A CONTRASTIVE ANALYSIS OF VIETNAMESE AND ENGLISH VOWEL PHONEME SYSTEMS

ĐỐI CHIẾU HỆ THỐNG ÂM VỊ NGUYÊN ÂM TIẾNG VIỆT VÀ TIẾNG ANH

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Abstract - In the era of English as a Lingua Franca (ELF), achieving a high level of pronunciation intelligibility has become a pivotal goal, surpassing the traditional emphasis on native-like accuracy. The research employs a qualitative method to analyze the phonological and phonetic characteristics of vowels in both languages. Subsequently, a quantitative approach is implemented for empirical testing of error predictions by statistically analyzing the frequency of actual pronunciation errors among participants across the contrasted vowel groups. The contrastive analysis findings reveal that significant disparities in the number, distinctive criteria, and specific pronunciation features between the two systems are the primary cause of negative transfer from Vietnamese, distorting English sounds pronounced. The study also provides some suggestions to overcome the negative influence of Vietnamese learners' native language, contributing to an improved quality of teaching and learning English pronunciation in Vietnam.

Key words - Phoneme; language transfer; vowel; pronunciation errors; contrastive analysis.

Tóm tắt - Trong bối cảnh tiếng Anh đóng vai trò là ngôn ngữ giao tiếp quốc tế, khả năng phát âm đạt mức độ nhận hiểu cao là yếu tố then chốt thay vì chỉ hướng tới sự chuẩn xác tuyệt đối theo giọng bản ngữ. Nghiên cứu áp dụng phương pháp định tính, miêu tả, phân tích đặc điểm ngữ âm - âm vị của nguyên âm trong cả hai ngôn ngữ. Sau đó, phương pháp định lượng được triển khai nhằm kiểm chứng các tiên đoán lỗi thông qua việc thống kê tần suất các loại lỗi phát âm thực tế của nghiệm thể đối với những nhóm nguyên âm đã được đối chiếu. Kết quả phân tích đối chiếu chỉ ra những khác biệt về số lượng, tiêu chí phân biệt và đặc điểm phát âm giữa hai hệ thống là nguyên nhân chính dẫn đến lỗi chuyển di tiêu cực từ tiếng Việt làm biến dạng âm thanh tiếng Anh. Nghiên cứu cũng đề xuất một số biện pháp khắc phục những ảnh hưởng tiêu cực của tiếng mẹ đẻ, góp phần cải thiện chất lượng dạy và học phát âm tiếng Anh tại Việt Nam.

Từ khóa - Âm vị; chuyển di ngôn ngữ; nguyên âm; lỗi phát âm; phân tích đối chiếu.

1. Introduction

In the context of globalization, English plays the role of an international language and serves as an essential tool in communication, learning, and professional activities. International studies have also indicated that pronunciation instruction, including the vowel system, has a positive impact on learners' listening comprehension skills, thereby helping improve their communicative competence [1]. In Vietnam, studies by D. T. Thuat [2], H. T. Chau [3], and several more recent works have also addressed the phonetic characteristics of Vietnamese and the difficulties encountered in learning English. However, in-depth contrastive studies of the English - Vietnamese vowel systems remain limited, particularly in explaining common pronunciation errors made by Vietnamese learners. Therefore, investigating the current situation and identifying solutions to improve accurate English pronunciation among Vietnamese learners is a practical necessity. The findings of this study not only add to the scientific foundation for phonetic - phonological contrastive analysis, but also contribute to the implementation of foreign language teaching and learning innovation programs in line with the State's orientation toward making English a second language in schools [4].

- Research objective: This study aims to contrast the English and Vietnamese vowel phoneme systems in order to identify the fundamental similarities and differences between the two languages. On that basis, it seeks to explain common pronunciation errors made by Vietnamese speakers when using English and to propose several appropriate solutions to enhance the effectiveness of teaching and learning English pronunciation.

- Research questions:

1, What are the similarities and differences between the English and Vietnamese vowel phoneme systems?

2, What causes the difficulties and errors in English vowel pronunciation among Vietnamese speakers?

