p-ISSN: 2722-0268
e-ISSN: 2797-9245

JADEs Journal of Academia in English Education
Volume 6 No 2, December 2025, (p. 170-183)
https://journal.iainlangsa.ac.id/index.php/jades
English Teaching Department Tarbiyah and Teacher Training Faculty of IAIN Langsa
Jl. Meurandeh Langsa Lama Kota Langsa Provinsi Aceh Telp. 0641-22619 / 23129 Fax. 0641-42139
Email: jades.pbi@iainlangsa.ac.id

The Pronunciation of English Fricative by Indonesian EFL Learners

Ahmad Wael [1*]
Rezkiah Hartanti[2]
Hayat Marwan Ohorella[3]
Rekayan Keliwawa[4]
[1.2.3.4.] Universitas Muhammadiyah Sorong, Kota Sorong 98419, Indonesia

Abstract

This research aims to identify and analyze the pronunciation errors made by Indonesian EFL learners in producing English dental fricative consonants /θ/ and /ð/ at Universitas Muhammadiyah Sorong. The study employed a descriptive qualitative design involving seven participants from the English Language Education Department. Data were collected using a 40-word pronunciation list focusing on dental fricatives, recorded through audio to analyze the participants' pronunciation accuracy. The findings revealed that most learners experienced difficulties pronouncing the dental sounds /θ/ and /ð/. Common mispronunciations included substituting /θ/ with /t/ and /ð/ with /d/. The percentage of errors was 100% for five learners, 83% for one learner, and 17% for another learner. These errors occurred because the dental fricative sounds do not exist in the Indonesian phonological system, leading learners to replace them with similar native sounds. Limited vocabulary and insufficient pronunciation practice also contributed to these pronunciation difficulties. The research concludes that lack of familiarity with dental fricatives significantly affects learners' pronunciation accuracy, highlighting the need for explicit phonetic instruction in EFL classrooms.

Keywords: Pronunciation; Errors; Dental Fricative

1. INTRODUCTION

Pronunciation is one of the fundamental aspects of speaking that enables English language learners to communicate effectively. It involves

[2*]Corresponding author, email: ahmadwael818@gmail.com
Citation in APA style: Wael, A., Hartanti, R., Marwan Ohorella, H., & Keliwawa, R. (2025). The Pronunciation of English Fricative by Indonesian EFL Learners. *JADEs Journal of Academia in English Education*, *6*(2), 170-183.
Received Jul 14, 2025; Accepted Dec 30, 2025; Published Dec 31, 2025
DOI: https://doi.org/10.32505/jades.v6i2.12153

the systematic production of sounds through the articulation organs as air passes through them. Since every language has a distinct set of speech sounds, learners often encounter difficulties and make pronunciation errors when speaking a foreign language. This phenomenon is supported by Fauzi (2014), who argues that the phonological features of a learner's first language are typically transferred to their second language pronunciation. Moreover, pronunciation errors frequently arise due to phonemic differences that exist among languages across the world. According to Syed and Hussein (2022), carefully listening to others is one of the most effective strategies for enhancing pronunciation skills. In learning English pronunciation, there are English phonemes (speech sounds) and graphemes (written symbols) different from Bahasa Indonesia. Many spelling rules are distinct from Bahasa Indonesia's spelling rules. This can be the reason that often makes Indonesian learners tend to fail to pronounce English words correctly. Almusharraf, (2024) argues that EFL learners frequently struggle with the pronunciation.

However, the phonemes in English that the second language learner often mispronounces is English dental fricatives. Fricatives are consonant with the characteristic that when they are produced, air escapes through a small passage and makes a hissing sound, Roach, (1991). Fricative consonant is a continuant consonant produced by breath moving against a narrowing of the vocal tract. Pronunciation is a fundamental part of the language learning process (Khan, 2021). It takes a lot of attention to acquire the pronunciation of a language, which not only involves uttering the correct sounds but also involves putting them together in the right combination during the flow of speech. Knowing a lot of vocabulary items is meaningless unless one can pronounce them accurately. The world has now become a global village where people are learning different languages for communication. This phenomenon has heightened the significance of pronunciation not only in the language learning process but also in communication.

