palatal affricate with the velar stop in this deviation. Essentially, these two sounds have the same vocal cord state: voiced, meaning both sounds are produced by vibrating the vocal cords. However, [dʒ] and [g] have distinct articulation patterns. For example, to produce a palatal sound, the front part of the tongue must be raised to the hard palate, whereas a velar sound is produced by placing the back of the tongue against the velum. Then, in terms of articulation, affricate occurs when the air stream is completely stopped for a brief period. Then, the articulators are slightly released to generate friction. In contrast, stop occurs when the air stream is completely stopped in the oral cavity for a brief period and then abruptly released. Since [dʒ] and [g] are distinct sounds, it's clear that the students made a deviation.

[ʒ] pronounced as [j]

The deviation was the substitution of [ʒ] with [j], which gave the sound of voice. Considering the number of errors in the elements of sound production, this deviation has the slightest error in sound production. The students altered only one feature of [ʒ], namely the manner of articulation. In terms of articulation, they replaced the fricative sound with the stop sound, which means they abruptly released the air stream after completely stopping it, resulting in a 'hissing noise.' Then, when dealing with air movement, they abruptly released the blocked air stream rather than slightly releasing the articulators to create friction. The students produced a voiced palatal stop [j] instead of voiceless palatal affricate [ʒ], resulting in another deviation of [ʒ].

[ʒ] pronounced as [dʒ]

Another deviation in student pronunciation was the replacement of voiced palatal fricative [ʒ] with voiced palatal affricate [dʒ]. This deviation is considered minor because the students only deviated from one feature of [ʒ], the manner of articulation. In this deviation, they stopped the air stream and then slightly released the articulators, causing friction rather than partially blocking the air stream as it passed through the narrow opening. The students created another deviation by producing [dʒ] instead of [ʒ]. This deviation did not occur in the medial position of a word.

[ʒ] pronounced as [ʃ]

The students' deviation was the substitution of [ʒ] with [ʃ]. The general characteristics of the two sounds, [ʒ] and [ʃ], can almost be categorized as similar sounds, but they were two distinct sounds when observed from the state of the vocal cords. [ʒ] is a voiced sound, while [ʃ] is a voiceless sound. As a result, changing [ʒ] to [ʃ] caused a pronunciation deviation among the students. This deviation only occurred in the first and middle positions of a word.

Furthermore, the researcher analyzed the most common phonological errors made by students at SMK N 7 Bandar Lampung. The analysis is based on Kenworthy's phonological error theory, specifically sound replacement and errors in pronouncing consonantal phonetics [v], [θ], [ð], [ʒ], [dʒ], and [tʃ]. Forty-five students made mistakes in the pronunciation of [v], 42 in the pronunciation of [ð], 42 in the pronunciation of [θ], 48 in the pronunciation of [tʃ], 39 in the pronunciation of [dʒ], and 55 in the pronunciation of [ʒ]. The students struggled with the final English consonant [ʒ]. The English phonetic system identifies [ʒ] as a voiced palatal fricative. The absence of the sound [ʒ] in the Indonesian phonetic system presents a challenge for students, despite its conventional description. Most respondents could not identify the sound of [ʒ] when pronouncing certain English borrowing words. Non-native English speakers should notice that their vocal cords vibrate when they produce this sound. They should raise their tongue towards the hard palate. Then, they create the hissing noise by partially stopping the air stream and pushing it through the narrow opening. In that case, this production is extremely difficult for non-native speakers of English to obtain.

The finding of this study is supported by previous studies. Previous researchers stated that intralingual, and developmental factors influence problematic English consonant sounds like /z/, /ʃ/, /ʒ/, /tʃ/, /dʒ/, /v/, /θ/, /ð/, and /r/, suggesting EFL learners are more attentive to these sounds to improve pronunciation (Anjani et al., 2023). Furthermore, one study found that high school students mostly struggled with their pronunciation when uttering consonants that do not exist in the Indonesian language (Sayogie & Adbaka, 2022).

Conclusion

Based on research conducted on class 12 students at SMK N 7 Bandar Lampung and data analysis through interviews with the students after the recordings were made, the researcher concluded that many students still made mistakes in producing the pronunciation sounds of several words that had been given. The results of sample tests administered to these students demonstrate this.

