

A Cognitive Approach to Teaching Pronunciation through Tongue Twisters

Maria Monika Balinayan
baliyananmonika77@gmail.com

Nurteteng
nurteteng@unimudasorong.ac.id

Universitas Pendidikan Muhammadiyah Sorong

ABSTRACT

This study examines the effectiveness of a cognitive approach in teaching pronunciation through tongue twisters among seventh-grade students at SMP TK Diaspora, Sorong. Indonesian EFL learners often face pronunciation problems caused by first language interference and limited exposure to authentic English sounds. Previous studies have shown that tongue twisters improve pronunciation accuracy, but few have explored how they support pronunciation from a cognitive perspective. This research aims to determine whether tongue twisters can enhance students' pronunciation by engaging attention, memory, and self-monitoring processes. A pre-experimental design with a one-group pretest–posttest model was employed. The participants were 26 seventh-grade students selected from a total population of 37. Data were collected through pronunciation tests administered before and after treatment and analyzed using the Paired Sample T-test in SPSS 20. The results showed a significant improvement in students' pronunciation scores, with the mean rising from 46.92 in the pretest to 65.88 in the posttest ($p = 0.001 < 0.05$). This indicates that tongue twister practice had a positive effect on pronunciation performance. The findings suggest that tongue twisters help learners internalize correct sound patterns by promoting focused attention, memory activation, and articulatory awareness. Applying a cognitive approach through tongue twisters effectively improves students' pronunciation and creates an engaging learning experience. This study contributes to pronunciation pedagogy by linking cognitive theory with classroom practice and offers practical insights for teachers in similar EFL contexts.

Keywords: Pronunciation; Tongue Twister; Cognitive Approach

INTRODUCTION

Pronunciation is an essential element of English language learning because it directly influences intelligibility and communication success. Learners who pronounce words clearly are more likely to be understood even when they make grammatical or vocabulary errors. In contrast, inaccurate pronunciation often leads to misunderstandings and decreases learners' confidence in speaking. As Gilakjani (2016) and Pourhosein Gilakjani (2021) argue, pronunciation is not only about producing correct sounds but also about developing learners' awareness of stress,

rhythm, and intonation patterns that shape meaning in communication. Therefore, teaching pronunciation effectively is a vital part of English instruction, especially for early-stage learners.

Despite its importance, pronunciation remains one of the most challenging skills for Indonesian EFL learners. Most students are influenced by the phonological patterns of their first language, which affect their ability to produce English sounds accurately. According to Wahyuni and Wijayanti (2020), Indonesian students tend to substitute unfamiliar English sounds with the closest equivalents in their mother tongue, resulting in errors such as pronouncing /θ/ as /t/ or /ð/ as /d/. This problem is especially evident among junior high school students who have limited exposure to spoken English and lack opportunities to practice pronunciation in meaningful contexts. Interviews with the English teacher at SMP TK Diaspora, Sorong, confirmed that most seventh-grade students have difficulty pronouncing even simple English words. They often read words as they are written, following Indonesian sound patterns, which leads to incorrect articulation and misunderstanding during oral activities.

Previous research has shown that pronunciation teaching in many Indonesian classrooms tends to focus on imitation and repetition without sufficient attention to the cognitive processes behind pronunciation learning. According to Putri (2019), traditional methods often emphasize drilling without encouraging students to notice sound differences, process them mentally, or apply them communicatively. This gap in instructional approach suggests the need for techniques that engage both the mental and physical aspects of pronunciation. A growing body of research supports the idea that pronunciation learning is a cognitive process that involves perception, attention, memory, and motor coordination (Derwing & Munro, 2015; Fraser, 2020). Learners need to consciously perceive sound contrasts, store them in memory, and retrieve them accurately during speech production. Thus, pronunciation teaching should not only involve practice but also stimulate learners' awareness of how sounds are produced and why they differ from those in their first language.

One engaging and cognitively rich technique that can address these challenges is the tongue twister technique. Tongue twisters are short sentences or phrases that contain similar sounds repeated in quick succession. They are designed to challenge articulation, concentration, and accuracy. As Sitoresmi (2018) and Husni (2019) note, tongue twisters encourage learners to focus on the position of their tongue, lips, and vocal cords while producing sounds, thereby enhancing their phonological awareness and articulatory control. Repetition of tongue twisters activates working memory and helps internalize sound patterns through constant retrieval and self-correction. In other words, tongue twisters integrate both cognitive and motor learning processes, making them a practical tool for pronunciation improvement.