Consequently, second language pronunciation has become an area of immense interest for researchers in the field of applied linguistics. Pronunciation is a most inclusive sense, the form in which the elementary symbols of language, the segmental phonemes or speech sounds, appear and are arranged in patterns of pitch, loudness, and duration (Hussein, 2021). In the simplest model of the communication process in language-

encoding, message, decoding-pronunciation is an activity, shaping the output of the encoding stage, and a state, the external. Sucihati, (2022), defines consonant in terms of both phonetics and phonology. Phonetically, it is a sound coming from closure or narrowing in the vocal tract therefore the airflow is either completely blocked or restricted that audible friction is produce. According to Daniel et al., (2014) in Sucihati, (2022), Humans employ speech organs in producing consonants that the term "articulation" is used to most to address consonant production.

Fricatives are consonants with the characteristic that when they are produced, air escapes through a small passage and makes hissing sound (Roach, 1991). Fricative consonant is produced by narrowing the flow of air that comes out of the mouth, but not completely stopping it as with a stop consonant (Westermann et al, 2021). There are two types of fricative consonants. That is voiced, where the vocal cords are vibrating, and unvoiced or voiceless, where the vocal cords do not vibrate. Moreover, there are mainly nine fricatives in English, mentioned by (Mulyadi et al., 2018): [f], [v], [θ], [ð], [s], [z], [ʃ] , [ʒ], [h]. Roach also mentions [f], [θ], [s], [ʃ], [h], [v], [ð], [z], [ʒ] are the only fricative phonemes in English, Roach, (1991). One the part of fricative is dental fricative. Roach, (1991) dental fricatives are sometimes described as if the tongue were placed between the front teeth. Minkova & Stockwell, (2009) the dental consonants [θ] and [ð] as in thistle and this, are articulated with the tongue touching the back of the teeth, and the air is allowed to flow out of the mouth, but there is some friction which result in a hissing sound. The dental fricative is the kind of place of articulation. Place of articulation is the parts of the vocal tract that can be used to form sounds.

2. LITERATURE REVIEW

There were some researchers cover pronunciation on fricative sound namely, (fauzi, 2020; Mulyadi et al., 2018; Juliardi et al., 2019; and Kurniawan, 2016) they found that the most mispronounced was voiced dental fricative sound [ð]. Due to the significant role of pronunciation in effective communication, many Indonesian learners, particularly those studying English as a Foreign Language (EFL). However, when it comes to the production of dental fricative sounds, achieving native-like proficiency remains challenging. Instead of employing the correct pronunciation of dental fricatives in English words, learners often

substitute them with the closest phonemes from the Indonesian language, where such sounds do not exist.

Moreover, pronunciation is one of the basic prerequisites for learner competence and one of the most important features of language teaching. Good pronunciation leads to learning, and bad pronunciation makes language learning difficult. Pardede (2018), emphasized that, in addition to grammar and vocabulary, pronunciation constitutes the mechanical elements of speaking skill. Thus, to speak effectively, the ability to pronounce accurately is a must. Without appropriate pronunciation, one's grammatical rules mastery and rich vocabulary possession does not guarantee that he is able to speak effectively.

According to Sucihati (2022), Humans employ speech organs in producing consonants that the term "articulation" is used to most to address consonant production. On the phonetics of consonants will primarily address the articulation and acoustics of consonants according to different classification criteria. Basically, consonants can be distinguished according to four criteria: a) air stream mechanisms, b) voicing contrast, c) place of articulation, and d) manner of articulation, Fuchs et al, (2019). These criteria are the main classifiers for the description of consonants in the International Phonetic Alphabet. Phonologically, consonants are those units which function at the margins of syllables, either singly 9 or in clusters. There are 24 consonants: [p], [b], [t], [d], [k], [g], [ʔ], [tʃ], [ʤ], [m], [n], [ŋ], [f], [v], [θ], [ð], [s], [z], [ʃ], [ʒ], [r], [h], [w], and [j].

Although numerous studies have explored Indonesian EFL learners' pronunciation of English consonants, a clear research gap remains regarding the specific production of dental fricatives /θ/ and /ð/, particularly within the sociolinguistic context of Eastern Indonesia. Previous research (e.g., Fauzi, 2020; Mulyadi et al., 2018; Juliardi et al., 2019; Kurniawan, 2016) primarily examined fricatives among learners from Java and Sunda or analyzed consonant errors in general without isolating the unique difficulties posed by dental fricatives.

