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# The Effectiveness of Applying Shadowing Technique to Improve Speaking Skills of Non-English-Majored Freshmen at Dong Nai Technology University

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**ABSTRACT**

This study investigates the effectiveness of the shadowing technique in enhancing the speaking skills of non-English-majored freshmen at Dong Nai Technology University (DNTU). As English speaking proficiency plays a vital role in academic and professional contexts, particularly for Vietnamese students in an increasingly globalized world, finding effective methods to develop oral communication skills is crucial. Shadowing, which involves listening to and simultaneously repeating spoken language, has gained attention for its potential in improving pronunciation, fluency, and listening comprehension. Using a quantitative research design, this study assessed the speaking performance of 60 freshmen before and after an eight-week shadowing intervention. Data were collected using speaking tests and analyzed in terms of mean scores, standard deviation, and t-tests. The findings revealed significant improvements in fluency, pronunciation, and overall speaking ability post-intervention. The study highlights the shadowing technique as an effective pedagogical tool for language instructors in EFL contexts, especially for students with limited exposure to English. The research contributes to the field of language education by supporting the integration of shadowing into speaking curricula to foster autonomous and effective learning.

**Keywords:** Shadowing technique, speaking skills, non-English-majored students, Vietnamese EFL learners, language education

## Introduction

English has solidified its status as a global lingua franca, playing a pivotal role in international communication, business, academia, and technology (Crystal, 2012; Seidlhofer, 2011). In Vietnam, English has become increasingly essential for both academic success and career advancement, especially as the nation integrates more deeply into the global economy (Nguyen, 2023). The Vietnamese Ministry of Education and Training (MOET) has made considerable efforts to improve English language education through initiatives such as the National Foreign Languages Project 2020, which emphasized communicative competence over grammatical knowledge (MOET, 2020). Despite these reforms, a significant proportion of university students, particularly those not majoring in English, still exhibit low proficiency in speaking skills (Nguyen & Nguyen, 2021; Le & Tran, 2022). This issue is particularly evident

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among freshmen at institutions like Dong Nai Technology University, where students often face barriers such as limited exposure to English-speaking environments, insufficient classroom interaction, a lack of confidence, and persistent language anxiety (Phan, 2022). These challenges hinder their ability to engage in spontaneous and effective spoken communication, thereby affecting both academic engagement and future employability.

In light of these challenges, there is an urgent need for pedagogical interventions that are both effective and accessible. One promising method that has garnered increasing attention in the field of English as a Foreign Language (EFL) instruction is the shadowing technique. Shadowing is defined as a practice wherein learners listen to a native speaker and immediately repeat what they hear, mimicking pronunciation, intonation, and rhythm (Murphey, 2001). Research suggests that shadowing aids in the development of prosodic features, supports phonological memory, and enhances real-time speech processing, thereby facilitating more natural and fluent spoken production (Tamura, 2006; Hamada, 2016). Moreover, shadowing is a flexible and autonomous learning strategy that can be implemented outside the classroom, which is particularly advantageous for learners with limited access to interactive speaking opportunities (Hsieh, Dong, & Wang, 2013). Recent studies have further affirmed the effectiveness of shadowing in EFL contexts, indicating improvements not only in fluency and pronunciation but also in overall speaking confidence and comprehension (Aziz, 2022; Lee & Lin, 2023).

However, the application of the shadowing technique remains relatively underexplored within the Vietnamese EFL context, particularly among university students who are not specializing in English. While some studies have investigated its use for enhancing listening skills (Nguyen & Pham, 2020), few have rigorously examined its impact on productive language skills such as speaking. This gap in the literature calls for targeted empirical research to evaluate how shadowing can be integrated into EFL instruction to address specific learner needs. Therefore, this study aims to investigate the effectiveness of applying the shadowing technique to improve speaking proficiency—specifically pronunciation and fluency—among non-English-majored freshmen at DNTU. Employing a quantitative research design, this study seeks to provide data-driven insights that can inform curriculum development and instructional strategies in Vietnamese higher education institutions.

## Research Questions

1. To what extent does the application of the shadowing technique improve the overall speaking proficiency of non-English-majored freshmen at Dong Nai Technology University?
2. How does the shadowing technique specifically affect students' pronunciation and fluency in speaking English?