2. Research design

2.1. Research methods

- Qualitative method: This method focuses on describing the phonetic and phonological characteristics of Vietnamese and English vowels. The main sources used for analysis and contrast include studies on Vietnamese phonetics by D. T. Thuat [2] and H. T. Chau [3]. For English, the study is based on the articulatory theory of P. Ladefoged and K. Johnson [5]. In addition, empirical data were collected directly from the research participants through a survey.

- Descriptive method: this method presents the articulatory and phonological characteristics of vowels in the two languages, based on existing phonetic - phonological studies.

- Quantitative method: the study uses statistical tools to quantify the data collected from the actual pronunciation survey of 125 participants. This method serves as empirical testing for predictions about learners' difficulties, helping identify the types of errors with the highest frequency of occurrence and objectively assess the extent of the negative transfer from the mother tongue.

- Contrastive method: this method compares the English and Vietnamese vowel systems, thereby identifying similarities and differences and explaining the causes of pronunciation errors.

To ensure research ethics, information about the survey participants was kept confidential; all interviews were conducted on a completely voluntary basis; the purpose of the study was clearly explained; personal information was strictly protected; and the information provided by participants was used solely for the purposes of this research project.

2.2. Data collection instrument

The study uses a survey questionnaire developed on the basis of the theoretical framework of pronunciation errors proposed by P. Ladefoged and K. Johnson [5]. To ensure reliability and validity, the questionnaire content focuses on identifying vowel pronunciation errors in different acoustic environments. This instrument was refined after expert consultation and a pilot survey in order to ensure objectivity in measuring the pronunciation situation of 125 students.

2.3. Survey sample and sampling criteria

The participants were students whose mother tongue is Vietnamese and who were learning English as a foreign language.

They were high school students with English proficiency, according to the 6-level Foreign Language Proficiency Framework for Vietnam, equivalent to the end of Level 2 (A2) and the beginning of Level 3 (B1). This is the stage at which phonological transfer errors are most likely to become apparent.

The students participated entirely voluntarily and were clearly informed of the purpose of confidentiality of the information collected for research purposes.

3. Scope of the study

Spatial scope: The study involved 125 Grade 10 students (upper secondary school level) studying at the Leogo English School system.

Temporal scope: The study was conducted from May 2025 to October 2025.

Content scope: The article focuses on describing and contrasting the English and Vietnamese vowel groups in order to identify the similarities and differences between the two languages that affect Vietnamese learners' English pronunciation.

4. Theoretical background

4.1. Vowels

Ladefoged and Johnson define vowels as sounds produced when the airstream from the lungs passes through the larynx and oral cavity in an open configuration, without any significant obstruction [5, pp. 204 - 206]. Vowels are identified mainly by the stable resonances (formants) of the vocal tract. Each vowel has its own acoustic characteristics that help distinguish it from other vowels, such as the degree of mouth opening, tongue position, and lip shape. Thanks to these factors, we can easily distinguish the vowel /i:/ from /u:/ in the IPA chart, although both are long vowels.

In essence, vowels are sounds produced by an airstream passing through the speech apparatus without obstruction, and the description of vowels is usually based on three main criteria: tongue position (front - back), degree of mouth opening (close - open), and lip shape (rounded - unrounded) [5, pp. 204 - 206]. From a phonological perspective, Odden [6, pp. 45 - 47] states that "a vowel is the central unit that forms a syllable - that is, the syllable nucleus." For example, in the Vietnamese word "hết" /het/, the vowel /e/ functions as the syllable nucleus.

Linguists commonly use the three articulatory features mentioned above to describe, identify, and distinguish different vowel units in language.

4.2. A contrastive analysis of Vietnamese and English vowels

4.2.1. The Vietnamese vowel system

a. Overview of the Vietnamese vowel system

- Monophthongs: Researchers such as D. T. Thuat [2], M. N. Chu, V. D. Nghieu, and H. T. Phien [7] argue that Vietnamese has 13 monophthongs, in which pairs such as /ɛ, ɛ̆/, /ɤ, ɤ̆/, /a, ă/, /ɔ, ɔ̆/ are distinguished by length. This view helps clarify certain English pronunciation errors made by Vietnamese speakers. In contrast, some authors such as C. D. Tu, H. V. Thung, and N. X. Tru [8] recognize only 11 vowels and do not treat /ɛ̆/ and /ɔ̆/ as independent phonemes, but rather as short variants of /ɛ/ and /ɔ/, because the difference in length does not change word meaning and therefore does not meet the criterion for phonemic distinction. This article follows the classification of 13 vowels in order to reflect the Vietnamese vowel system more comprehensively.

