



**A STUDY ON THE PERCEPTIONS AND PRACTICES OF
ENGLISH-MAJOR STUDENTS ON AFFRICATE AND NASAL
SOUNDS AT A UNIVERSITY IN THE MEKONG DELTA, VIETNAM**

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Abstract:

This study investigates the pronunciation challenges faced by first-year English major students at the School of Foreign Languages, Can Tho University, Vietnam, specifically focusing on affricate sounds (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, and /ŋ/). Utilizing pronunciation recordings analyzed through the Elsa Speak Application, the research involved 31 proficient EFL students. They provided insights into their difficulties with 20 selected English words from their learning materials that included these phonetic elements. The findings reveal widespread mispronunciations, with many students struggling significantly with both affricate and nasal sounds. Based on the data, the study presents targeted recommendations for EFL students, teachers, and curriculum developers to enhance pronunciation instruction and address these specific challenges. This research contributes to understanding the phonetic obstacles faced by EFL learners and emphasizes the need for improved teaching strategies that focus on sound production. By identifying specific difficulties and offering actionable solutions, the study aims to facilitate better pronunciation outcomes for students, ultimately enhancing their overall language proficiency, particularly in listening and speaking English effectively.

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1. Introduction

1.1 Rationale

The Mekong Delta, a vibrant and densely populated region of Vietnam, has experienced significant advancements in education, particularly in language studies. As English continues to serve as a global lingua franca, it has become a vital component of university curricula. For English majors, mastering phonetics and pronunciation is crucial not only for academic achievement but also for effective communication in international contexts.

However, Vietnamese students often encounter specific challenges in pronouncing English affricate and nasal sounds due to the phonetic differences between Vietnamese and English. Sounds like /tʃ/ and /dʒ/ (affricates) and /m/, /n/, and /ŋ/ (nasals) may lack direct equivalents in Vietnamese, which can hinder both their perception and articulation of these sounds.

While several studies have investigated the phonetic challenges faced by non-native English speakers, research specifically targeting Vietnamese students in the Mekong Delta remains limited. This study seeks to address this gap by providing insights into the particular difficulties these learners encounter and the strategies they employ to overcome them.

1.2 Research Objectives

The present study aims to achieve the following objectives:

To assess first-year English major students' awareness and practice in pronouncing the affricate sounds (/dʒ/ and /tʃ/) in the English vocabulary outlined in the curriculum of the School of Foreign Languages at Can Tho University. The study will also propose strategies to correct errors and improve pronunciation.

To evaluate first-year English major students' awareness and practice in pronouncing nasal sounds (/n/, /m/, and /ŋ/) in the English vocabulary included in the curriculum of the Faculty of Foreign Languages at Can Tho University. This objective includes recommending methods for error correction and improvements based on the findings.

Ultimately, the study will provide recommendations for educators and curriculum designers to enhance English pronunciation instruction. This will encompass suggestions for refining teaching strategies, developing classroom activities, and creating supplementary materials to better support students in overcoming pronunciation challenges.

1.3 Research Questions

The study was conducted to address the following research questions:

To what extent do first-year English language students at the School of Foreign Languages, Can Tho University, perceive and practice the pronunciation of affricate

sounds (/dʒ/ and /tʃ/) in their English vocabulary? What solutions can be proposed to correct errors and enhance their pronunciation?

To what extent do first-year English language students at the School of Foreign Languages, Can Tho University, perceive and practice the pronunciation of nasal sounds (/n/, /m/, and /ŋ/) in their English vocabulary? What solutions can be proposed to correct errors and improve their pronunciation?

1.4 Significance of the Study

The findings of this study carry significant implications for educators, curriculum developers, and policymakers, especially in the Mekong Delta region, where educational advancement is crucial for economic and social development. Understanding how first-year English majors perceive and practice the pronunciation of affricate and nasal sounds offers valuable insights into the specific challenges they encounter in mastering these essential elements of English phonology. This knowledge is vital not only for addressing immediate learning difficulties but also for shaping long-term educational outcomes.

For educators, the results will facilitate the development of more effective teaching methodologies that address the unique phonetic challenges faced by Vietnamese learners. By identifying common errors in the pronunciation of affricates and nasals, teachers can tailor their instructional strategies, incorporating targeted phonetic exercises, pronunciation drills, and corrective feedback. Additionally, the research will shed light on how students' perceptions of their pronunciation abilities affect their learning, enabling teachers to pinpoint gaps in self-awareness and introduce reflective practices in the classroom.

Curriculum developers can leverage the study's findings to create learning materials and activities that are more aligned with the phonetic realities of Vietnamese learners. This may involve revising the curriculum to include enhanced phonetic training focused on difficult sounds like affricates and nasals. The introduction of supplementary resources, such as multimedia tools or pronunciation software, can further support auditory discrimination and pronunciation skills beyond the classroom, leading to a more culturally relevant and student-centered curriculum.

Policymakers will benefit from concrete data regarding the pronunciation challenges faced by students in the region, which is essential for shaping educational policies that prioritize language proficiency in university programs, particularly in light of global communication demands. By comprehending the extent of these challenges, policymakers can allocate resources for professional development initiatives aimed at equipping teachers with advanced phonetic instruction techniques. They can also advocate for the integration of comprehensive pronunciation components in language education policies, ensuring students receive adequate support to overcome linguistic barriers.

Ultimately, enhancing the quality of English language education in the Mekong Delta requires a concerted effort to address the phonetic challenges students face. By incorporating the findings of this research into teaching strategies, curriculum design,

and educational policies, the region can produce graduates who are not only academically proficient but also skilled communicators in English. This improvement will significantly enhance students' ability to engage in international contexts—whether for academic pursuits, professional advancement, or global collaboration—thereby contributing to the overall development of the region's workforce and its integration into the global economy.

2. Literature Review

2.1.1 Challenges in Pronunciation for EFL Learners

EFL learners frequently encounter significant pronunciation challenges due to a variety of factors. One major issue is native language interference, where phonetic patterns from a learner's first language affect their ability to produce English sounds accurately. As noted by Baker (2011), this interference can lead to persistent mispronunciations that hinder effective communication.

Moreover, many EFL students lack formal training in phonetics, making it difficult for them to recognize and articulate sounds that do not exist in their native languages (Morley, 1991). Research by Derwing and Munro (2005) underscores that learners often prioritize fluency over pronunciation accuracy, which can exacerbate their difficulties.

Additionally, anxiety and lack of confidence can inhibit students from practicing and experimenting with new sounds, further entrenching their pronunciation challenges (Kang, 2016). Addressing these issues requires targeted instructional strategies that take into account learners' linguistic backgrounds and psychological barriers, fostering an environment where students feel supported in their pronunciation development.

2.1.2 Definition of "Affricates"

Affricates are complex consonant sounds that begin as stops—where airflow is completely blocked—and transition into fricatives, which involve partial obstruction of airflow that creates turbulence. In English, the primary affricates are /tʃ/ (as in "church") and /dʒ/ (as in "judge"). This unique sound structure, which combines the full closure of a stop with the turbulent release of a fricative, can be particularly challenging for learners.