## Literature Review

The shadowing technique is underpinned by both cognitive and sociocultural theories of second language acquisition, which together provide a comprehensive understanding of its mechanisms and benefits. From a cognitive standpoint, shadowing supports the process of automatization, wherein learners develop the capacity to perform language tasks with reduced conscious effort through repeated practice (Schmidt, 2001; DeKeyser, 2017). This process is essential in language learning, as automatization enables real-time communication and fluency by shifting knowledge from declarative to procedural memory. Through immediate imitation of auditory input, shadowing strengthens phonological loop functions within working memory, which aids in the storage and retrieval of linguistic forms (Baddeley, 2003). This, in turn, accelerates learners' acquisition of prosodic features and fosters faster speech processing.

In parallel, Vygotsky's (1978) sociocultural theory provides a complementary lens through which to understand shadowing as a mediational tool that scaffolds linguistic development. Although shadowing is

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primarily an individual practice, it simulates interaction by exposing learners to authentic speech input, enabling them to internalize both linguistic and paralinguistic elements. The repeated reproduction of utterances promotes the gradual internalization of language structures, echoing the concept of the Zone of Proximal Development (ZPD), where learners progress with the help of more capable models—in this case, native speakers in audio input. As argued by Lantolf and Thorne (2006), tools such as shadowing bridge social and cognitive domains in language learning by facilitating verbalization and internal dialogue.

Initially introduced in interpreter training programs, shadowing has evolved into a pedagogical technique in EFL and ESL settings to enhance listening and speaking skills (Murphey, 2001; Hamada, 2016). The fundamental principle of shadowing—immediate repetition of spoken input—engages learners in intensive listening while simultaneously practicing speech production, thus serving as both a receptive and productive skill enhancer (Shiki et al., 2010). It trains learners to focus on phonetic features such as stress, intonation, and rhythm, all of which are essential for natural and intelligible speech (Tamura, 2006).

Tamura (2006) observed that EFL students who regularly practiced shadowing demonstrated improved auditory discrimination, phonemic awareness, and oral accuracy. The technique's effectiveness lies in its ability to cultivate attention to micro-level speech features while encouraging macro-level fluency development. Similarly, Hamada (2011) conducted a longitudinal study with Japanese university students, revealing that shadowing participants achieved significantly higher gains in listening comprehension and oral fluency compared to control groups. These improvements were attributed to the repetitive and multimodal nature of shadowing, which aligns auditory input with articulatory output in real-time.

Further studies (e.g., Foote & Trofimovich, 2018) have emphasized the importance of prosodic development in comprehensible speech. Shadowing provides learners with consistent exposure to native-like speech patterns, allowing them to acquire suprasegmental features such as pitch movement and rhythm. This prosodic awareness contributes directly to intelligibility and is critical in reducing foreign-accentedness, a key concern among EFL learners.

Numerous empirical studies have explored the correlation between shadowing practice and speaking skill enhancement, with particular focus on fluency, pronunciation, and confidence. Hirata (2004) examined American learners of Japanese and reported that those engaged in shadowing training significantly improved their pitch accent accuracy and prosodic fluency. These findings underscore the technique's utility beyond mere repetition, highlighting its role in fostering authentic speech production.

Hsieh, Dong, and Wang (2013) implemented a structured shadowing intervention among Taiwanese college students and reported measurable gains in speech rate, reduced pause frequency, and improved intonation. The participants also expressed increased self-confidence and lower speaking anxiety, indicating the psychological benefits of shadowing in EFL contexts. Similarly, Lee and Lin (2023) found that shadowing-based instruction significantly enhanced fluency and reduced learners' dependence on scripted speech during presentations.

More recently, Aziz (2022) conducted a quasi-experimental study among Indonesian university students and found that those in the experimental group who practiced shadowing over six weeks showed significant improvements in both pronunciation and spontaneous speech production. These outcomes were supported by oral proficiency interviews and acoustic analyses, demonstrating the multidimensional impact of shadowing on speaking performance.

While shadowing has been extensively studied in East Asian EFL contexts, its integration into Vietnamese English language education remains limited. Nguyen and Pham (2020) investigated the effects of shadowing on listening skills among high school students and noted secondary gains in speaking ability. However, their study did not explicitly assess fluency or pronunciation improvements, leaving room for further exploration. Tran (2021) implemented shadowing in a blended learning model at a Vietnamese university and observed that students exhibited better cohesion in speech and were more willing to engage

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in classroom discussions. The study emphasized that shadowing promoted spontaneous output rather than reliance on memorized chunks, which is often a barrier to authentic communication in Vietnamese classrooms.