- Diphthongs: Vietnamese linguists such as N. T. Can [9], D. H. Châu [10], and C. X. Hao [11] agree that Vietnamese has three main diphthongs: /i‿e/, /u‿ɤ/, and /u‿o/. These are vowels in which the tongue and lip positions show a clear movement from an initial vowel element to a final vowel element within the same syllable.

- Triphthongs: According to D. T. Thuat [2, pp. 190 - 192], Vietnamese does not have triphthongs according to the standard IPA definition; that is, there is no sequence of three continuously gliding vowels within the same syllable. Combinations such as "uôi, iêu, ươi" are in fact combinations of a diphthong and a final semivowel, and are therefore not considered true triphthongs.

The role of tones in the Vietnamese phonological system: Vietnamese is a tonal language in which pitch and the contour of the voice on each syllable play a meaning-distinguishing role. The six tones of Northern Vietnamese (level, falling, rising, dipping, broken rising, and heavy) directly affect vowel pronunciation. To pronounce Vietnamese vowels correctly, it is necessary to coordinate tongue position, lip shape, and tonal movement.

b. Detailed description of the Vietnamese monophthong system

The system of 13 monophthongs is classified on the basis of three main criteria: tongue height, tongue position, and lip rounding.

Table 1. *Description of Vietnamese monophthongs [2]*

Vowel quality	Mouth opening	Tongue position, lip shape		
		Front, unrounded	Central, unrounded	Back, rounded
Fixed	Close	/i/	/ɯ/	/u/
	Example	*ý chí*	*từ từ*	*tu hú*
	Mid	/e/	/ɤ/, /ɤ̆/	/o/
	Example	*ê chề*	*bơ phờ, ân cần*	*hồ đồ*
	Open	/ɛ/, /ɛ̆/	/a/, /ă/	/ɔ/, /ɔ̆/
	Example	*e thẹn, anh ách*	*la đà, ăn năn*	*co ro, tóc*

Note on allophones: Although the table above lists 13 monophthongs, some of them (/ɛ̆/, /ɤ̆/, /ă/, /ɔ̆/) are often regarded as ultra-short variants of their corresponding vowels (/ɛ/, /ɤ/, /a/, /ɔ/) when they occur before final consonants. According to D. T. Thuat [2, pp. 196], this distinction is due to Vietnamese speakers' perception of vowel length, and whether they are identified as separate phonemes or as variants may depend on the researcher's viewpoint.

c. Detailed description of the Vietnamese diphthong system

Vietnamese diphthongs are formed by gliding from the first vowel element to the second vowel element in pronunciation [2].

- Diphthong /i‿e/: Its allophones have two forms depending on the phonetic environment: /i‿ɛ/ occurs when the syllable has a final consonant, for example, miết /miɛt/, and /i‿ə/ occurs when the final consonant is "zero" (that is, there is no final consonant), for example, kia /kiə/.

- Diphthong /u‿ɤ/: This vowel also has two allophonic forms: /u‿ɤ/ usually occurs when the syllable has a final consonant, as in /mɯɤn/, and /u‿ə/ when the final consonant is "zero," for example, mưa /mɯə/.

- Diphthong /u‿o/: The allophones of this vowel also have two forms: /u‿o/ occurs when the syllable has a final consonant, for example, buốt /buot/, and /u‿ə/ when the final consonant is "zero," as in búa /buə/.

4.2.2. The English vowel phoneme system

a. Overview of the English vowel system

- Number of monophthongs, diphthongs, and triphthongs:

According to Roach [12, pp. 59 - 70], the English vowel system is commonly described on the basis of two standard varieties: Received Pronunciation (RP), representing standard British English, and General American (GA), representing standard American English.