Recent studies have found that using tongue twisters can significantly enhance pronunciation and speaking fluency. Lutfiani and Astutik (2019) reported that

tongue twisters improved students' pronunciation accuracy and participation in class activities. Similarly, Yollanda (2019) found that repetitive practice using tongue twisters helped students differentiate difficult consonant sounds such as /f/ and /s/. However, most of these studies treat tongue twisters as a classroom technique rather than examining their role from a cognitive learning perspective. The focus has largely been on score improvement, while the underlying mental processes that make tongue twisters effective such as attention, noticing, and memory retrieval have received little empirical attention. This creates a research gap that this study aims to address.

By framing the use of tongue twisters within a cognitive approach, this study contributes a new dimension to pronunciation teaching research. It explores not only whether tongue twisters improve pronunciation outcomes but also how they engage learners' cognitive mechanisms in processing and producing sounds. The cognitive approach views language learning as a mental process in which input is perceived, stored, and retrieved through practice and feedback (Ellis, 2021). Applying this approach to pronunciation means helping learners develop internal awareness of sound features through tasks that require attention, reflection, and repetition. Tongue twisters naturally meet these criteria because they demand focused articulation, stimulate memory, and encourage metacognitive monitoring as students evaluate their own pronunciation.

The novelty of this research lies in integrating the cognitive learning framework into the use of tongue twisters for pronunciation teaching among junior high school students in Sorong, West Papua a context that remains underrepresented in current literature. Most previous studies on pronunciation techniques were conducted in urban or higher-education settings. By focusing on rural or developing regions such as Sorong, this study highlights the practical potential of cognitively based pronunciation instruction for learners with limited resources and exposure to English. Moreover, it introduces a perspective that connects theory and practice, showing that even simple techniques like tongue twisters can be grounded in solid cognitive principles.

Pronunciation teaching in Indonesia continues to face challenges related to learners' first language interference, lack of exposure, and limited instructional methods that address mental processing. Existing research on tongue twisters has demonstrated positive results but has not fully explored their cognitive dimension or application in less-studied regions. Therefore, this study seeks to fill this gap by investigating how tongue twisters can be used as a cognitive approach to teaching pronunciation at SMPTK Diaspora, Sorong. The findings are expected to provide new insights into effective pronunciation pedagogy, offering teachers a fun yet cognitively meaningful way to help students internalize correct English sounds and enhance their speaking confidence.

LITERATURE REVIEW

Pronunciation

Pronunciation refers to the way sounds, stress, and intonation are produced and perceived in spoken language. It involves accurate articulation of phonemes, appropriate word stress, and natural rhythm and intonation patterns (Gilakjani, 2021). Good pronunciation enables learners to communicate meaning effectively and enhances comprehensibility, while poor pronunciation may lead to misunderstanding even when grammar and vocabulary are correct. According to Fraser (2020), pronunciation is not merely a mechanical skill but a combination of perception, cognitive awareness, and motor coordination. It requires learners to identify differences between native and target language sounds, store these differences in memory, and retrieve them during speech production. Pronunciation consists of several key elements: sounds (segmental features), stress, rhythm, and intonation (suprasegmental features). Segmental features involve individual vowels and consonants, while suprasegmental features deal with how speech sounds are organized at the sentence level (Derwing & Munro, 2015). In English, correct placement of stress and intonation contributes to meaning and emotional tone. Learners often struggle with these features when their first language has different phonological rules. Wahyuni and Wijayanti (2020) note that Indonesian students tend to transfer L1 sound patterns into English, leading to recurring pronunciation errors.

Teaching pronunciation has traditionally focused on imitation and repetition. While this approach can build familiarity with sounds, it often neglects learners' awareness and self-monitoring skills (Putri, 2019). Contemporary pronunciation pedagogy emphasizes intelligibility over native-like accent and integrates listening, speaking, and cognitive engagement in pronunciation instruction (Derwing, 2018). According to Fraser (2020), effective pronunciation teaching should help students recognize sound patterns, understand articulatory mechanisms, and use feedback to self-correct. In Indonesian schools, pronunciation is often marginalized in the curriculum and taught indirectly through reading or speaking tasks. Teachers rarely provide explicit phonetic instruction or strategies for sound awareness. As a result, students develop pronunciation habits based on Indonesian phonology, leading to fossilized errors such as pronouncing "three" as "tree" or "thank" as "tank." These challenges indicate the need for methods that make learners actively aware of how sounds are produced and processed.