For Vietnamese learners, English affricates present specific difficulties due to the lack of direct equivalents in their native phonetic system. At the same time, Vietnamese contains affricates such as /tʃ̺/ (as in "trái"), the articulation differs significantly from the English /tʃ/ and /dʒ/. As a result, students may substitute these English affricates with simpler sounds like /t/ or /ʃ/, leading to mispronunciations that can hinder intelligibility (Nguyen, 2013; Ha, 2005). This underscores the necessity for targeted pronunciation training to enhance learners' proficiency in producing these sounds (Cunningham, 2013; Duong, 2009).

Phonetically, affricates start with a complete closure in the vocal tract, momentarily blocking airflow, followed by a gradual release that results in turbulent airflow characteristic of fricative sounds. This dual articulation—initially a stop followed

by a fricative—renders affricates complex. The two primary affricates in English, /tʃ/ and /dʒ/, are significant because they blend features of both stops (like /t/ and /d/) and fricatives (like /ʃ/ and /ʒ/), distinguishing them from pure consonant categories. Linguistically, affricates can be particularly challenging for learners whose native languages lack such sounds. In Vietnamese, there are no true affricates, although the language has both stops and fricatives. This absence can make it difficult for learners to accurately perceive and produce affricate sounds in English. Instead of recognizing these sounds as a seamless combination, they may misinterpret them as separate segments (e.g., hearing /tʃ/ as /t/ followed by /ʃ/).

Affricates can also be categorized as voiced or voiceless, depending on whether vocal cord vibration occurs during their production. The voiceless affricate /tʃ/ (as in "church") does not involve vocal cord vibration, while the voiced affricate /dʒ/ (as in "judge") does. This distinction adds another layer of complexity for learners, particularly because Vietnamese lacks voiced affricates, making it challenging for students to differentiate between /tʃ/ and /dʒ/. Mispronouncing these sounds can lead to significant misunderstandings; for instance, confusing "chop" with "job" alters the meaning entirely.

Affricates can appear in both initial and final positions in English, which complicates learning for Vietnamese speakers, as their language does not permit final consonant clusters or affricates. Consequently, learners often struggle with final affricates in words like "watch" or "bridge," leading to common mispronunciations where these sounds may be reduced or substituted with simpler stops (/t/) or fricatives (/ʃ/).

Furthermore, affricates interact with other sounds in complex ways within English phonotactics. For example, in consonant clusters like /str-/ (as in "stretch") or /tr-/ (as in "train"), the affricate /tʃ/ may be preceded by a cluster of consonants, increasing the difficulty of correct articulation. Vietnamese learners often find such clusters challenging, as their native language typically does not allow consonant clusters. Thus, not only are affricates themselves complex, but their interaction with other sounds can further complicate their production in specific contexts.

2.1.3 Definition of “Nasals”

Nasal sounds are a category of speech sounds produced when airflow passes through the nasal cavity during articulation. This occurs when airflow is blocked at a certain point in the oral cavity, typically by the tongue or lips, while allowing air to escape through the nose. Structurally, nasal sounds possess unique characteristics because they utilize both the oral and nasal airflow pathways. In English, the primary nasal sounds are /m/, /n/, and /ŋ/.

/m/ is produced by completely bringing both lips together, blocking airflow in the mouth while allowing air to escape through the nose. This sound is common in words such as "man," "mother," and "music." It is a voiced sound, meaning the vocal cords vibrate during its production.

/n/ is articulated when the tongue contacts the alveolar ridge, creating a blockage in the mouth while still allowing airflow through the nose. This sound appears in numerous English words, such as "no," "nice," and "night." Like /m/, /n/ is also voiced.

/ŋ/ is a distinctive nasal sound produced when the tongue touches the soft palate (the back part of the roof of the mouth) without completely closing off the mouth. This sound can be found in words like "sing," "long," and "ring." A key characteristic of /ŋ/ is that it does not occur at the beginning of words; it typically appears at the end or in the middle.

One significant challenge for English language learners, particularly those whose native languages lack similar sounds, is the pronunciation of nasal sounds. For example, while Vietnamese has /m/ and /n/, it does not feature /ŋ/ at the beginning of words. This can lead to confusion, as learners might struggle to pronounce /ŋ/ accurately, often substituting it with /n/ or another sound, which can result in misunderstandings, especially in contexts where pronunciation is crucial for conveying meaning.

Nasal sounds also interact with other phonemes in English. For instance, when combined with sounds like /d/, as in the word "and," the nasal /n/ can soften the /d/, creating a smoother transition in articulation. Moreover, nasal sounds play a significant semantic role in many languages, including English. The presence or absence of a nasal sound can completely change the meaning of a word. For instance, "pan" and "man" differ by their initial sounds, and mispronouncing them can lead to misunderstandings. This highlights the importance of nasal sounds in maintaining clarity and precision in communication.

In summary, understanding nasal sounds and their characteristics is essential for EFL learners, particularly those from linguistic backgrounds that lack similar phonetic features. Addressing these challenges through targeted pronunciation training can significantly improve learners' communication skills and overall language proficiency.

2.2 The Perceptions and Practices of Students in Pronouncing “Affricates” and “Nasals” in English

2.2.1 Affricates

Affricates such as /tʃ/ (as in "church") and /dʒ/ (as in "judge") present significant challenges for Vietnamese learners of English due to the phonetic differences between the two languages. Although Vietnamese features some affricates, such as /tʃ/, their articulation and voicing differ from those in English. As noted by Nguyen (2013), Vietnamese learners frequently substitute /tʃ/ with /t/ or /ʃ/ and /dʒ/ with /d/ or /ʒ/, leading to common mispronunciations that hinder effective communication.

Research by Ha (2005) highlights that these mispronunciations can negatively impact intelligibility, particularly in formal settings where clear communication is essential. Furthermore, Duong (2009) found that learners often omit the fricative component of affricates, simplifying them and exacerbating pronunciation issues. The accurate production of affricates is crucial for effective communication in English,

necessitating targeted pronunciation practice to address these challenges (Cunningham, 2013; Nguyen, 2013).

To support learners, educators should implement specific drills aimed at improving both the perception and articulation of these affricate sounds. These drills could include listening exercises, minimal pair practice, and focused articulation activities to enhance students' awareness and production of the nuanced characteristics of affricates. By addressing these pronunciation challenges directly, educators can significantly improve students' communicative competence and confidence in using English.

2.2.2 Nasals

The perception and pronunciation of nasal sounds present significant challenges for English learners, particularly for those from languages with different phonetic structures. For example, research indicates that Brazilian Portuguese speakers struggle with word-final nasals, affecting their cognitive processing of these sounds during language learning (Kluge, D. C. 2004). This highlights how the absence of certain phonetic elements in a learner's native language can hinder their ability to accurately perceive and produce similar sounds in English.