+ Received Pronunciation: Includes 12 monophthongs, 8 diphthongs, and 5 triphthongs.

+ General American: Includes 11 monophthongs, 6 diphthongs (the number may vary depending on the analysis), and no clear triphthongs as in Received Pronunciation (similar combinations are often pronounced as diphthongs plus /r/ or are simplified).

b. Detailed description of the English monophthong phoneme system

The English monophthong system contains many allophones depending on the phonetic environment [12, pp. 31 - 33]. Specifically, vowels tend to be shorter when they occur before voiceless consonants and longer when they occur before voiced consonants. For example, in *back* /bæk/, the vowel /æ/ is pronounced shorter than in *bag* /bæg/, where /æ/ has a longer duration. In addition, a following /l/ also affects the quality of the preceding vowel; the comparison between *feel* /fiːl/ and *fill* /fɪl/ demonstrates this difference. In General American pronunciation, the presence of a following /r/ creates even clearer variation, especially in *r-colored vowels*.

Stress also plays an important role: vowels in unstressed syllables are often weaker and shorter, with schwa /ə/ being a typical example [5, pp. 83].

c. Detailed description of the English diphthong phoneme system

In addition to the monophthong system, English also has diphthongs, which are combinations of two simple vowels within the same syllable, creating a clear movement of the tongue from the initial sound to the final sound. The difference between Received Pronunciation and General American is quite evident in this system. Table 2 below presents the diphthongs in the two varieties, based on Roach's description [12, pp. 64 - 67].

Table 2. *Description of English diphthongs in RP and GA [12]*

IPA phoneme (RP)	IPA phoneme (GA)	Structure (vowel 1 + vowel 2)	Example (spelling)
/eɪ/	/eɪ/	/e/ + /ɪ/	*say, face*
/aɪ/	/aɪ/	/æ/ or /ɑ/ + /ɪ/	*my, price*
/ɔɪ/	/ɔɪ/	/ɔ/ + /ɪ/	*boy, coin*
/əʊ/	/oʊ/	/ə/ + /ʊ/	*go, home*
/aʊ/	/aʊ/	/æ/ or /ɑ/ + /ʊ/	*now, mouth*
/ɪə/	/ɪr/	/ɪ/ + /ə/	*near, here*
/eə/	/ɛr/	/e/ + /ə/	*hair, there*
/ʊə/	/ʊr/	/ʊ/ + /ə/	*tour, poor*

In General American, diphthongs ending in /ə/ in Received Pronunciation are often accompanied by final /r/; for example, /ɪə/ in RP becomes /ɪr/ in GA, /eə/ becomes /ɛr/, and /ʊə/ becomes /ʊr/. In addition, the glide direction and endpoint of diphthongs also differ, as illustrated by the pair /əʊ/ in RP and /oʊ/ in GA, in which the initial element in GA is clearer and closer.

d. Description of the English triphthong phoneme system

In Received Pronunciation, triphthongs are formed by adding the glide /ə/ after certain diphthongs, creating a sequence of three vowels within one syllable. Table 3 presents representative triphthongs in Received Pronunciation [12, pp. 68 - 70].

Table 3. *Description of English triphthongs in RP [12]*

IPA phoneme (RP)	Structure (diphthong + /ə/)	Example (spelling)
/aɪə/	/aɪ/ + /ə/	*fire, higher*
/aʊə/	/aʊ/ + /ə/	*hour, tower*
/əʊə/	/əʊ/ + /ə/	*lower, grower*
/eɪə/	/eɪ/ + /ə/	*layer, player*
/ɔɪə/	/ɔɪ/ + /ə/	*loyal, employer*

In General American, these combinations are often pronounced as diphthongs followed by /r/ (/aɪr/, /aʊr/, /əʊr/, /eɪr/, /ɔɪr/) or tend to be simplified.

5. Results and discussion

5.1. Similarities and differences in the contrastive analysis of Vietnamese and English vowels

5.1.1. Similarities in the contrastive analysis of Vietnamese and English vowels

In terms of quantity, based on the standard IPA descriptive framework, English has 12 monophthongs, while Vietnamese has 13 monophthongs. Thus, the number of monophthongs in the two languages is relatively comparable. Regarding tongue position, both English and Vietnamese have vowels that fall into three groups according to this criterion. The similarities between the English and Vietnamese vowel systems in terms of tongue position can be summarized in Table 4.