In conclusion, it was discovered that students made phonological errors in all six English consonant sounds pronounced in this study. Furthermore, phonological errors exist in all three occurrence positions. However, it is worth noting that, despite their phonological errors, they can occasionally pronounce a few words correctly. Second, each student made sixteen different types of deviations. The sixteen types of deviations include:

1. Replacing [v] with [f] and [p].
2. Replacing [ð] with [d], [t], and [θ].
3. Replacing [θ] with [t], [d], and [th].
4. Replacing [tʃ] with [c] and [ʃ].
5. Replacing [dʒ] with [j], [d], and [g].
6. Replacing [ʒ] with [j], [ʃ], and [dʒ].

Then, it is clear that certain sounds in English cause many pronunciation difficulties for students, so many students continue to change the sounds of the words they pronounce.

References

- Adam, N. S., Hidayat, A., & Kholid, M. R. (2023). An analysis of pronunciation in word stress towards students of sixth semester of english education at uin raden intan lampung. *Journal of Linguistics and Social Sciences*, 1(2), 59.
<https://doi.org/10.24042/jlss.v1i2.18925>
- Alharbi, S. (2021). The Struggling English Language Learners: Case Studies of English Language Learning Difficulties in EFL Context. *English Language Teaching*, 14, 108.
<https://doi.org/10.5539/elt.v14n11p108>
- Anjani, R., Wahyuni, H., Nugraheni, M., & Bram, B. (2023). Problematic English Consonant Sounds for Indonesian EFL Learners. *Journey: Journal of English Language and Pedagogy*, 6, 592–604. <https://doi.org/10.33503/journey.v6i3.3493>
- Arikunto, S. (2009). *Dasar-Dasar Evaluasi Pendidikan*. Bumi Aksara.
- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. K. (2009). *Introduction to Research in Education*. Cengage Learning. <https://books.google.co.id/books?id=FqF7n0zGJm0C>
- Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE Publications.
- Crystal, D. (1991). *A Dictionary of Linguistics and Phonetics*. David Crystal.
- Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, 31(3), 498–501.
<https://doi.org/10.1093/humrep/dev334>
- Hidayat, A., & Sujarwati, I. (2024). Students' Attitude Toward Open AI ChatGPT in Writing Academic Articles. *English Journal for Teaching and Learning*, 12(1).
<https://doi.org/10.24952/ee.v12i01.10852>
- James, C. (1998). *Errors in Language Learning and Use: Exploring Error Analysis*. Longman.
<https://books.google.co.id/books?id=DLBoAAAAIAAJ>
- Lanteigne, B. (2006). Common, Persistent Errors in English by Brazilian Portuguese Speakers. *TEFL Web Journal*, 4.

- Maiza, M. (2020). An Analysis of Students Pronunciation Errors. *Journal of English Education and Literature*, 1(1).
- Meunier, F. (2006). Rod Ellis and Gary Barkhuizen. *Analysing Learner Language*. Oxford: Oxford University Press. 2005. Viii + 404 pages. ISBN 0-19-431634-3. £22. *International Journal of Lexicography*, 19(1), 110–111. <https://doi.org/10.1093/ijl/eck003>
- Moeliono, A. M., & Dardjowidjojo, S. (2003). *Standar Indonesian Grammar*. Balai Pustaka.
- Pourhosein Gilakjani, A., & Ahmadi, M. (2011). Why is Pronunciation So Difficult to Learn? *English Language Teaching*, 4. <https://doi.org/10.5539/elt.v4n3p74>
- Saville-Troike, M. (2005). *Introducing Second Language Acquisition*. Cambridge University Press. <https://books.google.co.id/books?id=fw1uXo6P9LEC>
- Sayogie, F., & Adbaka, M. (2022). Interlingual Errors in Indonesian EFL learners' Pronunciation: From Minimal Pairs to Speaking Ability. *Elsya : Journal of English Language Studies*, 4, 131–146. <https://doi.org/10.31849/elsya.v4i2.9693>
- Sugiyono. (2014). *Metode Penelitian kuantitatif, kualitatif dan R & D*. Alfabeta.
- Syed, F., & Abdelrady, A. (2021). Pronunciation Problems Encountered by EFL Learners: An Empirical Study. *Arab World English Journal*, 12, 194–212. <https://doi.org/10.24093/awej/vol12no4.14>
- Vernick, J., & Nesgoda, J. (1980). *American English Sounds and Spellings for Beginning ESL Students*. University of Pittsburgh Press.
- Yusriati, Y., & Hasibuan, S. (2019). The Analysis of English Pronunciation Errors by English Education Students of FKIP UMSU. *Journal of English Education and Teaching*, 3, 230–248. <https://doi.org/10.33369/jeet.3.2.230-248>