In the context of Vietnamese learners, the pronunciation of nasal sounds is particularly complex. Ha (2005) noted that many foreigners find it difficult to understand Vietnamese English pronunciation, which is often attributed to the phonetic issues faced by learners. Numerous studies (Cunningham, 2013; Duong, 2009; Ha, 2005; Luu, 2011; Nguyen, 2013) have documented the phonetic challenges Vietnamese speakers encounter, particularly with nasal sounds. These challenges can lead to misunderstandings and negatively impact communication quality. Nasal sounds are crucial phonetic elements in English, and their unfamiliarity can complicate learners' pronunciation efforts. For instance, while Vietnamese includes /m/ and /n/, the absence of /ŋ/ at the beginning of words creates confusion, as learners may substitute /ŋ/ with /n/ or another sound. This substitution can result in miscommunication, especially in contexts where accurate pronunciation is vital.

Through this research, we aim to gain a deeper understanding of how students in the Mekong Delta perceive and practice nasal sounds in their English language learning. By identifying specific challenges and misconceptions related to nasal sounds, educators can develop targeted strategies to improve learners' pronunciation skills and enhance their overall communicative effectiveness.

2.3 ELSA Speak Application

ELSA Speak is a comprehensive language learning app that excels in five key areas: Content Design, Pedagogical Design, Assessment Flexibility, Multimedia Design, and Automatic Speech Recognition. Each aspect plays a crucial role in enhancing pronunciation practice for learners.

2.3.1 Content Design

ELSA Speak offers a diverse and engaging learning experience with concise lessons tailored to real-life contexts. Regular updates ensure the content meets users' evolving needs. Research by Silaen & Rangkuti (2022), Darsih *et al.* (2021), and Samad & Aminullah (2019) indicates that students generally view the learning materials as complete and appropriate for various proficiency levels. However, some users have reported challenges with the British accent featured in the application.

2.3.2 Pedagogical Design

The pedagogical design of ELSA Speak emphasizes personalized learning, analyzing individual competencies to create a tailored educational journey. Studies (Samad & Aminullah, 2019; Silaen & Rangkuti, 2022; Darsih *et al.*, 2021) consistently demonstrate that students find the app's approach effective. Incorporating phonetic symbols, transcriptions, and gamified elements enhances student engagement and progression in pronunciation.

2.3.3 Assessment Flexibility

ELSA Speak provides automated evaluations of learners' progress, delivering detailed feedback that helps users pinpoint areas for improvement. In comparison, most students appreciate the assessment and flexibility features, but concerns about internet connectivity persist, as highlighted in research by Silaen & Rangkuti (2022) and Darsih *et al.* (2021). Overall, the assessment tools are beneficial for enhancing learners' pronunciation skills.

2.3.4 Multimedia Design

The application employs multimedia resources, including animated diagrams, to foster an engaging learning environment. Research by Samad & Aminullah (2019) and Silaen & Rangkuti (2022) consistently reveals positive student perceptions regarding multimedia elements. The extensive library of words, IPA transcriptions, placement tests, and Automatic Speech Recognition technology significantly enrich the overall learning experience.

2.3.5 Automatic Speech Recognition Design

ELSA Speak's Automatic Speech Recognition technology utilizes advanced algorithms to analyze and evaluate learners' responses, helping them identify and enhance their pronunciation skills. Studies by Samad & Aminullah (2019) and Kholis (2021) show that students respond positively to this feature. The immediate feedback and calibration options boost students' confidence and motivation in mastering pronunciation.

2.3.6 ELSA Speak App for Practicing Affricate and Nasal Sounds

Using the ELSA Speak app to improve the pronunciation of affricate sounds (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, /ŋ/) can be highly effective for language learners. As

Thornbury (2005) notes, effective pronunciation practice involves both listening and speaking, a combination that ELSA Speak facilitates through its interactive features.

The app allows users to hear native pronunciations and provides immediate feedback on their own attempts. Research by Derwing and Munro (2005) highlights that timely feedback is essential for improving pronunciation, as it helps learners identify errors and make necessary adjustments. By inputting specific words containing target sounds, users can focus their practice more effectively. For example, words such as "judge" (/dʒ/), "chip" (/tʃ/), "man" (/m/), "nine" (/n/), and "sing" (/ŋ/) serve as excellent focus points for practice. The app's ability to analyze recordings aligns with Pennington's (1996) emphasis on the role of technology in enabling self-assessment.

2.4 Learning Strategies and Teaching Techniques for Affricate and Nasal Sounds

Teaching affricate sounds (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, /ŋ/) require effective strategies that engage students in both auditory and articulatory practices.

2.4.1 Strategies for Learners

One key strategy is incorporating auditory discrimination exercises, where students listen to minimal pairs (e.g., "chip" vs. "ship" for /tʃ/ vs. /ʃ/) to discern subtle sound differences. Research indicates that focused listening exercises enhance phonemic awareness, which is crucial for accurate pronunciation (Derwing & Munro, 2005). Using visual aids, such as phonetic charts, helps students visualize tongue and lip positions, reinforcing their understanding of articulation. Encouraging students to practice in front of a mirror provides immediate feedback on their mouth movements.

Integrating technology, such as pronunciation apps like ELSA Speak, allows for personalized practice. These apps offer immediate feedback on pronunciation accuracy, which supports the findings of Pennington (1996) regarding the benefits of technology in language learning.

2.4.2 Techniques for Teachers

For educators, employing a variety of teaching techniques can significantly enhance student engagement and learning outcomes. Interactive activities, such as role-playing and pronunciation games, encourage students to use the sounds in context, promoting retention and practical application. Techniques like choral repetition build confidence, allowing learners to practice collectively before attempting sounds individually.

Corrective feedback is crucial; instructors should provide constructive feedback focused on specific sounds and areas for improvement, in line with best practices outlined by Baker (2011). Incorporating songs and rhymes featuring target sounds can also make learning enjoyable and memorable. The combination of these strategies fosters an environment where students feel supported in mastering affricate and nasal sounds, leading to improved pronunciation and overall language proficiency. By integrating diverse approaches and recognizing individual student needs, educators can create a

comprehensive learning experience that addresses both phonetic accuracy and communicative competence.

Research emphasizes the importance of explicit pronunciation instruction in EFL curricula (Celce-Murcia *et al.*, 2010). Techniques like minimal pair exercises can help learners distinguish between similar sounds, enhancing phonetic discrimination skills (Saito, 2012). Additionally, using authentic listening materials and encouraging peer feedback can foster a collaborative learning environment, promoting confidence and engagement in pronunciation practice (Derwing & Munro, 2005). Ultimately, employing a combination of these strategies can lead to more effective pronunciation instruction, addressing the unique challenges faced by EFL learners.

2.5 Related Studies

Research into the pronunciation of affricate sounds (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, /ŋ/) among non-native English speakers highlights the challenges faced by learners from diverse linguistic backgrounds.

2.5.1 Affricates

Studies on the pronunciation of affricates reveal significant difficulties for learners whose native languages lack similar phonetic structures. For example, Vietnamese learners often struggle with the transition between the stop and fricative components of affricates, leading to inaccuracies in their production. Cunningham (2013) and Nguyen (2013) indicate that these students frequently substitute affricates with more familiar sounds, such as stops or fricatives. This substitution can significantly impact the clarity of their spoken English, as seen when /tʃ/ is replaced by /t/ or /ʃ/.