Despite these encouraging findings, a significant gap persists in applying shadowing systematically to non-English-majored university students—who often receive limited English instruction and have fewer opportunities for oral practice. These students frequently struggle with basic pronunciation and fluency issues due to a lack of speaking confidence and real-world practice (Phan, 2022). Shadowing, with its low-resource, self-access potential, could serve as a valuable tool to bridge this gap.

Given Vietnam's national emphasis on communicative English competence, as outlined in the MOET (2020) reform framework, integrating evidence-based techniques such as shadowing into mainstream tertiary curricula could offer practical solutions for elevating speaking proficiency. However, empirical studies that specifically assess shadowing's effectiveness on key subcomponents of speaking—especially among underrepresented student groups like non-English majors—are still scarce. This research aims to address that gap by quantitatively evaluating how shadowing affects pronunciation and fluency in Vietnamese EFL learners at DNTU.

## Research Methodology

This study adopted a quantitative research design utilizing a quasi-experimental approach to examine the effectiveness of the shadowing technique in enhancing English-speaking skills among non-English-majored freshmen at NTU. Quantitative methods were deemed appropriate for this study due to their ability to objectively measure language performance and assess statistically significant differences between groups (Creswell & Creswell, 2018). A total of 60 participants were selected using convenience sampling, a common non-probability method suitable for educational settings where access to randomized samples may be limited (Etikan, Musa, & Alkassim, 2016). Participants were first-year students enrolled in general English courses and were randomly assigned into two groups: an experimental group (n = 30) and a control group (n = 30).

The experimental group received instruction incorporating the shadowing technique over a period of eight weeks, while the control group continued with traditional speaking instruction based on the standard communicative approach without the use of shadowing. Both groups participated in pre- and post-tests designed to measure speaking proficiency using a standardized rubric adapted from the IELTS speaking band descriptors, focusing on three core criteria: fluency, pronunciation, and overall communicative ability (British Council, 2020). These components were chosen due to their relevance in evaluating spontaneous spoken production in EFL learners.

Data were analyzed using IBM SPSS Statistics (Version 26). Descriptive statistics, including means and standard deviations, were calculated to compare the performance of the two groups. A paired-sample t-test was then conducted to determine whether the differences between pre- and post-test scores were statistically significant within each group. The significance level was set at $p < .05$, aligning with standard research practices in applied linguistics (Mackey & Gass, 2016). This methodology enabled the researchers to draw valid conclusions regarding the impact of shadowing on students' speaking skills in a controlled educational context.

## Findings and Discussion

*Findings and Discussion for Research Question 1*

*Research Question 1: To what extent does the application of the shadowing technique improve the overall speaking proficiency of non-English-majored freshmen at Dong Nai Technology University?*

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This section presents the quantitative findings of the study by comparing pre-test and post-test results of the experimental and control groups. Three main tables are used to demonstrate statistical changes in overall speaking proficiency, including mean scores, standard deviations, and results of a paired sample t-test.

**Table 1: Pre-test Speaking Proficiency Scores of Experimental and Control Groups**

| Group | N | Mean Score | Standard Deviation (SD) |
|---|---|---|---|
| Experimental | 30 | 5.87 | 1.12 |
| Control | 30 | 6.02 | 1.15 |

The initial pre-test scores reveal that both the experimental and control groups began the study with relatively similar levels of speaking proficiency, as evidenced by the mean scores of 5.87 for the experimental group and 6.02 for the control group. The proximity of these mean values indicates that participants across both groups had comparable baseline oral communication skills prior to the intervention. Furthermore, the standard deviations (1.12 for the experimental group and 1.15 for the control group) suggest a consistent distribution of scores within each group, thereby minimizing concerns regarding data skewness or extreme variability. This degree of homogeneity at the outset supports the internal validity of the quasi-experimental research design, ensuring that any subsequent improvements observed in post-test results are unlikely to be caused by pre-existing differences in speaking ability (Creswell & Creswell, 2018).

In quasi-experimental studies, establishing equivalence between groups at baseline is essential for making causal inferences, especially in the absence of random assignment (Shadish, Cook, & Campbell, 2002). The near parity in the pre-test data serves this function and reinforces the attribution of post-intervention changes to the treatment itself—in this case, the use of the shadowing technique. As noted by Mackey and Gass (2016), when both treatment and control groups demonstrate comparable starting points, improvements in the treatment group can more confidently be interpreted as the result of the applied intervention. Therefore, the similarity in initial speaking proficiency between groups in this study strengthens the credibility of the findings, particularly the conclusion that the shadowing technique contributed to measurable improvements in speaking performance.