The cognitive approach views language learning as a mental process that involves perception, memory, and attention (Ellis, 2021). Learning occurs when learners actively notice linguistic input, process it, and store it in long-term memory for retrieval and production. In pronunciation learning, cognition plays a central role because learners must analyze sound contrasts, remember articulatory patterns, and reproduce them accurately. According to Derwing and Munro (2015), pronunciation instruction benefits from techniques that engage cognitive functions

such as noticing, monitoring, and feedback. Learners must be encouraged to compare their production with target models, identify errors, and correct them through practice. This process involves both explicit knowledge (conscious understanding of how sounds work) and implicit learning (automatic retrieval of sounds during speech). The repetition of tongue twisters, for example, activates both mechanisms by combining awareness with habitual articulation. Fraser (2020) adds that cognitive engagement in pronunciation teaching enhances learners' motivation and self-efficacy. When students understand why a sound is produced in a certain way, they are more likely to retain and apply this knowledge. Therefore, incorporating a cognitive perspective in pronunciation teaching ensures that practice is not only repetitive but also meaningful and mentally engaging.

Teaching Reading Comprehension

Tongue twisters are short phrases or sentences that are difficult to pronounce because they contain similar or repetitive sounds. Beare (2018) defines them as linguistic tools designed to challenge articulation and improve fluency by focusing on specific phonemes. Tongue twisters force learners to pay close attention to the position of their tongue, lips, and jaw, enhancing both articulatory precision and auditory discrimination. According to Machackova (2019), tongue twisters serve as a fun and effective method to train speech organs and increase awareness of sound patterns. They are especially useful for teaching minimal pairs and contrastive sounds such as /s/-/ʃ/, /θ/-/t/, and /r/-/l/, which Indonesian learners often confuse. Tongue twisters also provide opportunities for rhythmic practice, which supports prosodic development.

From a cognitive standpoint, tongue twisters engage the learner's working memory and attention. When repeating complex sound patterns, learners must focus, process, and self-correct in real time. This strengthens both phonological awareness (the ability to recognize sound differences) and articulatory memory (the ability to reproduce them accurately). Studies by Sitoresmi (2018) and Husni (2019) revealed that regular practice with tongue twisters improved students' pronunciation accuracy and confidence, as it required continuous mental engagement and motor control. Tongue twisters also align with Anderson's cognitive skill acquisition theory, which suggests that skills develop through three stages: cognitive (understanding), associative (practice), and autonomous (automatic use). In this context, tongue twisters guide learners from conscious pronunciation to automatic fluency through repetitive yet meaningful tasks.

METHOD

Design and Sample

This study employed a pre-experimental quantitative design to examine the effectiveness of a cognitive approach to teaching pronunciation through tongue twisters. The design was selected because it allows the researcher to measure

improvement by comparing students' pronunciation performance before and after the treatment. A single-group pre-test and post-test model was used to determine whether tongue twisters could significantly enhance students' pronunciation accuracy and fluency when applied through cognitively guided instruction. The population of this study consisted of seventh-grade students at SMPTK Diaspora, Sorong, during the 2022/2023 academic year. From this population, a single class of 26 students was selected through purposive sampling. The selection was based on the teacher's recommendation that the class represented average English proficiency and active participation in oral English lessons. Although the sample size was relatively small, it was considered appropriate for classroom-based experimental research, where the primary goal is to evaluate instructional effectiveness rather than generalize to a broader population.