Duong's (2009) research emphasizes the necessity for focused pronunciation training aimed specifically at these affricates. Effective techniques include phonetic drills, visual aids, and phonetic software, all of which have proven useful in helping students address their pronunciation challenges. Additionally, integrating pronunciation exercises into a broader language curriculum can ensure that students practice these sounds consistently in various contexts, thereby enhancing their overall proficiency and confidence in speaking English.

2.5.2 Nasals

Research on nasal sounds reveals similar challenges for learners. A study by Kluge (2004) examined the perception of final nasal sounds among Brazilian Portuguese speakers, highlighting difficulties in accurately perceiving these sounds, especially in certain vowel contexts. The results showed that low vowels facilitated more accurate perception of final nasals, while the vowel /e+/ was least preferred for distinguishing these sounds. This indicates a complex relationship between vowel context and nasal sound perception.

Moreover, the challenge of nasal pronunciation is not only a barrier to effective communication but also a significant hurdle for students learning new languages and dialects. Expanding research to consider the influence of local culture could provide a

more comprehensive understanding of these challenges. To understand the language education landscape in Vietnam, it is essential to consider the specific challenges and opportunities students face when learning English. Globalization and the demand for English proficiency in the labor market underscore the importance of mastering pronunciation skills as a key factor for effective English learning. In the context of the Mekong Delta, Vietnam known for its cultural and linguistic diversity, students' approaches to learning English may reflect both linguistic and cultural misunderstandings. A thorough investigation into the current state of language education in this region is necessary, examining teaching strategies, textbooks, and language education infrastructure. Additionally, the challenges posed by multilingualism and multiculturalism should be assessed.

Focusing on students' awareness will enable the study to gauge their understanding of nasal sounds in English, encompassing both theoretical knowledge and practical application. Researching students' personal experiences and feelings regarding nasal pronunciation can uncover psychological and social challenges they face. By monitoring how students practice nasal sounds in real-life situations, the study can provide insights into the gap between theoretical knowledge and practical application, paving the way for targeted improvements in the learning process.

3. Research Methodology

3.1 Research Questions

This study aimed to address the following research questions:

- **Affricate Sounds:** To what extent do first-year English language students perceive and practice the pronunciation of affricate sounds (/dʒ/ and /tʃ/) in English vocabulary within the curriculum of the School of Foreign Languages at Can Tho University? What solutions can be proposed to correct errors and enhance pronunciation accuracy?
- **Nasal Sounds:** To what extent do first-year English language students perceive and practice the pronunciation of nasal sounds (/n/, /m/, and /ŋ/) in English vocabulary within the curriculum of the School of Foreign Languages at Can Tho University? What solutions can be proposed to address pronunciation errors and improve overall proficiency?

3.2 Research Design

This study utilizes a comprehensive pronunciation recording methodology to analyze the phonetic practices of 31 first-year students enrolled in the high-quality English Studies program. By employing the ELSA Speak Application, the research focuses on identifying errors in the pronunciation of 20 target words—10 representing affricate sounds and 10 for nasal sounds—selected from Lynn and Hogue's (2018) Oxford Q: Skills for Success (3rd ed.), which students will learn in their first year at university. This approach allows

for a detailed examination of the students' pronunciation challenges, providing valuable insights into their phonetic performance.

3.3 Data Analysis

To address the research objectives, distinct data analysis methods were employed for each aim. For Research Objective 1, descriptive statistics were utilized to process and present the data. Similarly, for Research Objective 2, descriptive statistics were applied to measure and display the data findings. This analysis enabled the researchers to summarize the sample observations, determining key metrics such as average scores and frequency distributions of the variables.

The researchers then compared the mean scores of the 31 participants across five distinct groups and the percentages, respectively, taking into account the students' learning abilities, which were represented through three indicators in the ASK model: Attitude, Skills, and Knowledge. A combination of statistical techniques was employed to identify both the advantages and challenges faced by the students.

3.4 Participants

The participants in this study were first-year English major students at the School of Foreign Languages, Can Tho University, all of whom had not yet completed any phonetics or phonology courses at the university level. A total of 31 high-quality EFL students were randomly selected from various classes to participate in the study. All participants were asked to pronounce these English words through the ELSA Speak app sincerely, providing a comprehensive perspective on their experiences.

3.5 Research Instruments

The research employed both primary and secondary data collection methods. In the primary phase, a quantitative approach was taken through semi-structured interviews with the 31 first-year students from the English Studies Program. Each student was recorded pronouncing 20 words—10 featuring affricates and 10 for nasals—sourced from the listening and speaking materials provided by the School of Foreign Languages at Can Tho University. High-quality recording devices were used to capture the nuances of each student's pronunciation.

To ensure the appropriateness of the selected words, the researcher reviewed references accompanied by recordings to confirm their suitability for the participants' proficiency levels. Each word was deliberately chosen to reflect common challenges associated with affricate and nasal pronunciation, which are critical elements of phonological studies. The recorded pronunciations were subsequently analyzed using the ELSA Speak App, which provided detailed spectrograms for further acoustic analysis. This facilitated precise measurements of each student's ability to articulate the sounds, highlighting specific errors or difficulties in their pronunciation.

3.6 Procedure

The study's initial phase involved selecting 20 words—10 containing affricate sounds (/tʃ/ and /dʒ/) and 10 containing nasal sounds (/m/, /n/, and /ŋ/)—from a comprehensive list of textbook vocabulary. These words were chosen to represent varying levels of complexity, ranging from basic to more advanced terms. Participants were instructed to pronounce the selected words spontaneously, without prior practice, to capture their natural pronunciation habits. The recordings were then saved in MP3 format for further analysis.

In the subsequent phase, the recorded words were processed using the ELSA application, which transcribed the sounds into English phonetic symbols according to Roach's (2001) framework. ELSA served as a reference to verify the accuracy of the phonetic transcription. Before finalizing the analysis, a reliable software program was utilized to ensure the quality and consistency of the recordings. After processing, each participant's pronunciation of affricates and nasals was categorized into three accuracy levels: high, medium, and low. These labels indicated the degree to which participants successfully produced the correct phonemes. A panel of reviewers collaborated to cross-check the data, summarize the findings, and finalize the assessment of each participant's pronunciation performance.

This multi-step process enabled a comprehensive and systematic analysis of the pronunciation challenges faced by the students, providing valuable insights into common errors and areas requiring further improvement. The collaborative efforts of the reviewers ensured the reliability of the findings and the clarity of the accuracy ratings assigned to the students' pronunciation.

3.7 Qualitative Data Analysis

The qualitative data provided a nuanced understanding of students' perspectives and practices regarding affricate and nasal sounds in English pronunciation. The researcher meticulously transcribed the interview data, which was then synthesized and analyzed by the research team. The analysis proceeded in two stages, focusing primarily on the pronunciation records gathered during the meetings. Initially, the interview responses were categorized based on their accuracy levels using a classification system established by ELSA (English Language Speech Assistant). The responses were sorted into three categories: High, Medium, and Low accuracy. This classification facilitated a structured framework for assessing pronunciation quality.

Following this initial categorization, the researchers conducted a detailed analysis of the categorized responses. Each set of responses was examined to uncover insights regarding the interviewees' practices and attitudes toward the pronunciation of affricate and nasal sounds. This step aimed to elucidate not only the level of pronunciation accuracy but also the underlying factors influencing students' perspectives on these sounds.