**Table 2: Post-test Speaking Proficiency Scores of Experimental and Control Groups**

| Group | N | Mean Score | Standard Deviation (SD) |
|---|---|---|---|
| Experimental | 30 | 7.83 | 0.96 |
| Control | 30 | 6.42 | 1.10 |

Following the eight-week intervention period, the experimental group that engaged in regular shadowing practice exhibited a substantial improvement in overall speaking proficiency, as reflected by an increase in their mean post-test score from 5.87 to 7.83. This gain represents a significant enhancement in spoken English performance across core domains such as fluency, pronunciation, and communicative coherence. In contrast, the control group, which received traditional speaking instruction without the integration of shadowing techniques, demonstrated only a marginal improvement, with mean scores rising modestly from 6.02 to 6.42. This modest gain suggests that conventional instructional methods, while not ineffective, may not be sufficient in accelerating the development of speaking proficiency to the same degree as more dynamic, repetitive, and immersive strategies like shadowing.

The pronounced difference between the two groups underscores the effectiveness of shadowing as a pedagogical tool for oral skill development in EFL contexts. The experimental group's advancement can be attributed to the core mechanics of shadowing—immediate auditory repetition, active listening, and the

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mimicking of authentic speech models. These processes promote the internalization of prosodic features such as stress, rhythm, and intonation, which are critical for natural and intelligible spoken output (Tamura, 2006; Foote & Trofimovich, 2018). Repeated exposure to native speaker input through shadowing also enhances learners' automaticity in speech processing, reducing the cognitive load required for real-time language production (Segalowitz, 2010).

These findings are consistent with previous empirical research. Hsieh, Dong, and Wang (2013) reported that Taiwanese university students who participated in shadowing-based instruction exhibited significant gains in fluency, measured through speech rate and reduction in hesitation markers. Likewise, Hamada (2016) found that Japanese learners engaged in shadowing not only improved their listening comprehension but also demonstrated greater accuracy in producing natural prosodic patterns. Such results suggest that shadowing plays a dual role in reinforcing both receptive and productive language skills.

In light of these outcomes, it can be concluded that the shadowing technique offers a meaningful and effective approach to improving speaking proficiency among non-English-majored students in EFL contexts, particularly in environments where learners have limited access to real-time communicative practice.

**Table 3: Paired-Sample T-Test Results for Pre- and Post-Test Scores**

| Group | t-value | df | p-value | Significance |
|---|---|---|---|---|
| Experimental | 6.45 | 29 | < 0.001 | Significant |
| Control | 1.85 | 29 | 0.073 | Not Significant |

The results of the paired-sample t-test revealed a statistically significant improvement in the experimental group's speaking proficiency following the eight-week shadowing intervention ($t = 6.45$, $p < .001$). This strong statistical significance indicates that the shadowing technique had a notable and reliable impact on students' oral English performance, particularly in fluency, pronunciation, and overall communicative competence. In contrast, the control group—who underwent traditional instruction without the use of shadowing—did not show significant improvement, as reflected by a t-value of 1.85 and a p-value of 0.073, which exceeds the conventional alpha level of .05. These findings demonstrate that while standard classroom-based instruction may offer some benefits, it does not yield the same magnitude of improvement in speaking proficiency as the more interactive and repetitive shadowing approach.

The marked performance difference between the two groups provides empirical validation for shadowing as a highly effective instructional method, particularly in EFL environments where authentic, real-time speaking opportunities are often scarce. The experimental group's enhanced post-test scores substantiate the argument that shadowing promotes fluency by reinforcing the automatization of linguistic structures. As discussed by Schmidt (2001), automatization refers to the transformation of conscious linguistic knowledge into automatic, fluid speech production—a process facilitated by consistent practice and repetition. Shadowing supports this transformation by engaging learners in immediate auditory processing and oral reproduction, allowing for faster speech recall and reduced cognitive load during speaking tasks.

Furthermore, the results align with Tamura's (2006) findings, which indicated that shadowing contributes to the internalization of prosodic features such as stress, rhythm, and intonation, thereby enhancing speech naturalness and intelligibility. By imitating native speaker input in real time, learners develop greater sensitivity to suprasegmental aspects of speech, which are critical to effective communication and listener comprehension (Foote & Trofimovich, 2018). These prosodic gains not only improve spoken accuracy but also boost learners' confidence and willingness to communicate—two crucial affective factors in successful language acquisition (Dörnyei, 2005).