Table 4. *English and Vietnamese vowels by tongue position*

Vowel	Front	Central	Back
English	/iː/, /ɪ/, /ɛ/, /æ/	/ɜː/, /ʌ/, /ə/	/uː/, /ʊ/, /ɔː/, /ɒ/, /ɑː/
Example	*feel, fill, pet, bad*	*bird, but, mother*	*pool, pull, horse, soft, dark*
Vietnamese	/i/, /e/, /ɛ/, /ĕ/	/ɯ/, /ɤ/, /ɤ̆/, /a/, /ă/	/u/, /o/, /ɔ/, /ɔ̆/
Example	*đi, kế, vè, anh*	*chữ, ngơ, ân, mắt*	*đủ, tô, nhỏ, góp*

In terms of mouth opening, both English and Vietnamese have vowels that fall into four groups according to the criterion of mouth opening, as shown in Table 5 below.

Table 5. *English and Vietnamese vowels by mouth opening*

Vowel	Close	Half-close	Half-open	Open
English	/iː/, /ɪ/, /uː/, /ʊ/	/ɜː/, /ə/	/ɛ/, /ʌ/, /ɔː/, /ɒ/	/æ/, /ɑː/
Example	*see, sit, too, foot*	*bird, ago*	*bed, but, door, dog*	*cat, car*
Vietnamese	/i/, /ɯ/, /u/	/e/, /ɤ/, /ɤ̆/, /o/	/ĕ/, /ɔ/, /ɛ/, /ɔ̆/	/a/, /ă/
Example	*mi, tư, thu*	*bê, mơ, mới, cô*	*ách, co, mẹ, học*	*ta, tắm*

In terms of lip shape, both English and Vietnamese have vowels belonging to two groups according to this criterion, as summarized below.

Table 6. *English and Vietnamese vowels by lip shape*

Vowel	Unrounded	Rounded
English	/iː/, /ɪ/, /ɜː/, /ɛ/, /ʌ/, /ə/, /æ/	/uː/, /ʊ/, /ɔː/, /ɒ/, /ɑː/
Example	*see, sit, bird, bed, but, ago, cat*	*too, foot, door, dog, car*
Vietnamese	/i/, /ɯ/, /e/, /ɛ/, /ɤ/, /ɤ̆/, /ĕ/, /a/, /ă/	/o/, /ɔ/, /u/, /ɔ̆/
Example	*im, tư, bê, mẹ, mơ, cần, sen, ta, tắm*	*cô, co, thu, học*

5.1.2. Differences in the contrastive analysis of Vietnamese and English vowels

- Vietnamese vowels (XL1) differ from English vowels (XL2): (XL1 ≠ XL2)

+ /u/ and /ʊ/: both are back, high, rounded vowels. However, Vietnamese /u/ has a longer duration, whereas English /ʊ/ is a short vowel. This difference in duration is the direct reason why learners tend to lengthen the English short vowel. For example: Vietnamese /u/: thu, mù, cung,...; English /ʊ/: cook, book, full,...

+ /a/ and /ɑː/: Vietnamese /a/ is a central, open, unrounded vowel, whereas English /ɑː/ is a back, open, and lengthened vowel. The difference in tongue body position (central versus back) and duration causes learners to pronounce English /ɑː/ without sufficient depth and length, leading them to substitute it with the /a/ vowel of their mother tongue.

+ /i/ and /ɪ/: Vietnamese /i/ has intermediate duration and is tenser than English /ɪ/ (short and lax). Vietnamese learners tend to use a tense vowel to pronounce a lax one, causing English /ɪ/ to be pronounced too tensely. For example: English /ɪ/: ship; Vietnamese /i/: tin.

+ /e/ and /ɛ/: Vietnamese /e/ (close-mid) has a higher tongue position than English /ɛ/ (open-mid). English /ɛ/ is pronounced too closed by Vietnamese learners because it is assimilated to Vietnamese /e/. For example: English /ɛ/: bed; Vietnamese /e/: bê.

