UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MÉXICO FACULTAD DE LENGUAS



THE INTERNATIONAL PHONETIC ALPHABET IN THE DEVELOPMENT OF ENGLISH PRONUNCIATION IN ADULT BEGINNERS

TESINA

Que para obtener el título de:

Licenciado en Enseñanza del Inglés

PRESENTA:

Ing. Mark Cruz Rodríguez

Directora de tesina:

Dra. en C. Alma Leticia Ferado García

Toluca, México Febrero, 2024

RESUMEN

El presente trabajo se centra en la utilización del Alfabeto Fonético Internacional (IPA) como una posible herramienta para mejorar la pronunciación de los sonidos del inglés en adultos principiantes que hablan español como primer idioma.

La comunicación hablada en inglés se ha vuelto cada vez más necesaria, y es importante poder ayudar a los alumnos de inglés a desarrollar una pronunciación clara. Sin embargo, esta importancia no siempre se ve reflejada en los salones de clase, lo que resulta en dificultades y barreras de comunicación para los aprendientes en situaciones reales.

El IPA (International Phonetic Alphabet, por sus siglas en inglés) es un sistema de símbolos que representan los sonidos de varios idiomas. El IPA se presenta como un instrumento que se puede utilizar por profesores y alumnos, para poder cerrar la brecha entre la manera en que las palabras del inglés están escritas y son pronunciadas. De igual manera el IPA puede apoyar en la identificación y producción clara de los sonidos del inglés, ayudando a su pronunciación.

Se presenta una explicación del concepto de pronunciación, y posteriormente hay una concentración en la fonología segmental: lo sonidos individuales del inglés. Se habla del rol de este aspecto de la pronunciación en la habilidad de expresión oral, y se presenta una explicación más detallada del IPA, así como de algunos sonidos difíciles de producir para hablantes del español.

Posteriormente, se explica qué es un aprendiente adulto, y los factores alrededor de esta combinación, que influyen en su aprendizaje de la pronunciación de los sonidos del inglés. De igual manera, se aborda la necesidad de capacitación para los profesores en la enseñanza de la pronunciación y el uso efectivo del IPA en el aula. También, se subraya el proceso gradual del aprendizaje del IPA y su uso, estableciendo que el objetivo no es lograr una pronunciación nativa, sino una comunicación clara.

Finalmente, se presenta una serie de ejercicios dirigidos a profesores de inglés, que pueden llevar a cabo para ayudar a sus alumnos a aprender los sonidos del inglés y el uso del IPA a partir de vocabulario básico, de manera que el aprendizaje del IPA no sea doblemente difícil, al combinarse con temas de mayor complejidad.

CONTENTS

INTRO	DUC	CTION	1
SIGNII	FICA	NCE OF THE PROJECT	3
STATE	MEN	NT OF THE PROBLEM AND RESEARCH QUESTION	5
METH	ODS	AND RESEARCH TECHNIQUES USED	9
Type	of R	esearch	9
Obje	ctive	s	10
•	Ge	neral Objective	10
•	Spe	ecific Objectives	10
Limi	tatio	ns	10
THEM	ATIC	DEVELOPMENT	12
CHAP	ΓER	1. ENGLISH PRONUNCIATION	13
1.1	Pro	onunciation	13
1.1	.1	Segmental Features	14
1.1	.2	Suprasegmental Features	14
1.2	Tw	o Approaches in Pronunciation Teaching	17
1.3	Sta	ndard Pronunciation	17
1.4	Pro	onunciation in Language Teaching	18
1.5	Th	e Importance of Pronunciation in English Performance	19
1.6	Th	e Importance of Segmentals in Second Language Learning	21
1.7	Ph	onemes	22
1.8	Th	e Sounds of English	22
1.8	.1	Consonants	24
1.8	3.2	Vowels	27
1.8	3.3	Diphtongs	29
1.9	Th	e International Phonetic Alphabet	29
1.10	Th	e IPA as a tool to learn the sounds of English	30
1.11	Ch	allenging Sounds of English for Spanish Speakers	31
1.1	1.1	/b/ and /v/	32
1.1	1.2	Consonant clusters starting with an /s/ sound	32

1.1	1.3	The $/z/$ sound at the beginning, middle, and end of some words	33
1.1	1.4	English /d/ and /ð/	35
1.1	1.5	Spanish /t/ vs English /t/	36
1.1	1.6	The $/\theta$ / sound	37
1.1	1.7	/æ/, /ɑː/, and /ʌ/	37
1.1	1.8	The schwa /ə/	38
1.1	1.9	/dʒ/ and /y/	38
1.1	1.10	/ɪ/ and /i:/	39
1.1	1.11	Spanish /r/ and English /r/	39
СНАРТ	TER 2	2. TEACHING THE IPA TO ADULT BEGINNERS	41
2.1	Adı	ult Beginners of English	42
2.2	Adı	ults and the acquisition of the sounds of English	43
2.3	Usi	ng the IPA in the classroom	45
2.4	Var	iables that can influence the learning of the IPA	47
2.4	.1	The teacher	48
2.4	.2	First language interference	51
2.4	.3	The student	52
2.4	.4	When teachers and learners share a common language	53
2.4	.5	The approach in the classroom	54
2.5	Rea	llistic goals of pronunciation teaching and learning	56
		3. USING THE IPA AS A TOOL TO DEVELOP ENGLISH ATION IN ADULT BEGINNERS	58
3.1	An	ote on tense, lax, short and long vowels	59
3.2		ercise 1: the IPA	
3.3	Exe	ercise 2: The Alphabet	62
3.4	Exe	ercise 3: Vowels and examples	63
3.5	Exe	ercise 4: Consonants and examples	66
3.7		ercise 5: Numbers 0 - 10	
3.8	Exe	ercise 6: Numbers 11 – 20	70
3.9	Exe	ercise 7: Days of the week	71
3.10		ercise 8: Months of the year	

3.11	Exercise 9: Family members	73
3.12	Exercise 10: /ə/	74
3.13	Exercise 11: middle and final /z/ sound	75
3.14	Exercise 12: /θ/	76
3.15	Exercise 13: /t/	77
3.16	Exercise 14: Consonant clusters	78
3.17	Minimal Pairs	79
3.17	7.1 Exercise 15: /i:/ vs /ɪ/	81
3.17	7.2 Exercise 16: /æ/ vs /ɑ:/	82
3.17	7.3 Exercise 17: /b/ vs /v/	83
3.17	7.4 Exercise 18: /k/ vs /g/	84
3.17	7.5 Exercise 19: /d/ and /ð/	85
CONCL	USIONS AND SUGGESTIONS	86
REFERI	ENCES	88

Illustration Index

Figure 1.1. An illustration of the difference between stressed vowels, unstressed vowels, and the schwa.	
Figure 1.2. An illustration of the rhythm in a syllable-timed language and a stress-timed language	16
Figures 1.3 and 1.4. Illustrations of the stress and rhythm of English in two example sentences. Each syllable is represented by a person, the tallest ones being the stressed syllables.	16
Figure 1.5. Mid-saggital section of the vocal tract with labels for place of articulation	24
Figure 1.6 English consonants organized by place and manner of articulation.	26
Figures 1.7 & 1.8 Illustrations of vocal cords when producing voiced consonants and unvoiced consonants	.27
Figure 1.9 Voice Quadrilateral that shows the English vowels	28
Figure 1.10 Schematization of the voice quadrilateral in the oral cavity	29

INTRODUCTION

The present work explores the consideration of using the International Phonetic Alphabet as a tool to help beginner English learners in the development of their pronunciation of the language.