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In sum, the statistically significant improvement in the experimental group supports both theoretical and empirical claims regarding the pedagogical efficacy of shadowing in EFL instruction. This evidence reinforces shadowing as a powerful strategy for promoting fluent, accurate, and confident spoken English, particularly for learners who may otherwise lack meaningful oral interaction in traditional classroom settings.

*Findings and Discussion for Research Question 2*

*Research Question 2: How does the shadowing technique specifically affect students' pronunciation and fluency in speaking English?*

This section presents the quantitative analysis of how the shadowing technique impacted the two key components of speaking proficiency: pronunciation and fluency. Data were collected from pre- and post-tests administered to the experimental group over an eight-week period, with each component assessed separately on a 10-point scale.

**Table 4: Pre- and Post-Test Scores for Pronunciation (Experimental Group)**

| Test | N | Mean Score | Standard Deviation (SD) |
|---|---|---|---|
| Pre-test | 30 | 5.80 | 1.08 |
| Post-test | 30 | 7.60 | 0.85 |

As presented in Table 4, there was a substantial improvement in the mean pronunciation score of the experimental group following the eight-week shadowing intervention, increasing from 5.80 (SD = 1.08) in the pre-test to 7.60 (SD = 0.85) in the post-test. This 1.80-point gain represents a 31.03% improvement in learners' pronunciation performance. Moreover, the reduction in the standard deviation indicates that students' performance became more consistent across the group, suggesting that shadowing contributed to a uniform improvement in articulatory skills. This consistency is critical in classroom contexts where variation in learner outcomes is often a challenge for teachers seeking effective, scalable methods.

The significant enhancement in pronunciation can be attributed to the way shadowing facilitates focused auditory input and immediate oral output. By mimicking native speaker models in real-time, learners engage in a process of high-frequency imitation that supports the internalization of both segmental features (individual sounds) and suprasegmental elements (intonation, stress, and rhythm), all of which are central to intelligible and natural-sounding speech (Foote & Trofimovich, 2018). Shadowing bridges perception and production, enabling learners to fine-tune their phonological representations and muscle memory for accurate articulation (Shiki et al., 2010).

These findings are consistent with the research of Hirata (2004), who demonstrated that shadowing significantly improved English-speaking learners' ability to reproduce Japanese pitch accents and overall prosody. Likewise, Tamura (2006) found that EFL students who practiced shadowing showed measurable gains in pronunciation and phonetic accuracy, largely due to the reinforcement of auditory discrimination and speech motor patterns. The effectiveness of shadowing in this context is also theoretically supported by cognitive models of second language acquisition, particularly Schmidt's (2001) noticing hypothesis, which posits that learners must consciously notice specific language features in input in order to acquire them. Shadowing inherently promotes such noticing by requiring close attention to phonological detail during real-time repetition.

Furthermore, this outcome aligns with Vygotsky's (1978) sociocultural theory, which emphasizes learning through mediated interaction. Although shadowing is typically conducted individually, it replicates social engagement by allowing learners to interact with the speech of native speakers in a scaffolded manner. Through this guided performance, students begin to develop more precise pronunciation skills, mirroring the articulatory models they are exposed to. Therefore, the improvement in pronunciation observed in this

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study not only demonstrates the practical benefits of shadowing but also validates its theoretical foundations as an effective method for pronunciation development in EFL contexts.

**Table 5: Pre- and Post-Test Scores for Fluency (Experimental Group)**

| Test | N | Mean Score | Standard Deviation (SD) |
|---|---|---|---|
| Pre-test | 30 | 5.70 | 1.15 |
| Post-test | 30 | 7.90 | 0.90 |

The data in Table 5 demonstrate a substantial improvement in the experimental group's fluency scores following the eight-week shadowing intervention. Specifically, the mean fluency score increased from 5.70 (SD = 1.15) in the pre-test to 7.90 (SD = 0.90) in the post-test, marking a 2.20-point gain and a relative increase of 38.60%. This result reflects a highly significant enhancement in students' ability to produce speech more fluidly, with fewer hesitations, self-corrections, and unnatural pauses. Furthermore, the observed reduction in standard deviation suggests that the improvement in fluency was not limited to a subset of students but was instead experienced consistently across the participant group, indicating the scalability of the shadowing technique in diverse EFL classrooms.

