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ФИЛОЛОГИЯ

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IMPROVING PRONUNCIATION FOR NON-ENGLISH MAJOR STUDENTS AT TECHNICAL UNIVERSITIES

Abstract

The way we speak immediately conveys information about us to others. Those who speak English well are more likely to be understood, even if they make mistakes in other areas. Conversely, individuals with unclear pronunciation may struggle to be understood, regardless of their grammar proficiency. Moreover, people often judge others based on their speech, and thus, poor pronunciation may lead to perceptions of incompetence or lack of knowledge. However, many language learners, especially those not majoring in language studies, fail to recognize the importance of pronunciation in language learning. Moreover, due to time constraints in university English courses, some instructors overlook pronunciation in their teaching plans, focusing instead on skills assessed in exams. Therefore, this paper highlights the significance of effective pronunciation, including English vowels, consonants, word and sentence stress, and intonation in communication. It also explores common pronunciation errors made by non-English major students when speaking English. Finally, the paper offers practical suggestions for improving the pronunciation skills of non-English major students at technical universities.

Keywords:

pronunciation, stress, intonation, non-English major students.

1. Introduction

The acquisition of English language skills, particularly pronunciation, holds significant importance for non-English major students seeking proficiency in a globalized world where English is considered the primary medium of communication. Despite being non-English majors, these students encounter English in various academic, professional, and social contexts, necessitating a solid foundation in pronunciation for effective communication. However, due to diverse linguistic backgrounds, limited exposure to authentic English environments, and differing instructional approaches, non-English major students often face challenges in understanding English pronunciation. Therefore, researching students' pronunciation mistakes is essential to identify common errors, understand the main factors causing these errors, and design targeted interventions to address them. By addressing pronunciation issues, educators can empower non-English major students to communicate confidently and effectively in English, thereby enhancing their academic and professional opportunities. This paper explores the significance of pronunciation in English language learning for non-English major students at technical universities and offers some suggestions for students to improve their English speaking ability in different situations.

2. An overview of english pronunciation

In communication, it is important for the speaker to convey the message effectively and for the listener to understand the intended message. This means that communicators must comprehend what they hear in the target language and accurately produce messages in that language. Therefore, even if learners have a rich vocabulary, incorrect pronunciation can lead to misunderstandings and communication breakdowns. When unable to pronounce words correctly, communicators may lose confidence, refrain from speaking English altogether, and struggle with other skills, particularly listening. Correct pronunciation entails articulating sounds to convey messages effortlessly. In other words, correct pronunciation is when native speakers do not need to focus or strain to understand you. Mispronunciations can hinder message transmission and cause communication difficulties. Many learners overlook pronunciation practice, assuming

their speaking skills are adequate because they are understood in class. However, when communicating with non-native speakers, misunderstandings arise due to mispronunciations. Therefore, learners need to grasp the concept of pronunciation and its components.

2.1. The concept of pronunciation

According to the Cambridge Dictionary online, pronunciation is simply defined as "how words are pronounced". Linguist Dalton (1994) describes pronunciation as the production and reception of sounds. In the first sense, pronunciation is seen as the creation and reception of sounds, while in the second sense, sounds are used to achieve effective communication in various contexts. Cook (1996) suggests that "pronunciation is a set of habits of producing sounds". These sound-producing habits are developed through repetition and correction of pronunciation errors. Learning to pronounce a second language involves developing new pronunciation habits and minimizing the influence of one's native language.

2.2. The elements of pronunciation

2.2.1. Vowels and Consonants

In English, sounds are divided into two categories: vowels and consonants, comprising 20 vowels and 24 consonants.

voweis					
1	/i/	fish, it, swim, pitch, since	11	/e/	egg, menu, text, many, healthy
2	/i:/	tree, eat, sleep, team, refund	12	/^/	up, public, money, touch
3	/æ/	fan, tram, crash, tax, bank, cat	13	/ei/	train, save, may, great, they
4	/a:/	garden, starter, glass, cast, car	14	/əʊ/	phone, broke, coat, slow
5	/ɔ:/	sc or e, fl oo r, bald, wall, draw	15	/ai/	bike, sh y , flight, height, eyes
6	/a/	clock, lorry, cost, on, bossy	16	/aʊ/	hour, town, flour, flower
7	/ʊ/	bull, cook, good, should, could	17	/ic/	b oy , sp oi l, enj oy , n oi sy, b oi led
8	/u:/	boot, moody, student, few, shoes	18	/iə/	ear, beer, here, really, serious
9	/3:/	bird, term, third, turn, earn	19	/eə/	chair, fair, rare, area, their
10	/2/	computer again other	20	/252/	sure plural euro tour