Despite its crucial role in effective communication, pronunciation is usually neglected in a many English classrooms. As a consequence, most adult learners have difficulty when speaking the language, which can create potential communication barriers.

The primary aim of this study is to consider the possibility of integrating the International Phonetic Alphabet (IPA) as an instructional tool to enhance the pronunciation skills of adult beginner English learners who speak Spanish as their first language.

This work also intends to provide English teachers with comprehensive knowledge and guidance on utilizing the IPA to improve English pronunciation among adult beginners.

The rationale for this research stems from the increasing necessity for English as a global second language. Statistical data supports the assertion that English has become the leading language globally.

As societies become more globalized, and the need for fast, effective communication is more pressing than ever before. This highlights the growing importance of pronunciation in language learning and the development of speaking skills.

The IPA, a system of symbols that represent sounds, offers the possibility to help English students learn how to identify and produce the sounds of English clearly to convey their thoughts and emotions more effectively.

The concept of pronunciation is broken down to appreciate its components, and then it focuses on segmental phonology: the sounds of English. There is an overview on two approaches in pronunciation teaching, and an analysis at the concept of standard

pronunciation. The importance of pronunciation in English performance is also explored. The sounds of English are then presented, as well as challenging sounds for Spanish speakers.

This work also presents an explanation of the characteristics of adult learners, who, in contrast to younger learners, may learn pronunciation differently. Finally, it addresses realistic goals for teaching pronunciation, particularly, segmental phonology.

SIGNIFICANCE OF THE PROJECT

This work is aimed at contributing to the already existing information about the use of the International Phonetic Alphabet in the development of pronunciation in adult English learners, and more specifically, adult beginners whose first language is Spanish.

The reason for conducting this work responds to the increasingly growing need to speak English as a second language. Global communication has grown dramatically in the last thirty years thanks to the advent of mobile phones, computers, and the internet. As a result, English has spread beyond the countries where it is used as the first language (Hewings, 2007, p. 10).

Moreover, English is getting more and more necessary to succeed in practically any professional field. In his book "Second Language Acquisition", Rod Ellis (1997) claims that "As never before, people have had to learn a second language, not just as a pleasing pastime, but often as a means of obtaining an education or securing employment" (p.3).

According to statista.com (2023), English is currently the most widely spoken language around the world, followed by Mandarin, Hindi, and Spanish. Undoubtedly, English is the language of global communication.

One of the main goals of English learners is to express themselves orally as clearly as possible. Penny Ur (2012), in her book "A Course in English Language Teaching", says that "language learners are mainly interested in learning to communicate orally" (p. 117). Douglas Brown (2007), in "Teaching by Principles: An Interactive Approach to Language Pedagogy", further supports this stance by commenting that "the benchmark of successful language acquisition is almost always the demonstration of an ability to accomplish pragmatic goals through interactive discourse with other speakers of the language" (p. 322).

English learners can develop their speaking skills by exercising four different aspects of the pronunciation of the language: segmental phonology (individual sounds), and, stress, rhythm, and intonation (suprasegmental phonology). Segmental phonology is a vital aspect of pronunciation as the majority of sounds used in English are different from those of Spanish.

English teachers can help learners acquire and use the sounds of English by using a tool called International Phonetic Alphabet: a system of symbols, with each representing a sound, and each sound having one symbol. This can be really useful, as English does not have a one-to-one correspondence between the spelling of words and their pronunciation.

Using the IPA consistently in the classroom, combined with the teaching of suprasegmental phonology, may help English learners (and teachers) improve their pronunciation and empower them to express their thoughts and feelings with more confidence and accuracy.

STATEMENT OF THE PROBLEM AND RESEARCH QUESTION

Learning English is an integrated process where students learn four basic communication skills: reading, writing, listening, and speaking. The gradual process of mastering these four skills helps learners communicate effectively (Sadiku, 2015, p. 29).

Reading, writing, listening, and speaking can be categorized as skills of receptive and productive performance. Receptive performance is competence in reading and listening. Productive performance is competence in speaking and listening (Brown, 2007, p. 284).

The Common European Framework of Reference for Languages (CEFR) (2001) states that "productive activities have an important function in many academic and professional fields" and moreover, "particular social value is attached to them (judgments made of ... fluency in speaking and delivering oral presentations)" (p. 14).

These four skills are ideally learned in an integrated, balanced way, although focusing on one or more skills, is also possible, as each student's situation and goals are different. However, it is important to note that, for many practical reasons, one of the goals of learning a language is to be able to speak it.

Brown (2007) affirms that "when someone asks [...] 'Do you speak English?' they usually mean: Can you carry on a conversation reasonably competently?" (p. 322). Furthermore, Ur (2012) points out that of all the four skills, "speaking seems intuitively the most important: people who know a language are referred to as 'speakers' of that language" (p. 117). This is further echoed by Prodanovska-Poposka (2017), who says that "speaking a language well and intelligibly regardless of the situation a language user can be found in, appears to be the utmost demand and desire among learners and users of a foreign language" (p. 778).

It would be sensible to assume that, given its importance, speaking would have a special place in English teaching environments. However, it is quite common to find English classrooms where teachers devote little time to the practice of speaking skills. Sadly, it is even more common to find out that pronunciation barely makes an appearance in their courses. Nair et al. (2006) state that "in many English language classrooms, teaching pronunciation is granted the least attention" (p. 27).

This is not a recent phenomenon. When Celce-Murcia et al. wrote *Teaching Pronunciation:* A Reference for Teachers of English to Speakers of Other Languages in 1996, they regarded pronunciation as suffering from "Cinderella syndrome: kept behind doors and out of sight" (p. 323). Almost thirty years before that, Louis G. Kelly (1969), in "25 Centuries of Language Teaching. 500 BC – 1969" had already addressed pronunciation as "the Cinderella of language teaching" (p. 87). Granted, pronunciation was emphasized during the audiolingualism era, but the main focus was put on the segmental aspect. As new teaching methods appeared, pronunciation was, again, sent to the back of the line. As Isaacs (2009) asserts, "pronunciation has been marginalized from the TESL mainstream" (p. 2).

In recent years, with the advent of omnipresent technology that allows instant communication, interest in pronunciation has become more prominent, demonstrating that, it is indeed, a major component of the speaking skills (Newton, 2018, p. 337). Saito and Plonsky (2019) found that, in twenty-five years, between 1982 and 2007, only 22 articles on pronunciation teaching were published in peer-reviewed journals. In contrast, in just nine years, between 2008 and 2017, fifty-five studies were conceptualized, conducted and published (pp. 671-672).