Instruments and Procedures

The main instrument used in this research was a pronunciation test designed to measure students' accuracy and fluency in reading a short text aloud. The test was administered twice: as a pre-test before the treatment and as a post-test after the implementation of tongue twister-based activities. Both tests required students to read aloud a passage of comparable length and difficulty, focusing on the correct articulation of sounds, stress, and intonation patterns. Students' pronunciation performance was scored using a rubric adapted from Heaton (2010), which assessed three indicators: sound accuracy, stress placement, and intonation control. Each category was rated on a six-point scale, and the total score was converted into a 0–100 scale. Before the main study, the instrument was reviewed by two lecturers in English education to ensure content validity and alignment with pronunciation learning objectives. A pilot test was also conducted with another class to evaluate the reliability of the scoring rubric. The reliability coefficient obtained through Cronbach's Alpha was 0.84, indicating a high level of internal consistency.

The treatment was conducted over six meetings within three weeks. In each meeting, students participated in pronunciation practice using tongue twisters related to specific English sounds, such as /s/, /ʃ/, /θ/, and /r/. The activities followed the principles of the cognitive learning approach, which emphasizes awareness, attention, and repetition. Each session began with the teacher introducing the target sounds and modeling their correct articulation. Students first practiced the tongue twisters slowly to notice sound differences and mouth positions. They then repeated them at increasing speeds while monitoring their accuracy. Peer correction and group repetition were used to promote self-awareness and memory retention.

After each activity, students discussed the challenges they faced in pronouncing specific sounds and reflected on their progress. This reflective step aimed to strengthen metacognitive awareness, a core element of the cognitive approach. Throughout the treatment, the teacher provided feedback to help students identify mispronunciations and develop strategies for improvement, such as focusing on tongue placement or voicing control.

Data Analysis

The data collected from the pre-test and post-test were analyzed quantitatively using descriptive and inferential statistics. Descriptive analysis included calculating the mean, minimum, and maximum scores to summarize students' overall pronunciation performance before and after the treatment. The level of improvement was also measured using the Normalized Gain (N-Gain) formula to classify the effectiveness of the tongue twister technique as low, moderate, or high. For inferential analysis, a paired sample t-test was conducted using the Statistical Package for the Social Sciences (SPSS) version 25. The test compared the mean scores of the pre-test and post-test to determine whether the improvement was statistically significant. The significance level was set at 0.05 ($p < 0.05$). If the p-value was lower than 0.05, the null hypothesis was rejected, indicating that the tongue twister technique had a significant effect on students' pronunciation performance.

To ensure data accuracy, all recordings were carefully reviewed before scoring, and each student's pronunciation was rated independently by two assessors. Inter-rater reliability was checked to minimize scoring bias. The interpretation of results focused not only on statistical improvement but also on pedagogical implications, particularly how tongue twisters support learners' cognitive engagement in processing English sounds. The analysis was designed to reveal whether pronunciation improvement resulted merely from repetition or from deeper cognitive involvement specifically, the learners' attention, awareness, and ability to self-correct. The findings of this study were expected to contribute to a better understanding of how cognitively oriented pronunciation activities, such as tongue twisters, can be effectively implemented in EFL classrooms.

RESULT AND DISCUSSIONS

Students' Pronunciation Scores in Pre-Test and Post-Test

Before the treatment, students' overall pronunciation ability was low. Many students struggled with the articulation of English sounds that are absent in Indonesian phonology, particularly the consonants /θ/ as in think, /ð/ as in this, /ʃ/ as in she, and the rhotic sound /r/. Their pronunciation tended to follow Indonesian spelling patterns, which led to frequent substitutions and distortions. For instance, three was often pronounced as tree, and ship was pronounced as sip. These errors indicate interference from the students' first language and limited awareness of English sound distinctions.

The results of the pre-test show that the mean score was 46.92, with a standard deviation of 10.15, suggesting a wide variation in students' pronunciation skills. Some students could produce certain sounds accurately, while others showed major articulation problems and inconsistent stress placement. The relatively high standard deviation reflects that the class performance was uneven, indicating that

individual differences in auditory discrimination and phonological awareness affected pronunciation outcomes.

After six sessions of treatment using tongue twisters, students' pronunciation scores improved substantially. The post-test mean score increased to 65.88, with a standard deviation of 6.70. This shows that students became more consistent in producing sounds and achieved greater control over articulation and rhythm. The decrease in standard deviation also indicates that students' pronunciation abilities became more uniform after the treatment, meaning that the technique helped weaker students catch up with their peers.