Vowels

Consonants

1	/p/	plate, shopping, trip, apply	13	/θ/	thin, healthy, path, thanks, both
2	/b/	bean, build, rabbit, probably	14	/ð/	mother, the, further, weather
3	/k/	court, chemist, mechanic, school	15 /tʃ/ change, pitch, picture, future		change, pitch, picture, future
4	/g/	golf, burger, aggressive, luggage	16	/dʒ/	jealous, just, fridge, judge
5	/f/	food, photo, traffic, laugh	17	/١/	lettuce, salary, sell, trolley, until
6	/v/	van, invest, of, behave, private	18	/r/	result, borrow, written, wrong
7	/t/	try, stupid, strict, worked	19	/w/	wear, white, which, one, once
8	/d/	director, afford, address, bored	20	/j/	yet, year, your, university, yacht
9	/s/	steps, likes, science, twice, scene	21	/m/	mean, summer, lamb, romantic
10	/z/	lazy, lose, loves, trousers	22	/n/	none, tennis, knife, knew, thin
11	/ʃ/	shower, ambitious, special, sugar	23	/ŋ/	si ng , spri ng , thi nk , goi ng
12	/3/	television, decision, usually	24	/h/	handsome, who, whose, hard

2.2.2. Word stress

In his book "Teaching English Pronunciation," Kenworthy (1987) suggests that when an English word has more than one syllable, one of those syllables tends to stand out more than the others. This syllable is pronounced louder, with a longer vowel sound, and clearer consonants. These characteristics mark the syllable as stressed.

Ví dụ: <u>Dic</u>tionary / ˈdɪk.ʃən.ər.i/ Aca<u>de</u>mic / ˌæk.ə ˈdem.ɪk/

Sin<u>cere</u>ly /sɪnˈsɪə.li/

E<u>co</u>nomy /iˈkɒn.ə.mi/

Economic /iː.kəˈnɒm.ɪk/ or /ek.əˈnɒm.ɪk/

Like word stress, sentence stress is pronounced louder, longer, and clearer, aiding listeners in understanding the speaker's meaning. While word stress emphasizes a particular syllable within a word, sentence stress highlights specific words within a sentence. Most English sentences consist of two types of words: content words and function words. Content words typically serve as the key elements of the sentence, conveying its main content or meaning. These words, such as verbs, nouns, adjectives, adverbs, and negation auxiliary verbs, receive sentence stress. On the other hand, function words primarily contribute to the sentence structure or ensure grammatical correctness. These words, including pronouns, prepositions, determiners, and affirmative auxiliary verbs, do not receive sentence stress. However, in spoken language, emphasized words may carry the speaker's implied meaning.

Examples: I don't think she will listen to him.

How long have you been learning English?
She's been working in Italy since October.
You mustn't use your phone on a plane.
I must go to the bank this morning.

Speech is like music, involving variations in intensity or pitch: speakers can modulate their voice intensity during utterance, making it higher or lower at will. Thus, speech also possesses a melody, known as intonation. In English, declarative sentences, imperative sentences, exclamatory sentences, questions with question words, and tag questions seeking agreement from the listener typically have a falling intonation at the end of the sentence, whereas yes/no questions and tag questions conveying a need for information have a rising intonation at the end of the sentence.

Examples: Nice to meet > you.

What country do you come $\$ from?

It's beautiful today, isn't ****it?

Do you like your new \(\strack{r}\) teacher?

We've met already, ∠haven't we?

Sentences such as alternative questions, enumerative sentences, and conditional sentences typically have a rising intonation at the beginning and a falling intonation at the end of the sentence.

Examples: I like *football, tennis, basketball and *volleyball.

If he ∠calls, ask him to leave a \message.

3. Common pronunciation errors made by non-english major students

Based on the researcher's English teaching experience to tertiary students and drawing upon teaching experiences and research findings from colleagues, some common pronunciation errors from non-English major students were revealed and synthesized as follows:

a. Using Vietnamese pronunciation when speaking English

Due to differences in phonetic systems between languages, students often resort to "Vietnamization" by attempting to match English sounds with those similar in Vietnamese. Common Vietnamese pronunciation errors include substituting sounds such as $/\delta$ / and $/\theta$ / with sounds like /d/ or /th/ in Vietnamese; pronouncing /J/ as /x/; and neglecting to aspirate sounds such as /p/, /t/, and /t/, as typically done in Vietnamese (whereas they should be aspirated in English). Additionally, some words are pronounced by students according to Vietnamese letter combinations rather than English phonetic rules.