Having recognized that pronunciation is crucial to the effective development of the speaking skill in English learners, it is imperative that teachers rethink the time and attention they devote to the practice of speaking skills, and especially, of pronunciation within their classes. Furthermore, they need to be properly trained so they can teach pronunciation effectively.

Pronunciation can be approached from a top-down perspective, or a bottom-up one. From a bottom-up perspective, segmental phonology i.e., individual sounds, is priority. This is

especially useful since many languages (Spanish included) do not have some of the sounds used in English (Cameron, 2012, p. xvi). It makes sense, then, to learn these sounds as early as possible.

English learners need to be aware that there is a difference between the sounds of Spanish and the sounds of English. Each language has their own repertoire of sounds. When learners ignore this crucial fact, they transfer sounds that they use in Spanish, to English. As a result, they develop an unclear English pronunciation that is confusing and not very useful in practice.

Failing to use the sounds of English, and instead, speaking English using the sounds of their first language may force listeners to make an extra effort to understand the speaker, and this extra effort is not usually sustained for a log time. A nonstandard pronunciation can lead to misunderstandings in the short term, but this can also affect learners negatively, causing reticence to communicate in future occasions in front of a group, lack of self-confidence, and refraining from participating in social interactions in general (Prodanovksa-Poposka, 2017, p. 778).

Helen Fraser (2000) comments in this respect that "many learners [...] have pronunciation difficulties that make it hard work for even the most willing interlocutor to speak with them" (p. 10). Jolanta Szpyra-Kozłowska (2014) adds: "pronunciation which puts too much strain on the listeners is very likely to cause them irritation and annoyance and, in consequence, discourage them from further contact with the foreign speaker" (p. 21).

In order to help students learn the sounds of English from the earliest stages, teachers can use a visual alphabet that represents the sounds of language: the International Phonetic Alphabet (IPA). The IPA can help students (and teachers) acquire the sounds of English through a learning process that shows how each of the symbols sounds, so that they can later connect those sounds to pronounce words clearly.

Learning how to use the IPA may seem challenging, overwhelming, and even intimidating, as learners are presented with a completely different alphabet, taught how to produce new sounds, and associate them to one of the symbols. Teachers need to be properly trained and

have a deep understanding of this system, so they can present this knowledge in a systematic and comprehensible way.

This work gravitates around the question: "How does the integration of the International Phonetic Alphabet (IPA), as an instructional tool, affect the segmental phonology and overall pronunciation skills of adult beginner English learners with Spanish as their first language?

METHODS AND RESEARCH TECHNIQUES USED

The research and proposal in this work are of an exploratory nature as the main goal is to obtain a better understanding of the subject matter, rather than testing specific hypotheses or drawing definitive conclusions. There is one general objective and three specific ones. Limitations are also mentioned at the end of this section.

Type of Research

In their book *Metodología de la Investigación*, Hernández et al. define exploratory studies as those that help us understand relatively unknown topics, gather information to decide if more detailed research is needed, investigate new problems, identify important concepts or variables, set priorities for future studies, or suggest new ideas and hypotheses (2014, p. 91).

Exploratory studies serve as an initial step in understanding a particular subject, especially in situations where comprehensive information might be limited. The way the authors describe it is like setting out on a journey to an unknown place about which we have never seen a documentary, or read a book; we have only heard a little bit about it (2014, p. 91). The objective of such journey is then, gain deeper insights into the specific topic.

The present work aligns with exploratory research as it sets out to explore the potential impact of the IPA on the development of segmental phonology (individual sounds) in adult beginner English learners whose first language is Spanish. It is intended to explore theoretical elements to help both teachers and students make practical use of the International Phonetic Alphabet in the developing of their speaking skills.

For this work to be as useful as possible, the theoretical aspect is supported by the most relevant authors in the English teaching field, as well as current research published in peerreviewed articles.

As for the activities presented in chapter three, several variations of these materials have been used with actual adult English learners.

Objectives

This work presents one general objective related to the use of the IPA as a tool to improve English learners' pronunciation, as well as three specific objectives related to both English learners and teachers.

• General Objective

To explore the effectiveness of integrating the International Phonetic Alphabet (IPA) as an instructional tool in improving the pronunciation skills of adult beginner English learners whose first language is Spanish.

• Specific Objectives

To examine the practical implementation of the IPA in English language classrooms, so that learners can understand and produce the sounds of English.

To evaluate the impact of introducing the IPA on segmental phonology (individual sounds) of English pronunciation in adult beginners whose first language is Spanish, with the aim of enhancing their clarity and intelligibility in spoken English.

To inform English teachers about the use the IPA as a tool to help their students improve their English pronunciation. This work provides educators with the necessary knowledge to guide adult beginner learners.

Limitations

Although this research presents valuable information applicable to most dialects of the English language, the sounds of English presented in this work are limited to those of American English.

10

Worth noting too is that the length marks that come after some vowel sounds in British English, but not typically used in American English, are still preserved in the examples and exercises provided in this document, as that is how these transcriptions appear in the American English transcriptions provided in the Oxford Advanced Learner's Dictionary, which is the dictionary used as a reference for this work.

Another important consideration is the fact that in this work, as well as in many textbooks aimed at ESL/EFL learners, a broad transcription style is used, not a narrow one, which uses more symbols and diacritics, and is more common among linguists. Using the narrow notation style would make the visual representation of sounds more precise, but less approachable for both English language teachers and students.

One more consideration to make is that the way vowel sounds and their symbols are approached in this work is aligned with that which most books and textbooks have presented for decades. British linguist Geoff Lindsey (2019), in his book "English After RP: Standard British Pronunciation Today" has offered a seemingly more coherent classification of the vowels of English, which may become the new standard in the future,. This classification, however, is not considered here as it is yet not present in mainstream ESL/EFL materials.

Finally, it is important to consider that the pronunciation of individual sounds is only one of four aspects of pronunciation, (the other three being stress, rhythm, and intonation). Improving one's pronunciation of individual sounds and words is not synonymous with faultless, clear speech, but it can make a noticeable difference in speech in general.

THEMATIC DEVELOPMENT

In the realm of language acquisition, the journey towards mastering a foreign or second language comprises the acquisition of four fundamental communication skills: reading, writing, listening, and speaking.

Fluent and intelligible speech represents the ultimate goal of communicative competence. In response to this increasingly pressing need, modern language teaching methods have begun to place a renewed emphasis on the teaching of pronunciation.

Chapter one delves into the significance of English pronunciation as a fundamental aspect of language learning, exploring the diverse dimensions that characterize this aspect of linguistic competence.

Chapter two explores the teaching of English pronunciation to adult beginners by means of the International Phonetic Alphabet, as well as some of the main challenges that this process entails. It also deals with the ideal balance between expectations when teaching the IPA to adults, and the potential outcomes.