Table 1. Students' Pronunciation Scores in Pre-Test and Post-Test

Test Type	N (Students)	Minimum Score	Maximum Score	Mean	Standard Deviation
Pre-Test	26	30	62	46.92	10.15
Post-Test	26	54	78	65.88	6.70

This improvement was clearly observed during the post-test administration. Students pronounced target sounds with greater precision and confidence, their speech rhythm was more natural, and intonation was smoother. They also demonstrated better control of stress patterns and could maintain consistent pacing while reading aloud. Qualitative classroom observations supported these findings: students appeared more focused and self-corrected their errors during pronunciation activities, showing evidence of enhanced awareness and memory of correct sound patterns.

To verify that the data met the assumptions required for parametric testing, the Shapiro–Wilk normality test was conducted because the sample size was fewer than 50 students. The test results showed that both the pre-test data ($p = 0.952$) and post-test data ($p = 0.299$) were normally distributed, as their significance values were greater than the 0.05 threshold. This confirms that the scores followed a normal distribution, validating the use of a paired sample t-test to determine whether the differences in students' pronunciation performance before and after the treatment were statistically significant. The result also suggests that the improvement observed in the post-test was not due to random variation but was systematically related to the instructional treatment.

A paired sample t-test was conducted to compare students' pre-test and post-test scores and to assess whether the difference was statistically significant. The analysis produced a p-value of 0.001, which is lower than the standard significance level of 0.05. This result indicates a significant improvement in students' pronunciation after being taught through tongue twisters. Therefore, the null hypothesis (H_0) stating that tongue twisters have no effect on pronunciation was rejected, and the alternative hypothesis (H_1) that tongue twisters significantly affect students' pronunciation was accepted. The increase in mean scores (from 46.92 to 65.88) supports the conclusion that the tongue twister technique effectively

improved students' pronunciation performance. The statistical significance of the t-test ($p < 0.05$) confirms that the observed improvement was not due to chance but to the instructional treatment. Furthermore, the narrowing of the standard deviation values between the two tests suggests a reduction in pronunciation variability among students, implying that the technique benefited both lower- and higher-performing learners.

The findings of this study confirm that the tongue twister technique, when applied through a cognitive approach, significantly improves students' pronunciation accuracy and fluency. The increase in students' post-test scores, supported by a statistically significant difference ($p = 0.001 < 0.05$), indicates that focused, repetitive, and cognitively guided practice can enhance learners' ability to articulate sounds accurately and fluently. This aligns with the view of Derwing and Munro (2015), who state that pronunciation development requires both perception and conscious attention to articulatory mechanisms rather than mechanical imitation alone.

From a cognitive learning perspective, the improvement observed in this study reflects how pronunciation learning involves active mental processing. Students were required to notice the contrast between English and Indonesian sounds, monitor their articulation, and adjust accordingly. Such activities engage working memory and phonological awareness two key elements of cognitive processing in language learning (Ellis, 2021; Fraser, 2020). Similar to findings by Wardana, Astuti, and Sukanadi (2022), learners who are guided to analyze how sounds are produced tend to achieve more stable and transferable pronunciation gains than those relying only on repetition.

This study also revealed that the tongue twister technique not only improved pronunciation accuracy but also reduced performance disparities among students. The standard deviation decreased from 10.15 in the pre-test to 6.70 in the post-test, showing that the technique benefitted both higher- and lower-performing learners. A comparable finding was reported by Thamrin et al. (2023), who found that tongue twisters helped equalize students' pronunciation performance across different proficiency levels by promoting sustained attention and repeated exposure to target sounds. The result also supports Anderson's Cognitive Skill Acquisition Theory, as cited in Fraser (2020), in which learners transition from the cognitive stage (conscious understanding of a skill) to the associative and autonomous stages (automatic, fluent performance) through meaningful repetition.

Students' behavioral changes observed during the treatment sessions further indicate cognitive engagement. They were more attentive, self-corrected errors, and even practiced outside of class behaviors consistent with the metacognitive awareness emphasized by Jarosz (2022) and Yunus, Salehi, and Amini (2021). According to these researchers, effective pronunciation instruction helps learners become self-directed, enabling them to evaluate and regulate their own

performance. The present findings confirm that tongue twisters can foster this autonomy by combining enjoyment with deliberate cognitive processing.