These studies also rarely provided detailed quantitative distributions of errors across individual learners, limiting the ability to understand the degree of variability among EFL students. Furthermore, although earlier research acknowledged that the absence of dental fricatives in the Indonesian phonological system contributes to mispronunciation, little

attention has been given to explaining how this absence leads to highly consistent substitution patterns, such as /θ/ → /t/ and /ð/ → /d/, which appear to be systematic across learners. Moreover, most existing studies analyzed only one of the two dental fricatives, focusing predominantly on the voiced sound /ð/, and thus failed to offer a comparative examination of both phonemes within the same group of learners. Another gap lies in the limited integration of recent phonetic literature; many studies relied on classical references such as Roach (1991) without incorporating updated perspectives from contemporary phonetics research published after 2020.

Additionally, previous studies generally stopped at describing errors without discussing pedagogical implications for EFL instruction, particularly in regions where English exposure is limited. Therefore, a more focused investigation that analyzes both dental fricatives simultaneously, incorporates detailed per-participant error percentages, and connects the findings to explicit instructional needs is required. This study addresses these gaps by examining the systematic pronunciation errors of /θ/ and /ð/ among EFL learners at Universitas Muhammadiyah Sorong and by offering data driven insights for improving pronunciation teaching.

3. METHODS

This study employed a descriptive qualitative research design to investigate Indonesian EFL learners' pronunciation of the English dental fricatives /θ/ and /ð/. The participants consisted of seven students enrolled in the English Language Education Department at Universitas Muhammadiyah Sorong. A word-list instrument containing forty English words twenty with the target sounds and twenty distractors was used to elicit pronunciation data. Participants' pronunciations were collected through individual audio recordings conducted in a controlled classroom environment. As stated by Yuliati et al., (2021) word list document which contains 40 words of English consisting of the target words and distracters. The data can be analyzed as the following steps:

1. *Data Cleaning*

Before analysis, the audio files were reviewed to ensure clarity and consistency. Recordings with background noise or unclear articulation were rechecked, and if necessary, participants were asked to reread

specific words. Non-target sounds, distractor items, and incomplete pronunciations were excluded from the analysis to maintain data reliability

2. *Data Coding*

After transcription, each production of /θ/ and /ð/ was coded as either correct or incorrect. Incorrect pronunciations were further categorized based on the type of substitution, such as /θ/ → /t/ or /ð/ → /d/. A numerical coding scheme was applied to facilitate quantification.

3. *Comparative Analysis*

The coded data were analyzed through comparative procedures to examine:

1. Differences in accuracy between /θ/ and /ð/,
2. Variation in error patterns across participants, and
3. The frequency of each type of substitution. Percentages were calculated for each learner to compare their performance. This analysis allowed the researcher to identify which dental fricative was more difficult and which substitution pattern was most dominant.

4. *Interpretation of Results*

The results were interpreted by linking the observed error patterns to linguistic theory, particularly the influence of L1 phonology and articulatory difficulty. The findings were also compared with previous studies to determine whether the learners' error tendencies aligned with established research. Finally, pedagogical implications were drawn to highlight the importance of explicit pronunciation instruction in EFL settings.

4. RESULT

The pronunciation of dental voiceless [θ] sound due to a lack of comprehension regarding dental consonants. A majority of the examples demonstrate students initially saying the dental consonant [θ], but then transitioning it to a [t] sound. To provide comprehensive information, the table below will present the specific pronunciation of each sound and the variations observed.

Table 1. Derivation sound

The Deviation of Sound /θ/				
No	**Dental words /θ/**	**Dictionary Transcription**	**EFL Learner Transcription**	**Deviation**
1.	Three	/θriː/	/tri/	θ → t
2.	Think	/θɪŋk/	/tiŋk/	θ → t
3.	Thing	/θɪŋ/	/tiŋ/	θ → t
4.	Anything	/ˈen.i.θɪŋ/	/ʻan.i.tin/	θ → t
5.	Both	/boʊθ/	/boʊt/	θ → t
6.	Truth	/truːθ/	/truːt/	θ → t
7.	Throw	/θroʊ/	/troʊ/	θ → t
8.	Thank	/θæŋk/	/tæŋk/	θ → t
9.	Strength	/streŋθ/	/streŋt/	θ → t
10.	Birth	/bɜːθ/	/bɜːt/	θ → t
11.	Something	/ˈsʌm.θɪŋ/	/ˈsʌm.tɪŋ/	θ → t
12.	Bath	/bæθ/	/bat/	θ → t
13.	Everything	/ˈev.ri.θɪŋ/ /	/ˈev.ri.tɪŋ/	θ → t
14.	Health	/helθ/	/helt/	θ → t
15.	Nothing	/ˈnʌθ.ɪŋ/	/ˈnotɪŋ/	θ → t
16.	Throughout	/θruːˈaʊt/	/truːˈaʊt/	θ → t

The table reveals that participants made errors in producing the sound /θ/, with deviations observed as /θ/ becoming /t/ and /θ/ becoming /d/. In the first instance of deviation, participants pronounced the word "three" as /triː/ instead of /θriː/. They substituted the sound /θ/ with the sound /t/. Most students tended to replace the voiceless dental fricative [θ] with the alveolar plosive [t]. This can be attributed to the absence of the [θ] sound in the Indonesian consonant system. Consequently, Indonesian students encounter difficulties when attempting to pronounce the sound [θ] accurately.