By exploring both pronunciation accuracy and students' attitudes, the researchers sought to provide a holistic view of the challenges faced by students in mastering these aspects of English pronunciation. This comprehensive approach enriched the understanding of the complexities involved in their language learning experiences.

4. Findings and Discussion

4.1 Overview of the Findings

This part presents the results of the research focused on the pronunciation of affricates (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, and /ŋ/) by first-year English major students at Can Tho University. Data collected through audio recordings were meticulously analyzed to identify common difficulties encountered by the students, the frequency of mispronunciations, and their overall awareness of these phonetic challenges.

The findings are organized into two main sections: the first details the results related to affricate pronunciation, while the second addresses the challenges associated with nasal sounds. This structure facilitates a clear understanding of the specific areas where students struggle and provide insights into their pronunciation patterns. By examining both affricate and nasal sounds, this chapter aims to illuminate the phonetic obstacles faced by the students, offering a foundation for potential pedagogical improvements and strategies to enhance their pronunciation skills in English.

4.1.2 Pronunciation of Affricate Sounds

The analysis of the 10 English words containing the affricate sounds /dʒ/ and /tʃ/ revealed a range of mispronunciations and challenges faced by the participants. These mispronunciations included common substitutions and omissions, often resulting from the students' native phonetic inventory, which lacks similar sounds.

The following table summarizes the pronunciation accuracy of selected affricate sounds (/dʒ/ and /tʃ/) among first-year English major students at the School of Foreign Languages, Can Tho University. The results are categorized into three levels of accuracy: High, Medium, and Low.

Table 4.1: The Accuracy Levels for Affricate Sounds

Word	Phonetic Transcription	High	Medium	Low	Total
Ditch	/dɪtʃ/	19	2	10	31
Matches	/mætʃ/	23	0	8	31
Scratch	/skrætʃ/	15	2	14	31
Twitch	/twɪtʃ/	17	4	10	31
Stretch	/stretʃ/	12	3	16	31
Journey	/'dʒɜːni/	9	0	22	31
Jazz	/dʒæz/	14	0	17	31
Challenge	/'tʃæl.ɪndʒ/	15	13	3	31
Juice	/dʒuːs/	8	2	21	31
Check	/tʃek/	27	1	3	31

From Table 4.1, it can be seen that for overall accuracy, the total number of students participating in each pronunciation task was consistent at 31. Notably, "Check" had the highest number of high-accuracy responses (27), indicating that this sound was relatively easier for students to pronounce. Then as for challenges with /dʒ/ sounds, words like "Journey" and "Juice" showed a significant number of low accuracy scores (22 and 21, respectively), highlighting the difficulty students faced with the /dʒ/ sound. Next, to Performance on /tʃ/ Sounds, "Ditch," "Matches," and "Twitch" generally received higher accuracy scores, suggesting that students are more comfortable with /tʃ/ sounds when compared to /dʒ/ sounds. And regarding the common errors, the occurrence of medium and low accuracy scores indicates common mispronunciations, likely influenced by the absence of similar sounds in Vietnamese phonetics. Finally, for implications for instruction, the results suggest a need for focused instructional strategies, particularly targeting the /dʒ/ affricate sounds, to help students improve their pronunciation skills. This analysis serves as a foundation for identifying specific areas where pronunciation practice can be enhanced in the curriculum. The next section will explore the pronunciation of nasal sounds.

The table below (Table 4.2) presents the percentages of the pronunciation accuracy of affricate sounds (/dʒ/ and /tʃ/) among first-year English major students at the School of Foreign Languages, Can Tho University, expressed as percentages across three accuracy levels: High, Medium, and Low.

Table 4.2: The Percentage of Accuracy Levels for Affricate Sounds

Word	Phonetic Transcription	High (%)	Medium (%)	Low (%)	Total
Ditch	/dɪtʃ/	61.29	6.45	32.26	100
Matches	/mætʃ/	74.19	0	25.81	100
Scratch	/skrætʃ/	48.39	6.45	45.16	100
Twitch	/twɪtʃ/	54.84	12.90	32.26	100
Stretch	/stretʃ/	38.71	9.68	51.61	100
Journey	/ˈdʒɜːni/	29.00	0	71.00	100
Jazz	/dʒæz/	45.16	0	54.84	100
Challenge	/ˈtʃæl.ɪndʒ/	48.40	41.90	9.70	100
Juice	/dʒuːs/	25.81	6.45	67.74	100
Check	/tʃek/	87.09	3.23	9.68	100

From this Table, first, for overall accuracy, each row totals 100%, providing a clear overview of the distribution of pronunciation accuracy among the students. And as for strengths and weaknesses, the word "Check" showed the highest high accuracy percentage (87.09%), indicating it was relatively easier for students. Conversely, "Journey" exhibited the lowest high accuracy percentage (29.00%) and the highest low accuracy percentage (71.00%), indicating significant difficulty with the /dʒ/ sound. Next, to affricate /tʃ/ performance, words like "Matches" and "Twitch" had strong high accuracy scores (74.19% and 54.84%, respectively), suggesting that students are generally more comfortable with /tʃ/ sounds compared to /dʒ/ sounds. And for pronunciation challenges,

the low accuracy percentages for words such as "Juice" (67.74%) and "Jazz" (54.84%) highlight specific areas where students struggle, particularly with the /dʒ/ affricate. And finally, in terms of implications for instruction, these results underscore the need for targeted teaching strategies that address the particular challenges students face with affricate sounds. Emphasizing practice on the /dʒ/ sounds could help improve overall pronunciation skills.

This analysis lays the groundwork for developing effective instructional strategies to enhance students' pronunciation of both affricate and nasal sounds. The subsequent section will address the challenges associated with nasal sounds.

In general, from the tables above, it is clear that students demonstrated greater proficiency with affricate sounds in shorter, simpler words (e.g., "Matches," "Ditch") than in more complex or polysyllabic terms such as "Journey" or "Stretch." Firstly, for substitution errors, a common error involved substituting the affricate sounds /dʒ/ and /tʃ/ with alternative sounds. For instance, many participants replaced /tʃ/ with /t/ or /ʃ/, and /dʒ/ with /d/ or /ʒ/. This pattern aligns with findings from previous studies (Nguyen, 2013; Ha, 2005), suggesting that these substitutions may stem from the lack of direct affricate equivalents in Vietnamese. Plus, as for the omission of the fricative component, another significant error was the omission of the fricative component in affricates. Rather than producing the complete affricate sound, students often stopped after the plosive, resulting in a simpler stop sound. This indicates a need for targeted practice to help students articulate the full range of affricate sounds. And lastly, for the influence of word position, the analysis revealed that affricates at the beginning of words (e.g., "Jazz," "Journey") were more frequently mispronounced than those occurring in the middle or at the end of words (e.g., "Matches"). This suggests that students may be more comfortable with affricates in certain positions, emphasizing the importance of comprehensive pronunciation practice that encompasses various word contexts.

These findings highlight specific areas where students struggle, underscoring the need for tailored instructional strategies to enhance their understanding and production of affricate sounds.