For example, the word August /ˈɔː.gəst/ is often pronounced "au gớt", audio /ˈɔːdiəʊ/ is pronounced "au đi ô"; and audience /ˈɔːdiəns/ is pronounced "au đi ần" etc. This error was made mainly because the spelling of "au" in English is pronounced "au" in Vietnamese. This type of error is often called "Vietnamization".

Some common pronunciation errors made by non-English major students

English	Examples	Vietnamization
/ð/ is pronounced d	this /ðɪs/, that /ðæt/	dít, dát
$/\theta/ \rightarrow th$	thank /θæŋk/, think /θɪŋk/	thanh, thinh
/ʃ/ → x	she /ʃiː/, shock /ʃɒk/	xi, xốc
/əʊ/ → ô	home /həʊm/, coat /kəʊt/	hôm, cốt
/ei/ → ê	late /leɪt/, hate /heɪt/	lết, hết
/p/, /k/, /t/ is not aspirated	put /pʊt/, cook /kʊk/ , ten /ten/	pút, cúc, ten
/eə/ → /e/	where /weər/, there /ðeər/, fair /feər/	gwoe, de, phe

b. Omission of final consonant sounds

Another common pronunciation error observed among non-English major students is the omission of final consonant sounds in English words. This tendency may stem from the fact that Vietnamese often do not utilize final consonant sounds, resulting in students neglecting to pronounce them in English. For example, words ending in consonant clusters or single consonants at the end may have their final consonant sounds dropped by students. This omission can lead to misunderstandings and affect the overall clarity and intelligibility of their speech.

For instance, "like" is pronounced as "lai," and "nice" is pronounced as "nai." This error can confuse listeners who may not understand which word is being referred to. For example, when speakers disregard pronouncing final consonant sounds, words like "nine," "nice," and "night" all sound like "nai," while words like "right," "rice," and "write" all sound like "rai." Similarly, words such as "why," "wine," "wife," "while," "white," and "wise" may all be pronounced as "wai." Some common final consonant sounds that students often omit include:

/d/: need, sound, played,

/t/: write, stopped,

/k/: work, like, cook, thick

/s/: works, pronounce, sentence, science

/ʃ/: wash, moustache, dish

c. Errors related to stress, linking sounds, and intonation

Another common error among non-English major students is the lack of stress on syllables, failure to connect sounds, and absence of intonation. This error can significantly impact the overall intelligibility and fluency of spoken English. In English, stress is placed on certain syllables in words, giving them more prominence and clarity. Without proper stress, words may sound flat and unclear. Additionally, failing to connect sounds between words can make speech sound choppy and disjointed. Properly connecting sounds enhances the flow and coherence of speech. Furthermore, intonation, or the rise and fall of pitch in speech, conveys meaning and emotion. Neglecting to use appropriate intonation patterns can lead to misunderstandings or misinterpretations of intended messages. Therefore, mastering stress, sound connections, and intonation is crucial for effective communication in English.

In Vietnamese, six tones create the melody of speech, resembling a musical score when read aloud. Each word in Vietnamese has a tone (a syllable), and each tone is pronounced decisively, without elongation and without connecting to other words. Influenced by Vietnamese, students often read English evenly, without intonation, and multi-syllable words are pronounced with equal emphasis, making it difficult to distinguish where the stress falls and hindering effective communication. Moreover, misplacing stress can lead to misunderstandings as similar-looking words with different syllable stresses can alter their meanings.

"Comfortable" /'knm.fə.tə.bəl/ is often pronounced as 'căm phót tây bồ', with all syllables pronounced equally, read evenly, and mispronounced.

"Information" / In.fə mei.[ən/ is pronounced as "in pho mây sừn" without distinguishing the stress.

"Find out" /faɪnd-aʊt/ involves linking the final consonant of "find" with "out". However, students often read each word separately, and if they hear this phrase from a teacher or in a text, they might write it as "find down".

4. Suggestions on pronunciation practice for non-english major students

From analyzing the basic pronunciation errors of non-specialized English learners, the research team identified that the fundamental cause lies in students' lack of knowledge of English phonetics and their tendency to "Vietnamize" English sounds. In this paper, the research team provides suggestions on pronunciation training for students, including parts that may receive assistance from teachers but primarily rely on self-practice by students. Additionally, the authors also offer some considerations for teachers when teaching pronunciation to engineering students, given the limited time allocated for the subject.