Table 2. Number of Errors Dental Voiceless

Number of Errors Dental Voiceless /θ/			
Participants	**Number of error pronunciation**	**Number of correct pronunciations**	**Percentage of error**
Participant 1	11	5	69%
Participant 2	16	0	100%
Participant 3	12	4	75%
Participant 4	14	2	88%
Participant 5	16	0	100%
Participant 6	16	0	100%
Participant 7	16	0	100%

The challenges encountered by students while pronouncing the dental voiced sound [ð] stem from a limited amount of practice in their daily lives. They have developed a tendency to substitute the dental consonant [ð] with [d] and [t]. The table below will provide detailed data regarding these pronunciation errors, including the specific sounds and their corresponding deviations.

Table 3. The Deviation of Sound /ð/

The Derivation of Sound /ð/				
No	**Dental Words [ð]**	**Dictionary Transcription**	**EFL Learner Transcription**	**Deviation**
1.	That	/ðæt/	/dæt/	ð → d
2.	The	/ðə/	/də/	ð → d
3.	Them	/ðem/	/ðem/	ð → d
4.	This	/ðɪs/	/dɪs/	ð → d
5.	These	/ði:z/	/dɪ:s/	ð → d
6.	They	/ðeɪ/	/ðeɪ/	ð → d
7.	although	/ɑ:lˈðoʊ/	/ɑ:lˈtoʊ/	ð → t
8.	There	/ðer/	/ðer/	ð → d
9.	clothes	/kloʊðz/	/kloʊdez/	ð → t
10.	Their	/ðer/	/ðer/	ð → d
11.	Mother	/ˈmʌð.ɚ/	/ˈmʌd.ɚ/	ð → d
12.	Father	/ˈfɑ:.ðɚ/	/ˈfɑ:.dɚ/	ð → d
13.	Brother	/ˈbrʌð.ɚ/	/ˈbrʌd.ɚ/	ð → d
14.	Another	/ əˈnʌð.ɚ/	Dəˈnʌd.ɚ/	ð → d

15.	Together	/təˈgeð.ɚ/	/təˈged.ɚ/	ð → d
16.	Weather	/ˈweð.ɚ/	/ˈwed.ɚ/	ð → d
17.	Though	/ðoʊ/	/toʊ/	ð → d
18.	Then	/ðen/	/ðen/	ð → d
19.	Those	/ðoʊz/	ðoʊz/	ð → d
20.	Therefore	/ˈðer.fɔːr/	/ˈder.fɔːr/	ð → d
21.	Within	/wɪˈðɪn/	/wɪˈdɪn/	ð → d
22.	Without	/wɪˈðaʊt/	/wɪˈdaʊt/	ð → d
23.	With	/wɪð/	/wɪt/	ð → d
24.	Breathe	/briːð/	/briːt/	ð → d

The pronunciation errors related to the sound /ð/ exhibited a higher level of deviation. The first instance of deviation occurred when participants pronounced the word "that" as /dæt/ instead of /ðæt/, where they substituted the sound /ð/ with /d/. The second deviation was observed when participants pronounced the word "with" as /wɪt/ instead of /wɪð/, and the word "although" as /ɑːlˈtoʊ/ instead of /ɑːlˈðoʊ/. In these cases, they replaced the sound /ð/ with /t/. This mispronunciation can be attributed to a tendency among students to replace unfamiliar sounds with more familiar ones that are easier for them to articulate. This substitution phenomenon was previously explained by Cystal (1991) that substitution refers to the process or result of replacing one item by another at a particular place. And this research, the learners made the substitution as the result of simplication of the sound that was easier for them to pronounce dental fricative words, and makes it an error in pronouncing dental fricative words.