12

CHAPTER 1.

ENGLISH PRONUNCIATION

Pronunciation plays a crucial role in communication: It can help a speaker express their thoughts and feelings with clarity, but it can also prevent them from conveying their message.

While the broader concept of pronunciation encompasses various elements, this chapter primarily deals with the segmental aspect, focusing on the production of individual sounds.

Moreover, this chapter explores approaches to learning and teaching pronunciation, as well as the concept of *standard* pronunciation. The importance of pronunciation and segmental phonology is also presented, in order to offer concise information about the sounds of English.

There is also a brief introduction to the International Phonetic Alphabet (IPA). The IPA acts as a valuable visual aid for both English learners and educators, helping them understand the sounds of English, thus, improving their pronunciation.

To conclude, this chapter presents the most challenging sounds for learners whose first language is Spanish.

1.1 Pronunciation

The word pronunciation means the way in which words of a language are spoken. It refers to the individual sounds, stress, rhythm and intonation used when articulating words and sentences of that language. In the realm of language learning, Carter and Nunan (2001) define it as:

[...] the production and perception of the significant sounds of a particular language in order to achieve meaning in contexts of language use. This comprises the production and perception of segmental sounds, of stressed and unstressed syllables, and of the 'speech melody', or intonation. (p. 56)

13

Although historically, research in L2 has strongly focused on vowels and consonants (Kang et al., 2018, p. 1), this definition enables us to discern something critical: pronunciation is not only concerned with the production of individual sounds. Pronunciation encompasses two basic dimensions: segmental features, which deal with individual sounds or phonemes, and suprasegmental features, which involve stress, rhythm, and intonation (Crystal (1981, p. 23); Brown (2007, p. 339); Harmer (2015, p. 281); Ur (2012, p. 128); Nunan (2015, p. 92); Lightbown & Spada (2017, p. 68); y Kang, Thomson, & Murphy (2018, p. 1)).

1.1.1 Segmental Features

Most languages have a sound system that relies on individual sounds, typically vowels and consonants. These basic sounds form the building blocks for putting together larger parts, such as syllables, words, and sentences (Rogerson-Revell, 2018, p. 93).

In the context of foreign or second language pronunciation, the individual consonant and vowel sounds of the language are known as segmental features.

Consonants are sounds produced by obstructing the airflow in various ways. The manner of articulation (e.g., stops, fricatives, and nasals) and the place of articulation (e.g., bilabial, alveolar, and velar) are crucial factors in distinguishing consonants. Consonants can also be voiced or unvoiced.

Vowels are produced with an open vocal tract and are characterized by their quality (e.g., height, backness, and roundedness). The pronunciation of vowels plays a pivotal role in word differentiation.

1.1.2 Suprasegmental Features

Suprasegmental features go beyond individual sounds and contribute to the prosody and melody of speech. They basically include:

Stress: Stress is the prominence given to certain syllables within a word. In English, stressed syllables sound longer and louder. Syllables can be either stressed, reduced, or unstressed, i.e., the schwa (Avery & Ehrlich, 1992, pp. 68,69).

Stressed vowels Long, clear	Unstressed vowels Short, clear	Reduced vowels (schwa) Very short, very unclear		
a	a	Э		
e	e	ə		
i	i	ə		
0	o	Э		
u	u	ə		
Very easy to hear	Easy to hear	Hard to hear		

Figure 1.1. An illustration of the difference between stressed vowels, unstressed vowels, and the schwa. (Gilbert, 2008, p. 18)

Rhythm: Rhythm refers to the pattern of stressed and unstressed syllables in speech. The rhythm of a language affects the pacing and natural flow of speech. In contrast to Spanish, a syllable-timed language that assigns mostly an equal weight to each syllable, English is a stress-timed language. In a stressed time language, syllables can be stressed differently.

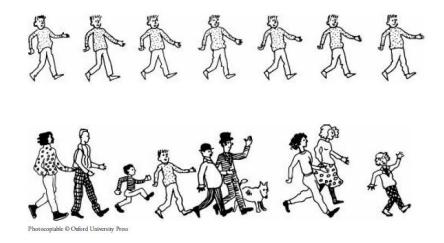
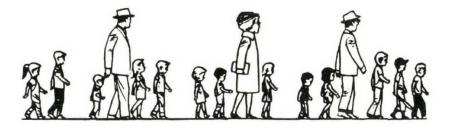
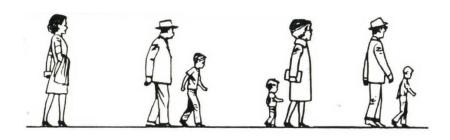


Figure 1.2. An illustration of rhythm in a syllable-timed language and a stress-timed language (Avery & Ehrlich, 1992, p. 76)

In a stress-timed language, syllables are not given equal weight. The stressed syllables of focus words in a sentence are the ones that get "stretched out", sounding longer and louder. Function words do not get stretched, and are even "compressed" i.e. reduced. If we take a sentence and make it longer in terms of its number of syllables, it will take approximately the same amount of time to say both sentences (Avery & Ehrlich, 1992, p. 77).



"The boy is interested in enlarging his vocabulary"



"Great progress is made daily"

Figures 1.3 and 1.4. Illustrations of the stress and rhythm of English in two example sentences. Each syllable is represented by a person, the tallest ones being the stressed syllables.

Adapted from (Prator Jr. & Wallace Robinett, 1985, p. 30)

Intonation: Intonation refers to the variations in pitch that we use when we speak (Avery & Ehrlich, 1992, p. 79). These variations convey meaning and emotion. Intonation helps to understand whether what the speaker is saying is a question, statement, or command, for example. It also helps both the speaker and listener to follow the main idea(s) in a conversation by using contrasts and emphasis and de-emphasis of old and new information.

1.2 Two Approaches in Pronunciation Teaching

There are two common approaches to teaching pronunciation. The first one is known as intuitive-imitative versus analytic-linguistic (Purwanto (2019, p. 86); Celce-Murcia et al. (1996, p. 2)) and the second one, is known as bottom-up, (versus top-down) (Pennington, 2021, p. 16).

The first approach relies on the student being skillful enough to listen for and imitate the features of the target language without intervention of any explicit information. The student will be provided with good models to listen to, such as audio samples in the listening lab. The analytic-linguistic approach uses more explicit materials: diagrams of articulation, pronunciation symbols, contrastive information, etc., to supplement listening, imitation and production. This second approach was developed to complement rather than replace the intuitive-imitative approach.

The second way to approach the teaching of pronunciation is known as a bottom-up approach. The bottom-up approach focuses on learning the segmental features first, as they are the building blocks of pronunciation. A top-down approach addresses pronunciation the other way around: it focuses on the suprasegmental aspects of pronunciation. As with the first approach, there is no need to adhere to just one of the two ways to teach pronunciation. Ideally, both approaches will be used in a balanced way to improve the learners' pronunciation in the most optimal way (Trinh et al., 2022, p. 750).