4.1.3 Pronunciation of Nasal Sounds

The assessment of nasal sounds reveals a varied performance among students across different words. While many students exhibit a solid understanding of nasal sounds, certain terms, such as "tranquility" and "conquer," underscore areas where learners encounter difficulties. This analysis highlights the need for focused phonetic training that addresses vowel-nasal interactions and the articulation of more complex sounds. By targeting these challenges, educators can enhance students' mastery of English pronunciation, particularly with nasal sounds.

Table 4.3: Accuracy Levels of Nasal Sounds

Word	Phonetic Transcription	High	Medium	Low	Total
Column	/'kɑ:.ləm/	15	2	14	31
Climb	/klaɪm/	24	3	4	31
Mat	/mæt/	20	2	9	31
Stamp	/stæmp/	27	2	2	31
Sink	/sɪŋk/	22	2	7	31
Bang	/bæŋ/	24	1	6	31
Pancake	/'pæn.keɪk/	21	2	8	31
Tranquility	/træŋ'kwɪl.ə.ti/	11	7	13	31
Tranquil	/'træŋ.kwəl/	14	3	14	31
Conquer	/'kɑ:ŋ.kə/	9	1	21	31

Table 4.3 presents the results of the students' pronunciation accuracy for various nasal sounds in English. The table categorizes the performance into three levels: High, Medium, and Low, reflecting how well students articulated each word.

The table indicates a varied level of proficiency among students in producing nasal sounds. While many students show a solid understanding, some specific words present challenges, highlighting areas for improvement. Firstly, for words with high accuracy, words like "Stamp" (/stæmp/) and "Climb" (/klaɪm/) achieved the highest accuracy rates, with 27 and 24 students respectively scoring in the High category. This suggests that students are generally comfortable with these nasal sounds and the placements within these words. Also, in the aspect of challenging words, in contrast, words such as "Conquer" (/kɑ:ŋ.kə/) and "Tranquility" (/træŋ'kwɪl.ə.ti/) revealed significant difficulties. Only 9 and 11 students, respectively, achieved a High accuracy score. The Low accuracy scores for these words indicate that many students struggled with the complex nasal sounds and their interactions with surrounding vowels. Next, regarding medium and low accuracy, The Medium and Low categories highlight specific issues. For example, "Tranquil" (/træŋ.kwəl/) shows a balanced distribution of scores, with 14 students in the Low category, indicating confusion or difficulty with nasal articulation in this context. And as for the importance of contextual practice, the variability in performance across different words suggests that students may benefit from targeted phonetic training focused on nasal sounds, particularly in more complex vocabulary. Understanding vowel-nasal interactions and practicing pronunciation in varied contexts could enhance overall performance. And lastly, in the sphere of implications for teaching, these findings underscore the need for instructors to address the specific challenges students face with nasal sounds. Incorporating focused exercises, visual aids, and technology (like pronunciation apps) could help students improve their pronunciation skills.

In summary, Table 4.3 provides valuable insights into the students' pronunciation abilities regarding nasal sounds, identifying strengths and weaknesses that can inform future instructional strategies and interventions.

Table 4.4: The Percentage of Accuracy Levels for Nasal Sounds

Word	Phonetic Transcription	High (%)	Medium (%)	Low (%)	Total
Column	/ˈkɑː.ləm/	48.39	6.45	45.16	100
Climb	/klaɪm/	77.42	9.68	12.90	100
Mat	/mæt/	64.52	6.45	29.03	100
Stamp	/stæmp/	87.10	6.45	6.45	100
Sink	/sɪŋk/	70.97	6.45	22.58	100
Bang	/bæŋ/	77.42	3.23	19.35	100
Pancake	/ˈpæn.keɪk/	67.74	6.45	25.81	100
Tranquility	/træŋˈkwɪl.ə.ti/	35.48	22.58	41.94	100
Tranquil	/ˈtræŋ.kwəl/	45.16	9.68	45.16	100
Conquer	/ˈkɑːŋ.kə/	29.03	3.23	67.74	100

Table 4.4 provides a detailed breakdown of the accuracy levels achieved by first-year English major students in pronouncing nasal sounds in various English words. The table categorizes student performance into three levels: High, Medium, and Low accuracy, allowing for a clear understanding of their proficiency with nasal sounds. When mentioning the Overall Performance, the percentage of students achieving high accuracy varies across words, with some words like "Stamp" (/stæmp/) and "Climb" (/klaɪm/) showing a high level of proficiency (87.10% and 77.42%, respectively). Conversely, words like "Conquer" (/ˈkɑːŋ.kə/) and "Tranquility" (/træŋˈkwɪl.ə.ti/) demonstrate significant challenges, with low accuracy percentages (29.03% and 35.48%, respectively). Also, with the High Accuracy, the high accuracy percentages indicate that a significant proportion of students were able to correctly produce these sounds. For example, "Stamp" and "Bang" show impressive high accuracy rates, suggesting that students are generally comfortable with these nasal sounds in specific contexts. In addition, it is the Medium and Low Accuracy, medium and low accuracy percentages highlight areas needing improvement. For instance, while "Tranquil" shows a balanced distribution between high and low accuracy (45.16% for both), "Conquer" has a notably high low accuracy rate (67.74%), indicating that many students struggled significantly with this word. And for Implications for Teaching, the variations in performance across different words suggest that certain nasal sounds may require more focused instructional strategies. Words with complex vowel-nasal interactions or less familiar sound structures appear to be particularly challenging for students. Educators might consider implementing targeted phonetic training and exercises to enhance students' pronunciation skills, especially for words with historically low accuracy rates.

In short, the data indicate a need for differentiated teaching approaches, focusing on the specific challenges students face with nasal sounds. By addressing these issues, educators can better support students in improving their pronunciation and overall communicative competence in English.

4.2 Discussion

The findings from this study offer valuable insights into the pronunciation challenges faced by first-year English majors at the School of Foreign Languages, Can Tho University, particularly regarding affricate sounds (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, and /ŋ/).

4.2.1 Affricate Pronunciation Challenges

The analysis of affricate pronunciation highlighted notable variations in accuracy among participants. Simpler words, such as "Ditch" and "Matches," yielded higher accuracy rates compared to more complex or polysyllabic words like "Journey" and "Stretch." The frequent occurrence of substitution errors—where participants replaced /tʃ/ with /t/ or /ʃ/, and /dʒ/ with /d/ or /ʒ/—suggests a significant influence from Vietnamese phonology, which lacks direct equivalents for these affricate sounds. Additionally, the omission of the fricative component in affricates indicates that students often stop after producing the plosive, underscoring the need for targeted training on the articulation of affricates.

These findings emphasize the inherent challenges affricates pose to Vietnamese learners of English. The students generally performed better with shorter, simpler words containing affricates, where these sounds are easier to identify and articulate. However, as word complexity increases, particularly with longer terms like "Journey" or "Stretch," the error rate rises substantially.