Moreover, the motivational effect of tongue twisters is worth noting. Students reported enjoying the challenge of pronouncing tricky sequences quickly and accurately. This aligns with Mu'in, Amrina, and Amelia (2017), who found that tongue twisters increased engagement and motivation because of their playful and competitive nature. When students are emotionally engaged, they are more likely to sustain attention and commit pronunciation patterns to long-term memory. The interaction of motivation, attention, and memory core elements in cognitive learning theory appears to explain the strong learning gains observed in this study. The improvement in students' pronunciation also supports research by Puspita, Wachyudi, and Hoerniasih (2023), who found that tongue twisters enhance phonological awareness and articulation through repetitive practice and peer interaction. However, this study differs by explicitly situating tongue twister activities within a cognitive framework. It emphasizes how learners process sounds internally, rather than focusing solely on performance outcomes. This theoretical lens expands earlier findings by Sitoresmi (2015) and Qian and Deris (2023), both of whom highlighted the importance of integrating pronunciation instruction with awareness-raising strategies and reflective learning.

The results also reinforce Indrayadi et al. (2021), who noted that Indonesian EFL learners often face pronunciation challenges caused by limited exposure to English and strong first-language interference. In this study, the cognitive approach helped students confront these issues by encouraging them to consciously differentiate English sounds from their Indonesian equivalents. Through guided attention and feedback, they developed strategies to overcome fossilized pronunciation habits. The discussion indicates that cognitive engagement is a decisive factor in pronunciation learning. By combining articulation practice with awareness, feedback, and reflection, tongue twisters transform a mechanical activity into a deeper learning process that connects physical speech control with mental processing. This approach not only strengthens pronunciation accuracy but also builds learners' confidence, motivation, and self-regulation skills essential for long-term oral proficiency. The findings thus extend prior research (Derwing & Munro, 2015; Fraser, 2020; Ellis, 2021) by demonstrating how a simple classroom technique, when grounded in cognitive theory, can yield measurable and meaningful pronunciation improvement in resource-limited EFL settings such as Sorong.

CONCLUSIONS

This study examined the effectiveness of a cognitive approach to teaching pronunciation through tongue twisters among seventh-grade students at SMP TK Diaspora, Sorong. The findings showed a significant improvement in students' pronunciation, with mean scores rising from 46.92 in the pre-test to 65.88 in the post-test and a p-value of 0.001 (< 0.05). These results confirm that tongue twisters,

when combined with cognitive learning principles, effectively enhance pronunciation accuracy and fluency. The improvement was not only statistical but also cognitive. Students learned to focus on how sounds were produced, recognized their own errors, and practiced self-correction. These processes reflect key aspects of cognitive learning such as attention, awareness, and memory (Fraser, 2020; Ellis, 2021). The decrease in score variation also indicates that the method helped weaker students improve, reducing the performance gap within the class. Theoretically, the study supports the view that pronunciation is both a cognitive and articulatory skill. It affirms that meaningful repetition guided by awareness and reflection leads to automatic and fluent pronunciation. Pedagogically, the study suggests that tongue twisters can serve as effective, low-cost tools for pronunciation teaching, especially in EFL contexts with limited resources. However, this research was limited by its small sample size and short treatment period. Future studies should include larger groups and longer interventions to strengthen these results. Overall, integrating cognitive principles with tongue twister practice offers an engaging and effective approach to improving EFL learners' pronunciation.