1.3 Standard Pronunciation

When we talk about pronunciation, it is common to hear people talking about it in terms of good, bad, correct, and incorrect. This can be misleading and, in some cases, discriminatory. Language is a truly complex concept, and its incredible diversity and adaptability makes it even richer.

On the other hand, it is necessary to have a point of reference, so the terms "standard" and "non-standard" may help. A standard pronunciation is the pronunciation that has been

socially agreed upon and widely accepted. This pronunciation is heard in academic settings, business settings, and broadcast television. A non-standard pronunciation does not mean incorrect. A non-standard pronunciation may present differences in individual sounds, speech patterns, and may be more commonly used in specific groups and regions. In the case of language learners, a non-standard pronunciation may be influenced by the segmental and suprasegmental aspects of their first language.

A standard pronunciation is always more comfortable to understand by native speakers, or speakers who do not share the speaker's native language. By using standard pronunciation, listeners will not have to strain to understand what the speaker wants to express. Penny Ur (2012) states:

Students do not need necessarily to model their accents on English native speakers [...] but their speech does need to be clear. Some learners consistently get particular sounds wrong, and as a result, their speech is less "comfortable" to listen to, and occasionally incomprehensible. (p. 128)

It is important to note that there is not just *one* standard pronunciation. No speaker of a language "can be taken to represent a particular accent or dialect and it also follows that the idea of a standard pronunciation is a convenient fiction, not a scientific fact" (Roach, 2012, p. 163). Nonetheless, in second language learning, the pronunciation of a word with a different stress pattern or the addition or omission of phonemes can be considered nonstandard pronunciation.

1.4 Pronunciation in Language Teaching

Pronunciation has gone through an interesting, yet rough path in the history of English teaching as a second or foreign language. The grammar-translation method gave little to no attention to oral production. It was developed in the nineteenth century and focused on translating sentences from one language to another, with a special emphasis on grammar (Harmer, 2015, p. 56). Florez (1998) notes that "[i]n the grammar-translation method of the past, pronunciation was almost irrelevant and therefore, seldom taught" (p. 2).

In the 1950s and 1960s, the teaching of pronunciation was highlighted with the introduction of the audio-lingual method. Nevertheless, the execution was not the most optimal one, as this method neglected other features such as stress, rhythm, and intonation, and focused on the segmental aspect (Fraser, 2000, p. 33), with learners having to spend hours repeating sounds in the language laboratory (Nair et al., 2006, p. 28).

During the late 60s and 70s, as the cognitive approach strongly suggested that since native-like pronunciation was unattainable, there was no reason to give much attention to pronunciation or L2 phonetics or phonological systems (Afshari & Ketabi, 2016, p. 78).

Later, in the 1970s and 80s, with the communicative language teaching (or communicative approach), pronunciation, once again, was not given proper consideration, as this method emphasized interaction, effective communication and active participation, where "students should be involved in meaning-focused communicative tasks so that 'language learning will take care of itself'" (Harmer, 2015, p. 57).

Over the years, pronunciation has been getting more attention, and the language teaching community has become more interested in the topic. In 2022, Bardel reported to have found over sixty books related to L2 pronunciation since 2010, compared to twelve books from the decade of the 2000s, and only seven for the 1990s (p. 41).

1.5 The Importance of Pronunciation in English Performance

There are several reasons pronunciation is an important aspect of language learning: clarity, the effort the listener makes to understand the speaker, the first impression that the speaker may make, and the effect that it has over other language skills.

One of the most important reasons to develop a standard pronunciation is to make our speech clear and understandable to others (Darcy, 2018, p. 14). When we pronounce sounds, words, and sentences clearly, it helps people easily understand what we are saying. This becomes particularly important when we need to communicate in various situations, such as work, school, or social gatherings.

There is another factor related to the above mentioned: speaking with clear pronunciation does not demand as much effort from the listener as speaking with nonstandard pronunciation. It may seem exaggerated to think that a few mispronounced words will affect the meaning of what the speaker wants to communicate. Certainly, the message may be transmitted successfully, but speaking with nonstandard pronunciation definitely demands more effort and concentration on the part of the listener (Gilakjani, 2016, p. 968). Unfortunately, this extra effort on the part of the listener is not usually long-lasting. Levis (2008) states that "pronunciation errors have a cumulative effect on the listener, and [...] when the attention required to process the speech signal becomes too great, the listener loses the ability, or desire, to understand" (p. 252).

Another reason why pronunciation is crucial to language performance is because pronunciation can impact the way we are perceived. Pronunciation is a vital factor for employability (Shak et al., 2016, p. 25). Clear pronunciation may give a good impression of our level of English and it can lead to more successful job interviews, and open doors for career advancement. Morley (1998, as cited in Gilakjani, 2016) states that "the first thing that can create good impression about the quality of their language ability is their pronunciation" (p. 968). Likewise, nonstandard pronunciation may hinder and obstruct interaction, and have our listeners question how competent we may be in other study or work areas. Shak et al. (2016) affirm that "graduates are often unfairly judged when they fail to convince others of their capabilities due to poor pronunciation and not having the language to express themselves well" (p. 25). Advanced students with poor pronunciation will be more likely to make a bad impression. In contrast, lower-level students with good pronunciation can come across as more capable or smarter than they actually are.

Pronunciation deserves special attention in English performance as it can compensate for other abilities, whereas other abilities cannot make up for incomprehensible pronunciation. "Without appropriate pronunciation, one's grammatical rules mastery and rich vocabulary possession does not guarantee that he is able to speak effectively" (Pardede, 2018, p. 143).

Finally, one more reason why pronunciation needs to be given importance is because its effect permeates other aspects of the language. Having a basic knowledge of pronunciation can help

with spelling, writing, and listening. In fact, Levis (2008) states that pronunciation is an essential part of listening comprehension (p. 43).

1.6 The Importance of Segmentals in Second Language Learning

Although pronunciation encompasses both segmentals and suprasegmentals, the former can often be the feature that stands out more frequently among English learners, especially in the case of beginners, since English beginners' stretches of speech are usually short. As a result, stress, rhythm and intonation features can go unnoticed, but not the way consonants and vowels are produced: this feature is present even in simple words, such as *yes* and *no*.

Learning segmental features correctly contributes to the intelligibility of a second language learner's speech. Native and nonnative speakers of English can understand learners more easily when they produce sounds accurately, reducing potential communication barriers, misunderstandings or confusion.

Another aspect where learning segmentals proves to be helpful is listening. It is no coincidence that numerous English learners with little instruction in pronunciation find listening tasks difficult. As learners become adept at recognizing and producing segmental features, their listening skills refine as well. They can better perceive and differentiate the sounds used by native speakers. This is really important because not being able to speak the language clearly, and not being able to understand it, can really set a student apart from a community of English language users. Purwanto (2019) declares that "if they cannot hear English well, they are cut off from the language except in printed form" (p. 84).

Finally, practicing the sounds of English can foster students' confidence and motivation. When learning how to pronounce vowels and consonants clearly, they realize how different and clear they start to sound, which will motivate them to continue working on this aspect of speaking.