4.1. Considerations for Instructors

Due to the non-specialized nature of the student cohort, the overall English proficiency level of students is generally low, particularly in speaking skills. However, students cannot pronounce accurately and proficiently without being able to read the International Phonetic Alphabet (IPA) chart. Therefore, the first step for teachers is to guide students in reading the sounds in the IPA chart. This chart can be downloaded from the internet or is often included at the end of English textbooks. For instance, in textbooks like New English File, the phonetic section provides ample examples for learners to practice pronunciation effectively. Additionally, each lesson includes a sub-section on pronunciation, and teachers should utilize these subsections for student practice rather than overlooking them to save time for other parts of the curriculum.

Given the limited duration of the course, instructors should integrate pronunciation practice into teaching other components such as reading and vocabulary. This can be achieved through pair or group activities, where students are required to read aloud each word or sentence when copying it into their notebooks or writing it on the board. For example, during vocabulary or listening skills lessons, teachers can introduce games involving matching sounds with words or pronouncing correct or fast phrases. For instance:

- 1. Peter Piper picked a peck of pickled peppers
- 2. Betty Botter bought some butter
- 3. She sells seashells by the seashore
- 4. How can a clam cram in a clean cream can?
- 5. If a dog chews shoes, whose shoes does he choose?

Furthermore, teachers should encourage students to develop the habit of writing phonetic transcriptions alongside dictionary entries. This ensures accurate pronunciation, correct stress, and word retention. Teachers can model this behaviour by writing phonetic transcriptions of selected words on the board (only for new or noteworthy words), and if necessary, instruct students to complete the remaining words at home.

4.2. Suggestions for Pronunciation Practice for Students

4.2.1. Acquire General Knowledge of English Phonetics

The first step for students is to learn to pronounce the sounds of English vowels and consonants. This can be done through classroom instruction or by following tutorials available on platforms like YouTube. For each sound, students should practice repeatedly and observe to avoid conflating English sounds with their Vietnamese counterparts, which may affect the pronunciation of individual words and sentences. To avoid pronunciation errors as mentioned above, students should note that English words are often pronounced with longer duration and greater pitch variation compared to the concise and abrupt manner typical in Vietnamese. Especially with diphthongs, triphthongs, or when two or three consonants occur together, all sounds are pronounced distinctly. For instance: in "street /stri:t/", all three sounds in the "str" cluster are pronounced, and the sound /i:/ is elongated compared to the Vietnamese /i/ sound. Additionally, the final

sound /t/ should be pronounced rather than omitted.

Furthermore, students should equip themselves with knowledge of general rules for stress placement, connected speech, intonation, and techniques for practising difficult English sounds. All of this information is readily available online or in pronunciation textbooks.

For example, practising the sounds $/\theta$ / and $/\delta$ / through sentences like:

- 1. **Th**at man over **th**ere is very weal**th**y.
- 2. June is **th**e six**th** mon**th** of **th**e year.
- 3. **Th**ere are **th**ree **th**ings you have to remember.

Examples of stress placement rules include:

✓ Most two-syllable words (excluding verbs) have stress on the first syllable.

• Noun: <u>pre</u>sent, <u>doc</u>tor, <u>tea</u>cher, <u>stu</u>dent, <u>ri</u>ver

• Adjective: happy, lucky, silent, yellow, boring

• Adverb: <u>ne</u>ver, <u>hardly</u>, <u>sel</u>dom, <u>e</u>ver

✓ Most two-syllable verbs place stress on the second syllable.

e.g. dis<u>cuss</u>, ex<u>plain</u>, de<u>cide</u>, en<u>joy</u>, em<u>ploy</u>, a<u>ffect</u>, com<u>bine</u>, dis<u>pose</u>, en<u>large</u>, sub<u>mit</u>

- ✓ Most words ending in -er, -ar, -or, -ow, -ance, -ent, -y, -en, -on, have stress on the first syllable.
- e.g. <u>children</u>, <u>current</u>, <u>suffer</u>, <u>en</u>ter, <u>ran</u>dom, ... (Exceptions: ce<u>ment</u>, i<u>deal</u>, po<u>lice</u>, de<u>sire</u>, July, technique, machine, canal, decoy).
- ✓ Words ending in -ance, -ence, -ant, -ent, -ian, -ience, -ient, -iar, -ior, -ic, -ical, -ieous, -ious, -ous, -ity, -ory, -ury, -ulary, -ive, -cial, -tial, -cion, -sion, -tion, -cious, -ics, -tious, -xious, -is, typically stress the syllable preceding these endings.
 - \checkmark E.g. population, mathe<u>matics</u>, de<u>cision</u>, a<u>bility</u>, fa<u>miliar</u>, lib<u>rarian</u>, at<u>ten</u>dance, ex<u>pen</u>sive, s<u>pe</u>cial Exceptions: <u>politics</u>, <u>Catholic</u>, a<u>rithmetic</u>, <u>lu</u>natic, <u>te</u>levision