+ /o/ and /ɔː/: Vietnamese /o/ (close-mid) has a higher tongue position and shorter duration than English /ɔː/ (open-mid, long). This difference leads to errors in both duration and height in pronunciation. For example: English /ɔː/: door; Vietnamese /o/: ô.

It can be predicted that the differences mentioned above are potential causes of English pronunciation errors among Vietnamese learners.

- Vietnamese vowels (XL1) exist, while English vowels (XL2) do not: (XL1 ∅ XL2)

+ Vietnamese has monophthongs such as /o/ (ô), /ɤ̆/ (â), /ɤ/ (ơ), /ɯ/ (ư), /e/ (ê), and diphthongs such as /i‿e/ - iê, yê, ia, ya (phiền, miền, tiên), /ɯ‿ɤ/ - ươ, ưa (hươu, xưa, thương), /u‿o/ - uô, ua (uống thuốc, múa, lúa), whereas English does not.

- English vowels (XL2) exist, while Vietnamese vowels (XL1) do not: (XL2 ∅ XL1)

+ English has triphthongs, whereas Vietnamese does not.

+ English has diphthongs such as /aɪ/, /ɔɪ/, /ʊə/, /eə/, and /aʊ/, whereas Vietnamese does not.

+ English has 8 diphthongs, representing 8 different types of articulatory movement within one syllable. These are classified according to glide direction: closing fronting glides (ending in /ɪ/, e.g. /eɪ/, /aɪ/), closing backing glides (ending in /ʊ/, e.g. /əʊ/, /aʊ/), or centering glides (ending in /ə/, e.g. /ɪə/, /eə/), whereas Vietnamese does not have such a system.

Thus, Vietnamese learners may encounter difficulties in pronouncing English triphthongs and may assimilate these phonemes, because they are pronounced rapidly and are therefore difficult for learners to distinguish.

5.2. Analysis of the causes of difficulties and errors in English vowel pronunciation among Vietnamese speakers

Based on the results of the phoneme-system contrastive analysis in Section 5.1 and the statistical data on actual errors from 125 survey samples, summarized in Table 7 below, the study identifies that these pronunciation errors do not occur randomly but stem from three core causes of negative language transfer.

Table 7. *Statistics of English vowel pronunciation error groups among students (n = 125)*

Pronunciation error group	Specific error characteristics	Frequency (Students)	Percentage (%)
Errors related to complex vowel structures	Simplification of triphthongs, omission of glide sounds (e.g: *flower* pronounced as /flaʊ/).	115	92.0%
Errors related to vowel length	Inability to distinguish long and short vowels; lengthening short vowels (e.g: /ʊ/ in *foot* pronounced as a long vowel similar to Vietnamese /u/).	102	81.6%
Errors related to vowel tenseness/laxness	Use of tense vowels instead of lax vowels (e.g: /ɪ/ in *sit* pronounced as the tense /iː/ as in Vietnamese *ti vi*).	95	76.0%
Vowel assimilation errors	Replacement of English vowels with acoustically similar Vietnamese vowels (e.g: /ɛ/ pronounced as *ê* /ɛ/; /ɔː/ pronounced as *ô* /o/).	88	70.4%

The quantitative results in Table 7 constitute empirical evidence confirming the predictions derived from the theoretical contrastive analysis. The correspondence between the high frequency of errors and the articulatory differences shows that the predictions about learners' difficulties are scientifically well grounded.

5.2.1. Cause stemming from the absence of an equivalent structure (Structural errors)

This is the most common group of errors (92%). The main cause is that Vietnamese has no triphthong system at all according to the IPA definition. Because learners do not have a ready-made "sound pattern" in their native language memory, they tend to simplify these combinations into diphthongs or monophthongs to fit the monosyllabic pronunciation habit of Vietnamese. As a result, the final glides are eliminated, completely distorting the target sounds.