1.7 Phonemes

In the realm of English teaching and learning, it is practical to be familiar with the notion of *phoneme* as it offers a gateway to the concept of individual sounds, and especially, since words in English are pronounced differently from their spelling. Roach (2012) explains: "because of the notoriously confusing nature of English spelling it is particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of the alphabet (p. 2)"

The Handbook of The International Phonetic Association (2011) defines a phoneme as "an element in an abstract linguistic system, an element which has to be realized in the physical world by an acoustic signal produced by vocal activity" (p. 27). The word *sheep*, for example, is then made up of three distinguishable phonemes: /ʃi:p/. Each symbol of the IPA represents one, and only one, phoneme.

1.8 The Sounds of English

The sounds of English are divided into two basic categories: consonants and vowels. A definition of what consonants and vowels are is provided by the International Phonetic Association:

Any sounds in which the flow of air out of the mouth is impeded at least enough to cause a disturbance of the airflow are consonants [...] Conversely, any sounds in which the air flows out of the mouth unimpeded are vowels. (2011, p. 6)

While there is no agreement among the most relevant sources on what variation of the phonetic alphabet to use (Kodirova & Henrichsen, 2022, p. 4), the Oxford Advanced Learner's Dictionary (2023) offers this notation for the consonant and vowel sounds of American English:

Consonants:

p	pen	/pen/
b	bad	/bæd/
t	tea	/ti:/
d	did	/dɪd/
k	cat	/kæt/
g	get	/get/
t∫	chain	/tʃeɪn/
t∫ dʒ		/tʃeɪn/ /dʒæm/
	jam	
d3	jam	/dʒæm/ /fɔ:1/
dʒ f	jam fall	/dʒæm/ /fɔ:l/ /væn/

S	see	/si:/
Z	Z00	/zu:/
\int	shoe	/ʃu:/
3	vision	/'vɪʒn/
h	hat	/hæt/
m	man	/mæn/
n	now	/naʊ/
n ŋ	now sing	/naʊ/ /sɪŋ/
ŋ	sing	/sɪŋ/
ŋ 1	sing leg	/sɪŋ/ /leg/
ŋ l r	sing leg red	/sɪŋ/ /leg/ /red/

Vowels:

i:	see	/si:/
i	happy	/'hæpi/
I	sit	/sɪt/
e	ten	/ten/
æ	cat	/kæt/
a:	father	/'fa:ðə(r)/
o:	saw	/so:/

Ω	put	/pot/
u	actual	/ˈæktʃuəl/
u:	too	/tu:/
Λ	cup	$/k \Lambda p/$
3.	fur	/f3:(r)/
э	about	/əˈbaʊt/

Diphthongs:

ei say /sei/
ou go /gou/
ai my /mai/
oi boy /boi/
au now /nau/

1.8.1 Consonants

Consonants are sounds produced in the mouth that involve some obstruction of air as it goes through the vocal tract. (Abad Olaya, 2020, p. 50). A more detailed definition of a consonant is offered by The International Phonetic Association (2011): "any sounds in which the flow of air out of the mouth is impeded at least enough to cause a disturbance of the airflow" (p. 6). There are three essential features to consider in order to produce the sounds of the English consonants: place of articulation, manner of articulation and voicing (Avery & Ehrlich, 1992, p. 23).

1.8.1.1 Place of articulation

Place of articulation is the feature that describes where in the mouth a sound is created. There are eight categories to indicate the different places of articulation: bilabial, labio-dental, dental, alveolar, post-alveolar, palatal, velar and glottal (Rogerson-Revell, 2018, p. 96).

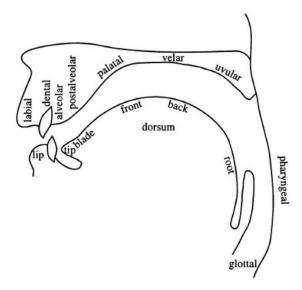


Figure 1.5. Mid-saggital section of the vocal tract with labels for place of articulation (The International Phonetic Association, 2011, p. 7)

Bilabial consonants are produced by tensing both lips and pushing air through them. Bilabial consonants are /p/, /b/, and /m/. Examples of words with a bilabial consonant are *pie*, *baby*, and *monkey*.

Labiodental consonants are produced when the lower lip touches the upper teeth. Labiodental consonant are /f/ and /v/. Words with these consonants are *flower* and *vase*.

Dental consonants are produced when the tip of the tongue touches the upper teeth. Dental consonants are $\frac{\theta}{a}$ and $\frac{\delta}{b}$. Words with a dental sound are *three* and *mother*.

Alveolar consonants are created by placing the tongue against or close to the gum ridge, above and just behind the upper front teeth. Alveolar consonants are /t/, /d/, /n/, /s/, /z/, /r/ and /l/. Alveolar sounds are present in the words *tomato*, dog, no, sun, zoo, read, and love.

Postalveolar consonants are produced by placing the tongue against or close to the gum ridge. Postalveolar consonants are $/t\int/$, /d3/, $/\int/$ and /3/. Words with a postalveolar sound are *church*, *jellyfish*, *shower*, and *education*. Note that the postalveolar 3 is not present at the beginning of words.

Palatal consonants are made by placing the tongue toward the hard palate. In English, the only palatal consonant is the /j/. A word with a palatal sound at the beginning is *yes*.

Velar consonants are produced when the back of the tongue touches or gets close to the velum (the soft palate) at the back of the mouth. Velar consonants are /k/, /g/, /g/, and /w/. Words containing a velar sound are *kiss*, *girl*, *hang*, and *what*. Note that the velar sound /g/ is not present at the beginning of words.

Glottal sounds are made near the glottis. The /h/ is a glottal consonant. The word *house* is an example of a word with the glottal h.

1.8.1.2 Manner of Articulation

Consonants can also be categorized by manner of articulation. A consonant sound does not only depend on the where in the mouth the sound is produced, but also on *how* it is produced (Rogerson-Revell, 2018, p. 99). Manner of articulation describes how the airflow is restricted in the mouth. There are six basic different manners of articulation to produce the English consonants: plosive (stop), affricate, nasal, fricative, approximant, and lateral approximant.

Plosive sounds are those where the airflow is temporarily stopped. Plosive consonants are $\frac{p}{h}$, $\frac{k}{h}$, $\frac{k}{h}$, and $\frac{g}{h}$.

Fricative sounds are those where the airflow is severely restricted but not stopped. Fricative consonants are f/\sqrt{v} , f/\sqrt{s} , f/\sqrt{s} , f/\sqrt{s} , and f/\sqrt{s} .

Affricate sounds are a combination of a plosive sound followed by a fricative sound. Affricate consonants are /tf/, and /dg/.

Nasal sounds are those where air does not flow out of the mouth but goes up through the nose. Nasal consonants are /m/, /n/, and $/\eta/$.

Approximant sounds lightly restrict some airflow. Approximant sounds are /r/, /j/, and /w/.