The primary issue appears to stem from a phonetic mismatch between Vietnamese and English. With Vietnamese lacking precise equivalents for the English affricates /tʃ/ and /dʒ/, learners often resort to substituting these sounds with more familiar ones. This pattern, supported by previous studies (Nguyen, 2013; Ha, 2005), highlights how students attempt to approximate unfamiliar sounds using sounds available in their native language. Moreover, many students struggle to produce the fricative component of affricates. The omission or reduction of this element leads to incomplete pronunciation, evident in words like "Church" and "Judge," where learners might only articulate the stop sound (/t/ or /d/), compromising their overall accuracy. This suggests a need for focused training that emphasizes the sequential production of both the stop and fricative elements.

Another critical factor is that English affricates often appear in complex sound clusters or unfamiliar positions for Vietnamese speakers. This contributes to articulatory difficulties, especially when learners aim to maintain fluidity in longer, multisyllabic words. Addressing this challenge will require targeted pronunciation drills that practice affricates in various word structures and positions, particularly in challenging contexts like the beginnings of words or within sound clusters.

4.2.2 Influence of Word Position on Affricate Sounds

The position of affricates within words significantly impacts pronunciation accuracy. Participants mispronounced affricates more frequently at the beginning of words (e.g., "Jazz" and "Journey") than in medial or final positions (e.g., "Matches"). This trend

indicates that students are more accustomed to encountering affricate sounds in certain contexts, underscoring the necessity of comprehensive pronunciation practice across various word positions.

Data reveal that affricates at the beginning of words—such as "Jazz" and "Journey"—are often pronounced with less accuracy compared to those found in medial or final positions, such as "Matches" and "Ditch." This pattern is significant, as it highlights the challenges students face when affricates occur in positions where they are less familiar due to differences in their native language. In Vietnamese, affricates or similar sounds typically occur in different positions within words compared to English. While Vietnamese contains sounds like /tʃ/ and /dʒ/, which function similarly to English affricates, they rarely appear in initial positions or complex clusters. Consequently, students may struggle more with affricates at the beginning of English words, as they must navigate ingrained phonetic habits from their first language.

The stress context of the affricate—whether in a stressed or unstressed syllable—also influences pronunciation. Stressed syllables generally receive more attention and precision, while unstressed syllables may be glossed over, leading to omissions or incorrect articulations. For instance, in "Journey," where the affricate occurs in the first stressed syllable, students may focus on the sound but still face difficulties due to its unfamiliar position. In contrast, when affricates are found in unstressed syllables, they may be more prone to substitution or omission errors. Isolating affricates in different syllabic positions through pronunciation exercises could help students overcome these challenges.

4.2.3 Common Pronunciation Errors of Nasals

Several pronunciation errors were identified in nasal sounds, reflecting interference from the participants' native language and challenges related to the positioning of nasal sounds within words: first, it is the omission of Nasal Sounds. A frequent error was the complete omission of nasal sounds, particularly in words like "conquer" and "tranquility," where the nasal appears in the middle or at the end. This tendency may stem from the absence of similar nasal sounds in Vietnamese phonetics, especially in comparable positions. The unfamiliar placement of nasal sounds can lead to confusion, resulting in their omission during pronunciation. This indicates a crucial area for improvement, as consistent exposure to these sounds in varied contexts may help students develop greater familiarity and accuracy over time. Second, it should be the substitution errors. Another prevalent issue was the substitution of nasal sounds with other consonants. For example, the /ŋ/ sound in words like "sink" and "bang" was often replaced by /n/ or /m/, which are sounds more familiar to Vietnamese speakers. This substitution often occurs unconsciously, as students default to using sounds they are comfortable with from their native language. Such patterns suggest that phonetic training should focus not only on the articulation of specific nasal sounds but also on enhancing awareness of their correct usage across different phonetic environments. Third, there would be the difficulty with multisyllabic words. The analysis revealed that multisyllabic

words, such as “tranquility” and “conquer,” exhibited significantly higher rates of mispronunciation compared to simpler, monosyllabic words like “stamp” and “mat.” This discrepancy indicates that a word’s complexity—both in syllable count and phonetic structure—can substantially influence a student's ability to pronounce nasal sounds accurately. As word complexity increases, so does cognitive load, making it more challenging for learners to maintain correct pronunciation throughout the word. This underscores the importance of providing targeted practice that addresses both nasal sounds and the broader aspects of syllable structure and rhythm in complex words.

Overall, these common pronunciation errors highlight the need for tailored instructional approaches that consider the phonetic challenges presented by nasal sounds and the specific linguistic backgrounds of learners. By integrating focused phonetic exercises, increased exposure to multisyllabic words, and strategies for addressing native language interference, educators can significantly enhance students' pronunciation skills and boost their overall confidence in speaking English.

4.2.4 Nasal Sound Pronunciation Patterns

Beyond affricates, the study also assessed the pronunciation of nasal sounds, revealing a wide range of accuracy levels among participants. Simpler, monosyllabic words such as “stamp” (87.10%) and “climb” (77.42%) demonstrated high rates of correct pronunciations, suggesting that students found these words easier to articulate. The straightforward phonetic structures of these words likely contributed to their success, as the nasal sounds were positioned in familiar and less complex contexts. Conversely, words like “conquer” (67.74%) and “tranquility” (41.94%) posed significant challenges for students, primarily due to their complex structures. The increased syllable count and intricate arrangement of sounds in these words may have overwhelmed learners, leading to higher rates of mispronunciation. The difficulties encountered with these more complicated terms highlight the importance of focusing on specific phonetic features and syllable structures that contribute to errors.

To enhance pronunciation accuracy for nasal sounds, it would be beneficial to implement targeted practice that not only emphasizes simpler words but also gradually introduces more complex structures. By providing students with exercises that build from basic to advanced levels of difficulty, educators can help improve their confidence and proficiency in articulating nasal sounds across various contexts. This approach will ultimately enhance their overall communicative competence in English.

4.2.5 Solutions

In light of these findings, it is evident that the pronunciation of both affricates and nasal sounds necessitates focused and sustained practice among students. Addressing the common errors identified in this study is crucial for enhancing students’ phonetic skills.

For affricates, targeted pronunciation exercises should emphasize both the stop and fricative components of these sounds. Students must learn to produce both parts in combination to achieve accurate pronunciation. Phonetic drills focusing on minimal

pairs—words differing only by the affricate sound—can be particularly effective. Additionally, incorporating listening exercises will reinforce the auditory distinction between affricate sounds and their substitutes, enhancing students' perceptual skills.

Regarding nasal sounds, students require extra practice with complex, polysyllabic words where nasal sounds are more likely to be omitted or substituted. Activities that encourage students to sustain nasal sounds across different syllabic positions will be vital for their development. Techniques such as breaking down words into syllables and emphasizing the nasal sounds during pronunciation can provide structured support. Furthermore, leveraging technology can significantly enhance the learning experience. Tools like speech recognition software or pronunciation apps can offer immediate feedback, allowing students to identify and correct errors in real time. This immediate response mechanism aids in improving accuracy and helps students develop greater awareness of their pronunciation patterns over time.

Incorporating these elements into a comprehensive pronunciation curriculum will empower Vietnamese learners to overcome the specific challenges posed by affricates and nasals. By focusing on these targeted strategies, educators can facilitate the development of more intelligible and fluent speech among students, ultimately enhancing their overall communicative competence in English.