The notable gain in fluency can be directly attributed to the repetitive and real-time nature of shadowing. By requiring learners to listen and simultaneously repeat spoken input, shadowing cultivates real-time speech production skills, which are essential for developing automaticity in language use. This finding aligns with the results of Hsieh, Dong, and Wang (2013), who reported that EFL learners participating in shadowing exercises significantly increased their speech rate while reducing filler words and hesitation time. The technique promotes rhythm and verbal pacing, which are foundational to fluent delivery, allowing learners to generate sentences more spontaneously and naturally.

From a cognitive perspective, these improvements align with Segalowitz's (2010) fluency framework, which distinguishes between three interrelated dimensions of fluency: cognitive fluency (mental processing speed), utterance fluency (observable speech output), and perceived fluency (listener's interpretation). Shadowing supports all three by reducing the cognitive demands associated with constructing speech, facilitating faster lexical retrieval and syntactic processing, and ultimately leading to more coherent and uninterrupted speech production. The automatization achieved through repeated practice, as described in the theory of skill acquisition, allows learners to move from effortful, conscious speech construction to more automatic, fluid delivery (DeKeyser, 2017).

Additionally, the practice of shadowing enhances learners' exposure to authentic discourse patterns and syntactic chunks, contributing to their ability to produce language in larger, more natural units rather than word-by-word construction. This chunking process is crucial for speech fluency and is reinforced through high-frequency shadowing, where learners acquire formulaic sequences commonly used by native speakers (Wood, 2010). In this regard, shadowing not only improves mechanical aspects of fluency but also enriches the pragmatics and coherence of spoken discourse.

Socioculturally, shadowing simulates an interactional environment where learners are engaged in communicative modeling with native speaker input, echoing Vygotsky's (1978) notion of learning through mediated activity. Although not dialogic in nature, the practice involves a form of guided performance in which learners internalize fluency patterns from expert models. As Lantolf and Thorne (2006) point out, such mediation through linguistic tools fosters self-regulation and autonomy in language use, both of which were likely factors in the observed improvement in learners' fluency throughout the shadowing intervention.

In conclusion, the significant gain in fluency evidenced by the post-test data affirms the pedagogical value of shadowing in enhancing EFL learners' speech production. The technique promotes both the automatic retrieval of language and the mastery of natural speech flow, making it a highly effective and accessible

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strategy for improving fluency, especially among learners in non-native English-speaking contexts who may lack opportunities for real-time interaction.

**Table 6: Comparative Analysis of Pronunciation and Fluency Gains**

| Component | Mean Gain (Post - Pre) | Improvement (%) |
|---|---|---|
| Pronunciation | 1.80 | 31.03% |
| Fluency | 2.20 | 38.60% |

Table 6 presents a comparative analysis of the improvement percentages in pronunciation and fluency as measured through pre- and post-test scores in the experimental group. The results reveal that while both speaking subskills experienced notable enhancement following the eight-week shadowing intervention, fluency demonstrated a slightly higher percentage gain (38.60%) compared to pronunciation (31.03%). This distinction, though subtle, offers meaningful insights into the nature of shadowing and its differential influence on temporal versus articulatory dimensions of spoken language.

The greater relative improvement in fluency suggests that the shadowing technique may exert a particularly robust effect on learners' real-time speech production abilities. Shadowing requires learners to engage in simultaneous listening and speaking, a process that promotes speech flow, rhythm, and automaticity (Segalowitz, 2010). This is especially relevant for developing utterance fluency—defined by metrics such as speech rate, mean length of utterance, and the number and duration of pauses (Tavakoli & Skehan, 2005). Through repeated practice, learners develop the cognitive capacity to retrieve lexical items and syntactic structures rapidly, allowing them to speak with fewer disfluencies and reduced reliance on conscious language processing. This result aligns with findings by Hsieh, Dong, and Wang (2013), who observed increased speech rate and decreased hesitation among EFL learners using shadowing, thereby reinforcing the technique's potential to cultivate fluid and spontaneous speech.

In contrast, while pronunciation also improved significantly, its slightly lower gain may be attributed to the inherent complexity of acquiring segmental and suprasegmental features. Accurate pronunciation often involves more deliberate articulatory control, including muscle coordination and auditory discrimination of subtle phonetic contrasts, which may take longer to develop (Foote & Trofimovich, 2018). Nonetheless, the 31.03% improvement is pedagogically significant and reflects the effectiveness of shadowing in reinforcing both the perception and production of phonological elements. Studies by Tamura (2006) and Hirata (2004) corroborate these findings, showing that shadowing enhances learners' control over prosodic features such as stress, intonation, and rhythm, all of which contribute to clearer, more intelligible speech.