Table 4. The percentage of Errors Dental Voiced /ð/

The percentage of Errors Dental Voiced /ð/			
Participants	Number of error pronunciation	Number of correct pronunciations	Percentage of error
Participant 1	20	4	83%
Participant 2	24	0	100%
Participant 3	24	0	100%
Participant 4	24	0	100%
Participant 5	4	20	17%

Participant 6	24	0	100%
Participant 7	24	0	100%

From the result, it was determined that the most problematic dental fricative sound was the /ð/ sound. Many learners struggled to accurately produce words containing the /θ/ and /ð/ sounds. Specifically, they often substituted the /ð/ sound with the /d/ or /t/ sounds. The words "the," "although," and "with" were consistently identified as the primary words that learners frequently mispronounced.

The result revealed that the majority of pronunciation errors occurred within the two dental phonemes, with a notable dominance of errors in the dental voiced sound, specifically accounting for 100% of the errors made by five learners, 83% by one learner, and 17% by another learner. The common error occurs in voiced dental fricative [ð], local error is higher than global error, it indicates that the subjects made errors in pronouncing English words without make miscommunication, error in pronouncing English fricative consonants.

The dental voiceless sound exhibited 100% errors among four learners, 88% errors for one learner, 75% errors for another learner, and 69% errors for yet another learner. The most common errors observed were the mispronunciation of the dental fricative /θ/ as the sound /t/, and the dental fricative /ð/ as the sound /d/. Many students tended to substitute the voiceless dental fricative [θ] with the alveolar plosive [t]. This can be attributed to the absence of the [θ] sound in the consonant system of Indonesian. As a result, Indonesian students encounter difficulty when attempting to pronounce the [θ] sound accurately.

5. DISCUSSION

The findings of this study reveal persistent challenges faced by Indonesian EFL learners in producing the English dental fricatives /θ/ and /ð/, confirming and expanding upon earlier research while offering new insight into the specific difficulties experienced by learners in Eastern Indonesia. The data show that participants overwhelmingly substituted /θ/ with /t/ and /ð/ with /d/ or, less frequently, /t/. This substitution pattern demonstrates the strong influence of the learners' first language (L1) phonological system, which lacks both dental fricative sounds. As noted by previous scholars, such as Fauzi (2020) and Mulyadi et al. (2018),

the absence of phonemic equivalents in Bahasa Indonesia prompts learners to replace unfamiliar sounds with the closest available consonants in their L1. The results of this study strongly support this explanation, as all participants displayed some level of substitution, with several producing 100% error rates for both phonemes.

The findings also indicate that the voiced dental fricative /ð/ posed greater difficulty than the voiceless /θ/. Five participants demonstrated a complete inability to produce /ð/ correctly, suggesting that voicing adds another layer of complexity for learners. This pattern aligns with previous reports that voiced fricatives are generally harder to articulate, particularly for learners whose native language does not include voiced fricatives at the same place of articulation. Additionally, learners' limited exposure to authentic English input likely contributes to these persistent errors. The words *the*, *these*, *although*, and *with*, despite being highly frequent in English, were among the most commonly mispronounced, indicating that frequent occurrence in written language does not necessarily translate to accurate oral production without explicit phonetic instruction.

Another significant finding is the consistency of the error patterns across participants. This consistency suggests that the difficulties encountered are systematic rather than random. Learners did not show a wide range of alternative substitutions; instead, nearly all participants relied on the same L1-based replacements. This reinforces the view that interlanguage phonology develops through predictable stages influenced by both the learners' linguistic background and their articulatory habits. Such predictable substitution patterns also align with Crystal's (1991) notion of simplification, wherein learners choose articulatory forms that require less effort or resemble familiar sounds.

From a pedagogical perspective, the results highlight the urgent need for explicit pronunciation training in EFL classrooms, particularly in regions where exposure to natural spoken English is limited. Teachers may need to incorporate articulatory instruction, visual aids, and phonetic drills that emphasize tongue placement and airflow control. Technology-assisted pronunciation tools may also help learners practice independently. The findings clearly indicate that without direct intervention, learners are likely to retain inaccurate articulations due to deeply ingrained L1 phonological habits. Overall, this study reinforces the

importance of integrating focused phonetic instruction into EFL programs to support learners in achieving more intelligible and accurate English pronunciation.