5.2.2. Cause stemming from the transfer of distinctive criteria (Errors of length and tenseness)

The difference in the acoustic nature of the two systems is the cause of errors in length and tenseness. Empirical data show that the error rate for the /uː/ - /ʊ/ pair is very high (81.6%). The core reason is phonemic split. Unlike Vietnamese, which has only one corresponding phonemic area at this articulatory position [2], English separates the pair on the basis of length and tenseness to create meaning-distinguishing features [12].

5.2.3. Cause stemming from the tendency toward phoneme assimilation

Assimilation errors (70.4%) arise because learners attempt to narrow the gap between the target language and their mother tongue by seeking the "closest" sounds. Learners tend to assimilate because the Vietnamese vowel /e/ has a narrower mouth opening (higher tongue position) than the English vowel /ɛ/. Because they do not recognize the difference in tongue position, learners assimilate /ɛ/ (English) to /e/ (Vietnamese), leading to an overly closed pronunciation error. Similarly, the long English /ɔː/ is assimilated to the Vietnamese /o/ (ô) because of the similarity in lip rounding, although the tongue height is entirely different.

6. Conclusions and recommendations on solutions to improve the quality of teaching and learning English pronunciation for Vietnamese students

6.1. Conclusions

A comparison of the English and Vietnamese vowel systems shows many similarities in terms of quantity as well as classification based on tongue position, degree of mouth opening, and lip shape. English has 12 monophthongs, whereas Vietnamese has 13, indicating a considerable closeness in quantity. Both languages distinguish between rounded and unrounded vowels and also employ similar degrees of mouth opening in the process of articulation. These similarities suggest that Vietnamese learners have certain advantages when approaching English pronunciation, as they are already familiar with many basic phonetic features.

6.2. Recommendations on solutions to improve the quality of teaching and learning English pronunciation for Vietnamese students

6.2.1. For teachers

Teachers should apply highly interactive pronunciation exercises such as language games and pair or group practice, while also organizing additional practice sessions for students who experience difficulties in pronouncing vowels.

They should use supporting tools and software such as Sounds of Speech, YouGlish, and Sensay to help students improve their ability to distinguish vowels through immediate feedback.

They should provide detailed learning materials on the differences in vowel pronunciation between English and Vietnamese.

They should apply an articulatory analysis approach. In particular, for complex structures such as diphthongs and triphthongs, teachers should break down the articulatory components. Specifically, triphthongs (e.g. /aɪə/, /eɪə/) should be taught not as a sequence of three isolated sounds but as a diphthong with schwa /ə/ (in British English, RP) or with /r/ (in American English, GA). This approach helps Vietnamese learners simplify the articulatory process and more easily approach structures that do not exist in their mother tongue.

They should conduct continuous assessment and provide feedback by regularly evaluating students' vowel pronunciation and giving specific feedback to help them correct errors and monitor their progress.

6.2.2. For students

Students should practice pronunciation daily by spending 15 - 20 minutes each day practicing words containing English vowels, using online dictionaries, instructional videos, or pronunciation-learning applications.

They should record and listen again by making recordings during practice and comparing them with standard pronunciation from reliable sources in order to adjust vowel pronunciation errors.

They should participate in English clubs, learn through songs and films, and use applications such as Duolingo, Elsa Speak, or Pronunciation Power to help them maintain frequent exposure to natural intonation.

6.2.3. Improvement of teaching materials

Teaching materials should classify vowels clearly. Materials should categorize English vowels (monophthongs, diphthongs, and triphthongs) and contrast them with Vietnamese so that students understand the differences and similarities between the two languages, thereby creating a solid foundation for pronunciation learning.

Technology should be integrated. Pronunciation-learning applications and practice software should be used so that students can practice vowels anytime and anywhere. Specifically, teachers should use QR codes linked to visual learning resources such as BBC Learning English to simulate accurate mouth shapes. At the same time, the application of artificial intelligence (AI) software such as Elsa Speak and Pronunciation Power will provide instant feedback, helping students self-correct errors related to vowel duration and tenseness. In addition, the use of interactive platforms such as Quizlet or Kahoot to design minimal-pair exercises will make the training process more vivid and strengthen vowel recognition naturally.

Teaching materials should be updated regularly. It is necessary to ensure that materials are updated in accordance with the latest research in linguistics and teaching methodology so that students can access modern learning approaches.

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