Lateral approximants are sounds where air flows around one or both sides of the tongue. The sound /l/ is a lateral approximant.

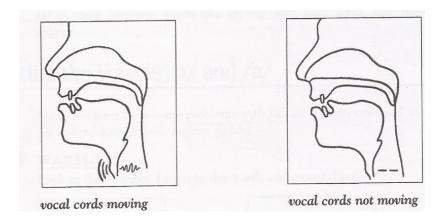
Place of articulation									
عب ت		Bilabial	Labiodental	Dental	Alveolar	Palato- alveolar	Palatal	Velar	Glottal
Manner of articulation	PLOSIVE	p b			t d			k g	
ann	FRICATIVE		f v	θð	s z	J 3			h
a E	AFFRICATE					tf dz			
	NASAL	m			n			ŋ	
	APPROXIMANT	W				r	j		
LATERAL APPROXIMANT					1				

Figure 1.6 English consonants organized by place and manner of articulation

Adapted from (Rogerson-Revell, 2018, p. 100)

1.8.1.3 Voicing

The third feature of consonants is voicing. Consonants can be either *voiced* or *voiceless* (also known as unvoiced). A consonant is voiced when the vocal folds vibrate during the production of that consonant. When the consonants are pronounced without making the vocal folds vibrate, they are voiceless consonants.



Figures 1.7 & 1.8 Illustrations of vocal cords when producing voiced consonants and unvoiced consonants (Hicks, 2010)

One way to test whether a consonant is either voiced or voiceless is by placing one's fingers against the throat, or one's hand around the neck when producing the sound. When the consonant uttered is voiced, a light vibration will be perceived in the fingers, or the hand. If the consonant is voiceless, the fingers or hand will not feel any change.

Some voiceless consonants have a voiced counterpart: the place and manner of articulation is the same for both sounds, but only one will make the vocal folds vibrate.

Note that in figure 1.4, in the cells where there are two symbols, the second one is a voiced consonant.

1.8.2 Vowels

In contrast to consonants, vowels cannot be described in terms of place of articulation, manner of articulation, or voicing –they are all voiced–. Linguists classify vowels according to four pieces of information: tongue height, tongue backness, lip rounding, and tenseness (Anderson, 2018). A simpler way to classify vowels is by considering two features: the vertical distance between the upper surface of the tongue and the palate: their height; and the part of the tongue, between front and back, which is raised highest: front, central or back (Roach, 2012, p. 11).

Vowel sounds can be represented visually by a "four-sided figure known as the 'Voice Quadrilateral" (The International Phonetic Association, 2011, p. 10)This voice quadrilateral describes the position of the tongue in the production of vowel sounds.

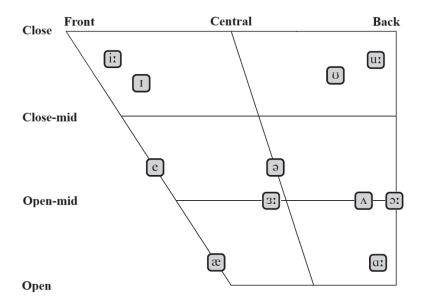


Figure 1.9 Voice Quadrilateral that shows the vowels of American English Adapted from (Rogerson-Revell, 2018, pp. 113-114)

At first sight, the voice quadrilateral may not bear any resemblance to the oral cavity. The following picture, however, shows the voice quadrilateral in a more illustrative way.

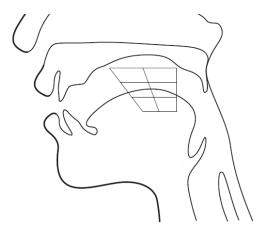


Figure 1.10 Schematization of the voice quadrilateral in the oral cavity Adapted from (Ashby, 2011, p. 88)

In close vowels, the tongue is placed up high near the roof of the mouth, without obstructing the airflow. In open vowels, the tongue rests down at the base of the mouth.

When the front part of the tongue is raised to produce a vowel, it is categorized as a *front* vowel; when the back part of the tongue is raised, it is a *back* vowel. The /u:/ sound is then a high, back vowel, and the /a:/, a low, back vowel. The /ɪ/ in *milk* /mɪlk/ is a close, front vowel, and the /ə/ in *about* /əbaot/ is a middle, *central* vowel.

1.8.3 Diphtongs

Some vowels change their sound during their pronunciation; they start at one sound and move toward another. These sounds are called diphtongs. The word *cook*, for example has three phonemes: two consonants and a vowel. Now, the word *cake*, also has two consonants, but the sounds in between: /eɪ/ are a diphthong as the sound /e/ goes toward the sound /ɪ/. The diphthongs in English are /eɪ/, /oʊ/, /aɪ/, /oɪ/, /aʊ/, /ɪr/, and /er/.

1.9 The International Phonetic Alphabet

The IPA is a collection of symbols that make a complete alphabet that represents phonemes, i.e., the smallest abstract, meaningful units of sound in a language.

A clear definition of what the IPA is can be found in The Handbook of The International Phonetic Association

[It] is based on the Roman alphabet, which has the advantage of being widely familiar, but also includes letters and additional symbols from a variety of other sources. These additions are necessary because the variety of sounds in languages is much greater than the number of letters in the Roman alphabet. (2011, p. 3)

The International Phonetic Alphabet was designed in 1888 by a group of European scholars in France. This alphabet was initially created to help children "acquire a realistic pronunciation of foreign languages" (2011, p. 194).

As its name suggests, the IPA is an alphabet that covers practically every sound uttered and used in human languages: Arabic, German, Portuguese, Turkish, and English, among others. An English learner is not required to learn the whole system of symbols of the IPA, only the ones that represent the sounds of English. Furthermore, the complete table of the IPA offers more symbols and diacritics to represent sounds even more precisely, but the average English learner does not need to learn these extra symbols.

1.10 The IPA as a tool to learn the sounds of English

English is a language that has more sounds than letters to represent them. This is evident in American English, for example, where there are at least 24 consonants sounds and 18 vowel sounds, a total of at least 42 sounds, but only 26 letters to symbolize them.

This disparity is noticeable in, for example, the letter *o* in words like *no*, *pot*, *horse*, *one*, and, *word*: they have the same written vowel, but the sound this vowel makes when uttered in these words is different. Conversely, one sound can be spelled in many different ways –the sound /u:/ in *boot*, *lose*, and *shoe*, for example.

English learners cannot rely on the spelling of words to determine their pronunciation. If they do so, there is a high possibility that it will create confusion in the person who speaks, as well as in the listener, who will be trying to understand what the speaker is actually saying.

Students should definitely learn that the sounds of their first language are not all available in their target language and vice versa (Zainnuri, 2014, p. 942).

The IPA serves as a visual way to help students see how similar words are pronounced, for example, eat /i:t/ and it /ɪt/; sky /skaɪ/ and ski /ski:/, etc. Avery and Ehrlich (1992) mention on the IPA: "In order to avoid the problems that a spelling system like English poses for the representation of sounds, it is helpful to use a phonetic alphabet when discussing sounds in languages" (p. 362).