Importantly, the observed improvements across both pronunciation and fluency underscore the multidimensional benefits of shadowing, supporting its theoretical underpinnings in both cognitive and sociocultural frameworks. Cognitively, the results affirm Schmidt's (2001) noticing hypothesis and the theory of automatization, which posit that repeated exposure and practice promote attention to linguistic input and convert declarative knowledge into procedural fluency. Socioculturally, Vygotsky's (1978) concept of learning through mediated activity is also relevant; shadowing enables learners to engage with expert language models (i.e., native speakers in audio input) in a scaffolded environment, thereby internalizing natural speech patterns through imitation. Lantolf and Thorne (2006) emphasize that such socially mediated forms of practice allow learners to appropriate language in meaningful contexts, even when interaction is simulated rather than reciprocal.

In sum, while the shadowing technique appears to have a slightly stronger effect on fluency than on pronunciation, both areas show statistically and pedagogically significant improvements. These findings confirm that shadowing is a powerful instructional strategy capable of targeting two critical dimensions of

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spoken language: intelligibility (through pronunciation) and fluidity (through fluency). For EFL educators, especially in contexts with limited opportunities for real-time interaction, shadowing presents an accessible and effective means to improve students' oral communication skills in a comprehensive and integrated manner.

## Conclusion

This study investigated the effectiveness of the shadowing technique in improving the speaking skills specifically pronunciation and fluency of non-English-majored freshmen at DNTU. Drawing on a quasi-experimental design and quantitative data analysis, the findings revealed significant gains in students' speaking proficiency following an eight-week shadowing intervention. The experimental group demonstrated notable improvements in overall speaking performance, with fluency showing a slightly higher percentage increase than pronunciation. These results affirm that shadowing is a powerful pedagogical tool capable of addressing common challenges faced by EFL learners, such as hesitation, poor articulation, and lack of spontaneous speech production. The technique's success lies in its ability to bridge receptive and productive skills by combining intensive listening with immediate verbal reproduction, allowing learners to internalize authentic speech patterns. From a theoretical standpoint, the results support both cognitive theories of automatization and noticing (Schmidt, 2001) and sociocultural theories of mediated learning (Vygotsky, 1978), confirming that shadowing fosters linguistic development through repeated practice and interaction with native speaker input. Given its flexibility, accessibility, and alignment with modern communicative language teaching approaches, shadowing can be integrated into both classroom instruction and self-directed learning. For Vietnamese EFL learners particularly those outside English-major programs who often lack sufficient speaking practice shadowing presents a practical, low-cost solution to enhance oral competence. Future research is encouraged to explore the long-term impacts of shadowing, its effects on learner autonomy, and its integration with digital tools to maximize engagement and effectiveness across varied learning contexts.

## References

[1] Aziz, Z. A. (2022). Investigating the effectiveness of the shadowing technique in enhancing EFL students' speaking proficiency. *TESOL International Journal, 17*(4), 128–145. https://doi.org/10.54268/tij.v17i4.128

[2] Baddeley, A. D. (2003). Working memory: Looking back and looking forward. *Nature Reviews Neuroscience, 4*(10), 829–839. https://doi.org/10.1038/nrn1201

[3] British Council. (2020). *IELTS Speaking band descriptors (public version)*. https://www.ielts.org/-/media/pdfs/speaking-band-descriptors.ashx

[4] Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications. https://doi.org/10.4135/9781506386690

[5] Crystal, D. (2012). *English as a global language* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781139196970

[6] DeKeyser, R. (2017). Knowledge and skill in ISLA. In S. Loewen & M. Sato (Eds.), *The Routledge Handbook of Instructed Second Language Acquisition* (pp. 15–32). Routledge. https://doi.org/10.4324/9781315676968

[7] Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge. https://doi.org/10.4324/9781410613349

[8] Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

[9] Foote, J. A., & Trofimovich, P. (2018). Second language speech fluency: Effects of speed and pausing on comprehensibility. *Studies in Second Language Acquisition, 40*(2), 403–417. https://doi.org/10.1017/S0272263117000193

[10] Hamada, Y. (2016). Shadowing: Who benefits and how? *Language Teaching Research, 20*(1), 35–52. https://doi.org/10.1177/1362168814559806

[11] Hamada, Y. (2011). Improvement of listening comprehension skills through shadowing with difficult materials. *The Journal of Asia TEFL, 8*(3), 139–162. https://doi.org/10.18823/asiatefl.2011.8.3.9.139