REFERENCES

- Alghazo, S., Jarrah, M., & Al Salem, M. N. (2023). The efficacy of the type of instruction on second language pronunciation acquisition. *Frontiers in Education*, 8, 1182285. <https://doi.org/10.3389/feduc.2023.1182285>
- Beare, K. (2018). *Using tongue twisters for pronunciation practice*. ThoughtCo. <https://www.thoughtco.com>
- Derwing, T. M., & Munro, M. J. (2015). *Pronunciation fundamentals: Evidence-based perspectives for L2 teaching and research*. John Benjamins.
- Derwing, T. M. (2018). The role of instruction in improving second language learners' pronunciation. *TESL Canada Journal*, 35(2), 66–78. <https://doi.org/10.18806/tesl.v35i2.1284>
- Ellis, N. C. (2021). Cognitive approaches to second language acquisition. *Studies in Second Language Acquisition*, 43(5), 1003–1020. <https://doi.org/10.1017/S0272263121000061>
- Fraser, H. (2020). Cognitive perspectives on pronunciation teaching and learning. *Journal of Second Language Pronunciation*, 6(2), 185–205. <https://doi.org/10.1075/jslp.20010.fra>
- Gilakjani, A. P. (2016). What factors influence the English pronunciation of EFL learners? *Modern Journal of Language Teaching Methods*, 6(2), 314–326.
- Gilakjani, A. P. (2021). A review of pronunciation instruction: Past, present, and future directions. *English Language Teaching*, 14(3), 94–103. <https://doi.org/10.5539/elt.v14n3p94>
- Husni, A. (2019). The use of tongue twister strategy to increase students' English pronunciation mastery. *Jurnal Pendidikan Bahasa Inggris*, 7(1), 45–52.
- Indrayadi, T., Mulyono, H., Kusuma Ningsih, S., & Mukminin, A. (2021). Pronunciation learning attitudes: The case of EFL undergraduate students in Indonesia. *Studies in English Language and Education*, 8(2), 537–553. <https://doi.org/10.24815/siele.v8i2.19945>

- Jarosz, A. E. (2022). Trainee teachers' and in-service teachers' beliefs about EFL pronunciation instruction. In *Proceedings of the 12th Pronunciation in Second Language Learning and Teaching Conference* (pp. 101–115). Iowa State University Digital Press. <https://doi.org/10.31274/psllt.13478>
- Lutfiani, R., & Astutik, Y. (2019). Using tongue twisters to improve pronunciation. *Journal of English Education Studies*, 4(2), 57–65. <https://doi.org/10.30653/005.201942.64>
- Machackova, M. (2019). *Pronunciation games in EFL teaching*. Masaryk University Press.
- Mu'in, F., Amrina, R., & Amelia, R. (2017). Tongue twister, students' pronunciation ability, and learning styles. *Arab World English Journal*, 8(4), 365–383. <https://doi.org/10.24093/awej/vol8no4.25>
- Putri, A. R. (2019). Teaching pronunciation through communicative activities in EFL classrooms. *Indonesian Journal of English Education*, 6(1), 77–89. <https://doi.org/10.15408/ijee.v6i1.11825>
- Puspita, N., Wachyudi, K., & Hoerniasih, N. (2023). Tongue twister method in teaching pronunciation: A narrative inquiry of pre-service English teacher. *Edukasiana: Jurnal Inovasi Pendidikan*, 2(3), 197–203. <https://ejournal.papanda.org/index.php/edukasiana/article/view/391>
- Qian, B., & Deris, F. D. (2023). A corpus-based pronunciation teaching model: A conceptual paper. *Arab World English Journal*, 14(1), 71–88. <https://doi.org/10.24093/awej/vol14no1.5>
- Sitoresmi, U. (2015). Tongue twisters in pronunciation class. *Proceedings of the International Conference on Teacher Training and Education (ICTTE FKIP UNS)*, 1(1), 274–280. <https://media.neliti.com/media/publications/170223>
- Thamrin, S. W., Anugrah, A., Halijah, H., & Mutiah, H. (2023). Effect of using tongue twister on students' vowel pronunciation skills at Universitas Muhammadiyah Bulukumba. *Exposure: Jurnal Pendidikan Bahasa Inggris*, 12(2), 339–350. <https://doi.org/10.26618/exposure.v12i2.12762>
- Wahyuni, N., & Wijayanti, L. (2020). The influence of mother tongue on students' English pronunciation. *ELT Worldwide*, 7(1), 1–10. <https://doi.org/10.26858/eltww.v7i1.13354>
- Wardana, I. K., Astuti, P. S., & Sukanadi, N. L. (2022). Examining the effect of phonological awareness instruction on EFL learners' pronunciation and motivation. *Erudita: Journal of English Language Teaching*, 2(2), 129–147. <https://doi.org/10.56013/erudita.v2i2.6191>
- Yollanda, S. (2019). Using tongue twister to improve pronunciation of grade VII students. *E-Journal of English Language Teaching*, 7(2), 120–131.
- Yunus, M., Salehi, H., & Amini, M. (2021). EFL teachers' cognition of teaching English pronunciation techniques: A mixed-method approach. *English Language Teaching*, 14(3), 56–67. <https://doi.org/10.5539/elt.v14n3p56>