5. Conclusion

5.1. Conclusion

This research study examined the pronunciation challenges encountered by first-year high-quality English language students at the School of Foreign Languages, Can Tho University, Vietnam, with a particular focus on affricates (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, and /ŋ/). Employing a systematic approach that integrated both qualitative and quantitative methodologies, we aimed to assess students' awareness and performance in pronouncing these phonetic elements while proposing effective solutions for addressing their pronunciation difficulties.

The findings provided valuable insights into the participants' pronunciation capabilities. Notably, students demonstrated higher accuracy with shorter, simpler words compared to more complex or polysyllabic terms. The prevalence of substitution errors, where affricates were replaced by sounds not found in English, underscores the influence of the Vietnamese phonetic system on their pronunciation. This highlights a critical aspect of language learning: the necessity for targeted phonetic training to tackle the unique articulatory challenges posed by affricates.

Furthermore, the position of affricates within words significantly affected students' performance. Mispronunciations were more frequent at the beginning of words, suggesting that students have not fully internalized the correct articulatory patterns for these sounds across different contexts. This finding emphasizes the need for comprehensive instructional strategies that encompass a wider range of practice contexts, allowing students to develop their skills more holistically. Similarly, the analysis of nasal

sounds revealed a varied spectrum of pronunciation accuracy. While students displayed proficiency with simpler, monosyllabic words, the complexity inherent in multisyllabic words often posed significant challenges. The frequent occurrence of omission and substitution errors further illustrates the need for targeted pedagogical interventions focusing on the specific phonetic characteristics of nasal sounds, especially in complex word structures.

Based on these findings, the researchers propose several actionable solutions aimed at enhancing students' pronunciation performance. First, incorporating focused phonetic exercises into the curriculum is essential, particularly emphasizing the articulation of affricate and nasal sounds. Utilizing technology, such as language applications like ELSA, can provide students with real-time feedback on their pronunciation, facilitating self-correction and improvement. Additionally, interactive classroom activities and phonetic drills can reinforce the correct production of these sounds. Moreover, continuous assessment and monitoring of students' pronunciation progress will enable educators to identify persistent challenges and implement timely interventions. By adopting a multifaceted approach that combines direct instruction, technology, and regular feedback, educators can significantly enhance students' pronunciation skills, ultimately contributing to their overall language proficiency.

In conclusion, this study underscores the importance of understanding the specific pronunciation challenges faced by first-year English language students. By addressing these issues through targeted training and comprehensive instructional strategies, we can create a more effective language learning environment that equips students with the necessary skills to communicate confidently and competently in English. The insights gained from this research serve as a foundation for future studies and pedagogical developments aimed at improving pronunciation within English language education.

5.2 Pedagogical Implications

5.2.1 For EFL Students

To enhance their learning experience with affricates (/dʒ/ and /tʃ/) and nasal sounds (/n/, /m/, and /ŋ/), EFL students should consider several key strategies: First of all, it is their self-directed practice. Regular practice is essential for mastering pronunciation. Students should be encouraged to use pronunciation apps like ELSA, which provides immediate feedback on their speech. This interactive learning approach allows students to identify and correct mispronunciations independently, thereby reinforcing their phonetic awareness. Additionally, recording their own voices during practice sessions can heighten their consciousness of articulation, enabling them to make necessary adjustments. Secondly, it would be peer collaboration. Working in pairs or small groups can significantly enhance the learning experience. Collaborative practice allows students to engage in pronunciation drills together, fostering a supportive environment where they can provide constructive feedback to one another. This approach not only reinforces correct pronunciation but also builds confidence, as students learn from each other's strengths and weaknesses. And last but not least, it should be their goal setting.

Establishing specific, achievable objectives can motivate students to improve their pronunciation skills. By setting clear goals related to mastering affricate and nasal sounds, students can track their progress and celebrate their improvements. Incorporating these goals into their study routines, along with regular reflections on their learning journey, cultivates a sense of ownership and responsibility for their pronunciation development.

With self-directed practice, peer collaboration, and goal-setting, EFL students can navigate the complexities of affricate and nasal sounds more effectively, leading to enhanced pronunciation and overall proficiency in English.

5.2.2 For EFL Classroom Teachers

For EFL classroom teachers, several implications can enhance students' pronunciation skills. Targeted training is the first tip. Developing focused phonetic exercises specifically for the /dʒ/ and /tʃ/ sounds is crucial. Incorporating auditory discrimination exercises along with articulation practice can significantly enhance students' proficiency in these affricate sounds. And secondly, it would be engaging in classroom activities. Classroom teachers should implement more interactive classroom activities that emphasize challenging affricate and nasal sounds. Drills that provide real-time feedback on pronunciation, such as using language apps like ELSA, can be integrated into the curriculum to create a dynamic learning environment. And finally, it would pose their continual assessment: Regular assessments and monitoring of students' pronunciation progress are essential. These evaluations can help educators identify specific areas where students continue to struggle, allowing for timely interventions. By adjusting instructional strategies based on assessment outcomes, teachers can provide targeted support that meets the individual needs of their students.

By focusing on targeted training, engaging classroom activities, and continual assessment, EFL teachers can effectively support their students in overcoming pronunciation challenges, ultimately leading to improved communication skills in English.

5.3 Limitations

First, while this research focuses on affricate and nasal sounds, which are indeed critical for pronunciation, it may inadvertently overlook other significant phonetic challenges that Vietnamese learners encounter when learning English. Issues related to vowel sounds, diphthongs, and consonant clusters also play a crucial role in overall pronunciation difficulties. Expanding the scope of our research to include these elements could provide a more comprehensive overview of the pronunciation challenges faced by learners.

Second, the analysis could benefit from a deeper exploration of the cultural factors influencing language acquisition. Cultural attitudes towards English learning, societal expectations, and exposure to English-speaking environments significantly impact learners' experiences. By examining how cultural perceptions shape learners' attitudes

and experiences with pronunciation, we can gain a richer understanding of the challenges involved in mastering English pronunciation.

5.4 Suggestions for Further Research

To build upon the findings of this study, future research should expand its focus to include a broader range of phonetic challenges faced by EFL students. Specifically, examining vowel sounds, diphthongs, and consonant clusters would provide a more comprehensive understanding of the pronunciation difficulties encountered at various proficiency levels.

Additionally, researchers could explore how these phonetic elements interact with affricates and nasal sounds, offering insights into the overall pronunciation landscape. Conducting studies across different educational contexts and with diverse learner populations could yield valuable information on common challenges and effective teaching strategies. Incorporating a wider array of phonetic elements will not only enrich the existing body of research but also better equip educators to address the nuanced pronunciation needs of EFL students.

Also, in future research, incorporating the PRAAT app could significantly enhance the analysis of pronunciation challenges. PRAAT is a powerful tool for phonetic analysis that allows researchers to visualize and measure various aspects of speech, such as formant frequencies, pitch, and intensity. By using PRAAT, researchers can gain deeper insights into the specific articulatory features of affricates and nasal sounds, enabling a more precise understanding of students' pronunciation patterns. This technological approach would complement traditional qualitative and quantitative methods, providing a more robust framework for examining the nuances of phonetic performance among language learners.

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Conflict of Interest Statement

The author declares no conflicts of interest.

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