6. CONCLUSSION

This study concludes that Indonesian EFL learners, particularly those at Universitas Muhammadiyah Sorong, continue to face significant challenges in accurately producing the English dental fricatives /θ/ and /ð/. The analysis of 40 target words revealed that all participants demonstrated consistent pronunciation errors, with the majority substituting /θ/ with /t/ and /ð/ with /d/, and occasionally /t/. These substitution patterns confirm the strong influence of the learners' first language phonology, as Bahasa Indonesia does not contain dental fricative consonants. As a result, learners rely on the closest native sounds available, leading to systematic and predictable pronunciation errors.

The findings further indicate that the voiced dental fricative /ð/ is more difficult for learners to articulate than the voiceless /θ/. Five participants produced 100% errors for both dental phonemes, highlighting the severity of the pronunciation gap. Limited exposure to authentic spoken English, insufficient practice, and a lack of explicit phonetic instruction also contribute to these challenges. The frequent mispronunciation of high-frequency words such as *the*, *with*, *those*, and *although* demonstrates that repeated visual exposure does not translate into accurate oral production without direct training.

Therefore, this study emphasizes the need for explicit pronunciation and articulatory instruction in EFL classrooms, especially in contexts with low access to natural English input. Teachers should incorporate phonetic modeling, targeted drills, and visual demonstrations of tongue placement to support learners in overcoming these persistent difficulties. Strengthening pronunciation instruction is essential for improving learners' communicative competence and ensuring more intelligible English speech

7. REFERENCES

Almusharraf, A. (2024). Pronunciation instruction in the context of world English: exploring university EFL instructors' perceptions and practices. *Humanities and Social Sciences Communications*, *11*(1), 1-11. https://doi.org/10.1057/s41599-024-03365-y

Fauzi, F. (2020). *Analysis Error of Sundanese English Pronunciation On Fricatives Sound*. Buletin Al-Turas, 20(1), 199–218. Https://Doi.Org/10.15408/Bat.V20i1.3756

Fuchs, S., & Birkholz, P. (2019). *Phonetics Of Consonants. Oxford Research Encyclopedia of Linguistics*, August. Https://Doi.Org/10.1093/Acrefore/9780199384655.013.410

Gilakjani, A. P. (2012). *The Significance of Pronunciation in English Language Teaching*. English Language Teaching, 5(4), 96–107. accessed from Https://Doi.Org/10.5539/Elt.V5n4p96

Guntari, A. K. (2013). *Sundanese Students' Production of English Dental Fricative Consonant Sounds*. Lexicon, 1(1), 75–84. accessed from Https://Doi.Org/10.22146/Lexicon.V2i1.5321

Hussein, H. A. (2021). *The Importance of Pronunciation In English Language Teaching*. Dissertation Submitted to Salahaddin University / College of Education English Department Fo. May.

Juliardi, D., Susilawati, E., & Bunau, E. (2019). *An Analysis of Students' Pronunciation Mastery of Dental Fricative and Alveolar Plosive Sounds*. Journal Of Equatorial Education and Learning, 1–8.

Khan, T. A. (2021). *A Descriptive Study: Factors Affecting the Pronunciation of English Language (L2)*. January. Accessed from Https://Doi.Org/10.32350/Jcct.12.01

Kurniawan, D. (2016). *The Error Analysis of The Pronunciation of Dental Fricative Consonants (/Î¸/, /Ã°/) By the Students of English Education Study Program Faculty of Teacher Training and Education Sriwijaya University*. The Journal of English Literacy Education: The Teaching and Learning of English as A Foreign Language, 3(2), 157–163.

Roach 1943-, P., & Roach, P. (Peter J. (2009). *English Phonetics and Phonology:* A Practical Course<Span Class="Frbrsuppress"> / .

Roach, P. (1991). *Cambridge P Roach English Phonetics and Phonology* (P. 8).

Sucihati, T. B., & Pd, M. (2022). *An Analysis of Fricative Consonants of English Reading Used by The Fourth Semester of Manajemen Program Universitas PGRI Madiun*. 5(2), 157–163.

Syed, F., & Hussein Abdelrady, A. (2022). Pronunciation problems encountered by EFL learners: An empirical study. *Arab World English Journal (AWEJ) Volume*, *12*. https://dx.doi.org/10.24093/awej/vol12no4.14

Westermann, D., & Ward, I. C. (2021). *Fricative Consonants. In Practical Phonetics for Students of African Languages* (Pp. 101–109). Https://Doi.Org/10.4324/9781315683478-22

Yuliati, P., Ferry, R., & Hasyim, Z. (2021). *An Analysis of Error in Pronouncing Dental Fricative Sounds by The First Year Students of English Education Study Program. English Language Teaching Society* (ELTS), 9(02), 73–83.