[12] Hirata, Y. (2004). Training native English speakers to perceive Japanese length contrasts in word versus sentence contexts. *The Journal of the Acoustical Society of America, 116*(4), 2384–2394. https://doi.org/10.1121/1.1784440

[13] Hsieh, Y., Dong, Y. R., & Wang, M. J. (2013). Using shadowing to enhance college students' oral performance. *English Language Teaching, 6*(11), 1–13. https://doi.org/10.5539/elt.v6n11p1

[14] Hsieh, Y., Dong, Y. R., & Wang, M. J. (2013). Using shadowing to enhance college students' oral performance. *English Language Teaching, 6*(11), 1–13. https://doi.org/10.5539/elt.v6n11p1

[15] Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780194421812.001.0001

[16] Le, H. T., & Tran, Q. M. (2022). Vietnamese EFL university students' speaking difficulties and the need for innovation in language instruction. *Asian EFL Journal, 24*(1), 75–94. https://doi.org/10.55542/aej.v24i1.172

[17] Lee, C. H., & Lin, M. C. (2023). Shadowing-based instruction in EFL: Impacts on oral fluency and learner autonomy. *Journal of Language Teaching and Research, 14*(2), 238–247. https://doi.org/10.17507/jltr.1402.05

[18] Mackey, A., & Gass, S. M. (2016). *Second language research: Methodology and design* (2nd ed.). Routledge. https://doi.org/10.4324/9781315750606

[19] Ministry of Education and Training (MOET). (2020). *National Foreign Languages Project 2020: Final report and outcomes*. Hanoi: MOET Publishing.

[20] Murphey, T. (2001). Exploring conversational shadowing. *Language Teaching Research, 5*(2), 128–155. https://doi.org/10.1177/136216880100500203

[21] Nguyen, H. T., & Pham, T. H. (2020). The effect of shadowing technique on students' listening skill in EFL classroom. *International Journal of Educational Methodology, 6*(2), 385–392. https://doi.org/10.12973/ijem.6.2.385

[22] Nguyen, T. T. H. (2023). English language education in Vietnam: Challenges and future directions. *VNU Journal of Foreign Studies, 39*(1), 24–38. https://doi.org/10.25073/2525-2445/vnufs.4891

[23] Nguyen, T. T. H., & Nguyen, T. P. (2021). Challenges in teaching English speaking skills in Vietnamese universities. *VNU Journal of Foreign Studies, 37*(4), 115–127. https://doi.org/10.25073/2525-2445/vnufs.4666

[24] Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3–32). Cambridge University Press. https://doi.org/10.1017/CBO9781139524780.003

[25] Phan, V. N. (2022). Addressing speaking anxiety in Vietnamese EFL learners: Pedagogical interventions and learner strategies. *Asian Journal of Education and Social Studies, 23*(2), 45–58. https://doi.org/10.9734/ajess/2022/v23i230541

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**Research Article**

[26] Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3–32). Cambridge University Press. https://doi.org/10.1017/CBO9781139524780.003

[27] Segalowitz, N. (2010). *Cognitive bases of second language fluency*. Routledge. https://doi.org/10.4324/9780203850704

[28] Seidlhofer, B. (2011). *Understanding English as a lingua franca*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780194375009.001.0001

[29] Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin. https://doi.org/10.1198/tech.2003.s33

[30] Shiki, O., Mori, Y., Kadota, S., & Yoshinaga, N. (2010). Exploring differences between shadowing and repetition practice in L2 listening comprehension. *ARELE: Annual Review of English Language Education in Japan, 21*, 81–90. https://doi.org/10.20581/arele.21.0_81

[31] Tamura, Y. (2006). The effectiveness of shadowing and listening practice on learners' listening comprehension. *Journal of Asia TEFL, 3*(1), 1–25. https://doi.org/10.18823/asiatefl.2006.3.1.1.1

[32] Tavakoli, P., & Skehan, P. (2005). Strategic planning, task structure, and performance testing. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 239–277). John Benjamins. https://doi.org/10.1075/lllt.11.12tav

[33] Tran, M. T. (2021). The impact of shadowing on English speaking performance in a blended learning environment. *Asian Journal of Educational Research, 9*(2), 45–56. https://doi.org/10.5430/ajel.v9n2p45

[34] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

[35] Wood, D. (2010). *Formulaic language and second language speech fluency: Background, evidence and classroom applications*. Bloomsbury Academic. https://doi.org/10.5040/9781474211976