4.2.2. Classroom Practice

English language classes provide an excellent environment for students to practice pronunciation, as they have peers and instructors for practice and feedback. During lessons for reading, speaking, listening, vocabulary, or other class activities, students can engage in pronunciation practice. For instance, they can look up words in the dictionary and write down the phonetic transcription, pay close attention to the pronunciation demonstrated by their teachers, and repeat after them. Alternatively, they can jot down the pronunciation of words they find challenging or prone to mispronunciation (in abbreviated form) to aid memory. Students must develop a habit of annotating phonetic transcriptions whenever necessary to enhance retention and prevent mispronunciation.

For example, for the word "prepare /prɪˈpeər/", one might simply write 'ɪ' above the first 'e' and 'eə' above the 'are' cluster in the second syllable, and underline the second syllable to indicate stress.

r eə PREPARE

4.2.3. Extra-curricular Practice

Students can utilize online resources such as *YouTube*, English language learning websites like *englishclub.com*, *tienganh123.com*, *learnenglish.voanews.com*, *oddcast.com* (*text-to-speech*), *voaspecialenglish.blogspot.com*, *and talktyper.com* (*for pronunciation/spelling checking*) to access instructional videos analyzing the pronunciation of individual phonemes in the International Phonetic Alphabet (IPA) or demonstrating the pronunciation of individual words, phrases, and native-like English speech. These resources offer abundant material for students to practice and refine their pronunciation skills.

In addition to practising with online videos, students can improve their pronunciation by listening to

songs, watching movies, or listening to speeches by celebrities. It is important to pay attention to the pronunciation of native speakers and strive for natural, emotive speech rather than mechanical repetition. Some students speak English rapidly to demonstrate fluency in their speaking skills. However, speaking too quickly without accurate pronunciation, stress, intonation, etc., may hinder comprehension by listeners. Therefore, it is essential to prioritize accurate pronunciation initially, and once achieved, adjusting speaking speed will become easier and more fluid. Controlling volume and incorporating intonation, particularly emphasizing stress in sentences or keywords, is crucial. Moreover, infusing emotions into speech to convey feelings to listeners, reflected through volume and speech rate, facilitates accurate message delivery.

5. Conclusion

Pronunciation holds significant importance for non-English major students at technical universities due to its pivotal role in effective communication, professional development, and academic success. Despite focusing primarily on technical subjects, students at technical universities are increasingly required to possess competent English language skills for various purposes, including presenting research findings, collaborating with international colleagues, and pursuing opportunities in multinational corporations. Pronunciation accuracy enhances clarity and comprehension during oral presentations, ensuring that technical concepts and ideas are effectively conveyed to diverse audiences. Moreover, clear pronunciation fosters confidence and credibility, essential attributes for successful communication in academic and professional settings. Additionally, precise pronunciation facilitates effective collaboration and teamwork, enabling non-English major students to engage in interdisciplinary projects and leverage diverse perspectives to solve complex problems. Overall, proficiency in pronunciation equips non-English major students at technical universities with essential communication skills essential for their academic and professional endeavours.

References

- 1. Cook V (1996). Second language learning and language teaching. London: Arnold.
- 2. Dalton, C. (1994). Pronunciation. OUP
- 3. Dictionary.cambridge.org
- 4. Kenworthy, J.(1987). Teaching English Pronunciation. Longman.
- 5. Ur, Penny. (1996). A Course in Language Teaching: Practice and Theory. Cambridge. London.
- 6. Nguyen Thanh Tam, *Tầm quan trọng của phát âm tiếng Anh,* ĐH Văn Hoá, Hà Nội.
- 7. Lynda Yates (2002). Fact sheet- What is pronunciation? Adult Migrant English Program Research Centre, La Trobe University.

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READING SKILLS IN ESP FOR TECHNICAL STUDENTS: CHALLENGES AND SOLUTIONS

1. Introduction

English for Specific Purposes (ESP) has attracted attention from universities due to the demands of globalization and the practical significance of ESP for students' future careers after graduation. For