By using the IPA, English students are able to visually differentiate between similar words where phonemes can sound very similar. Mompean (2015) states that using the IPA presents at least four advantages: systematicity, awareness-raising, visual support in teaching/learning, and even autonomous learning (pp. 295-297). This last advantage is of tremendous importance, as learners can write down the phonetic symbols of words for future reference, without the need of a teacher.

When English students have a visual reference to the sounds of English, they gradually distinguish the small differences between similar words, and their acquisition of vocabulary tends to be more accurate than that of a learner who does not have a way to differentiate between similar sounds. This is also beneficial to their listening skills, as they tend to have less difficulty to recognize words when they hear them.

The idea of learning a second alphabet can be quite intimidating, both for teachers and students. However, it is not a mentally demanding task to use two notation systems, since each system has its own use.

1.11 Challenging Sounds of English for Spanish Speakers

As English has a different repertoire of sounds from those of Spanish, English learners may experience more difficulty in producing some sounds than others.

Some of these difficulties are related to the absence of some sounds in Spanish, for example, the $/\theta$ / sound, or most of the vowel sounds. Sometimes, the challenge has to do with articulatory variations. Sounds like the /t/, or /d/ are produced differently in each language.

Muscle memory is another factor than interferes with learning how to pronounce some sounds, as the mouth is already habituated to familiar patterns. This is particularly noticeable when pronouncing consonant clusters that start with an /s/ sound and a consonant, as these clusters are common in English, but not present in Spanish.

1.11.1 /b/ and /v/

In general, Spanish makes no distinction between the sound /b/ and /v/. Spanish speakers tend to use the Spanish sound /b/ for English words that have the sound /b/ and /v/.

It is also necessary for students to learn that although both Spanish and English have the sound /b/, the English /b/ sound is more plosive. The /b/ in the word *billete* in Spanish sounds softer in contrast to the /b/ in the word *bill*.

Second, words in English containing the letter v are pronounced using the labiodental /v/, not the bilabial /b/. The production of this sound can be demonstrated by producing the /f/ sound while making the throat vibrate.

Some English words with the /v/ sound that are frequently mispronounced are have, love, very, give, and vowel. This last one deserves special attention as pronouncing it with a /b/ sound would sound like the word *bowel*. Context would definitely make the word understandable, but it would still evoke an unpleasant image in the listener.

1.11.2 Consonant clusters starting with an /s/ sound

Spanish words tend to maintain a one-consonant-per-syllable structure. The sound /s/ in Spanish is typically followed by a vowel sound, and it is often found at the beginning or middle of words, such as *sal*, or *mesa*. However, consonant clusters that start with the letter "s" are relatively common. Since Spanish generally does not have consonant clusters at the

beginning of words or syllables that start with the sound /s/, it is often difficult to pronounce words in English that have this consonant clusters. What the majority of students end up doing is adding a /e/ or a /ə/ sound before the s. For example, the phrase *special school* /speʃl sku:l/ would very likely be pronounced as /espeʃ(ə)leskʊl/.

Some difficult consonant clusters are:

• **s+t**: stop, start, strong

• s+p: spoon, space, special

• s+m: small, smile, smoke

• s+k: sky, skool, skeleton

• **s+l**: sleep, slow, slip

• s+n: snack, snake, sneeze

• s+c: school, scream, squirrel

What students can do in order to gradually get rid of the extra vowel is to stretch the /s/ sound so they can get used to producing the /s/ sound at first, until they feel more comfortable making it without recurring to stretching the sound at the beginning.

1.11.3 The /z/ sound at the beginning, middle, and end of some words

The letter z exists in the Spanish alphabet. Still, in Latin American Spanish, words with the /z/ sound are not pronounced with a different sound than that of the /s/. The words *salami* and *zapato* both have an /s/ sound at the beginning. In English, these sounds are completely different. The /s/ does not make the vocal cords vibrate whereas the /z/ sound does.

Words that are frequently pronounced using a /s/ sound instead of the /z/ sound are zero, zebra, and zoo.

The challenge of the /z/ sound is not limited to words that start with the letter z. This letter can also appear in the middle of words: *frozen*, *breezy*, *dozen*, *frenzy*, *person*, *present*, etc.

Moreover, the sound z is present not only in words that have the letter z at the beginning or the middle of the word. The sound z can also be present at the end of some words, even

when the word does not end with the letter z. Words such as *is, please, because, has, does,* and *was*, are pronounced with the sound /z/.

The pronunciation of the /z/ sound usually occurs in the following situations:

Plural nouns and third person singular verbs: When making a plural noun, and the word is preceded by a voiced consonant or a vowel sound. For example:

Noun	Plural	IPA representation	Explanation	
pet	pets	/pets/	The t is an unvoiced sound, therefore, the last sound is /s/	
dog	dogs	/dɔgz/	The g is a voiced consonant, therefore, the last sound is $/z$ /	

Third person singular verbs: When changing a verb to its third person singular form, and the verb is preceded by a voiced consonant or a vowel sound

Verb	Third	IPA	Explanation	
Verb	Person	representation	Explanation	
wish	wishes	/wɪʃɪz/	The I is a vowel sound, therefore, the last sound is /z/	
love	loves	/lavz/	The v is a voiced consonant, therefore, the last sound is /z/	

The possessive: The "s" in possessive forms is pronounced /z/ when the preceding sound is a voiced consonant or a vowel sound. For example:

Phrase	IPA representation	Explanation
Carlos's house	/ˈkaːrləsɪz haʊs/	The I is a vowel sound, therefore, the last sound is /z/

Inflections of Some Adjectives and Adverbs: Some adjectives and adverbs form their comparative and superlative forms with "er" and "est" endings. In these cases, the "s" is pronounced /z/ if the preceding sound is voiced or a vowel sound. For example:

Adjective	Adjective Comparative and		Explanation
	superlative form	representation	
close	closer, closest	/kləʊzər/, /kləʊzɪst/	The σ sound is a vowel, therefore, the following sound is /z/

A really important observation needs to be made here: it is not enough to just make the /z/ sound in words that contain the letter s but the sound /z/; As with other syllables ending in a vowel-consonant, the preceding vowel will be *stretched* and will have an "up and down" musical quality. This phenomenon is known as vowel lengthening.

1.11.4 English /d/ and /ð/

The Spanish sound /d/ is often used to produce both the English plosive /d/ and the fricative /ð/. However, the Spanish sound /d/ is different from the English /d/ sound. The Spanish /d/ sound is typically unaspirated, meaning that there is little or no puff of air when producing it. It is a relatively soft and clear sound produced by pressing the tip of the tongue against the teeth.

Conversely, to produce the English /d/, the tip of the tongue is not placed against the teeth; it is placed against the gum ridge above and behind the upper front teeth. Also, the English /d/ has a more aspirated quality. This is very noticeable when it appears at the beginning of a stressed syllable, like in *daylight*, or *doormat*. A small puff of air is released when producing the sound, making it more perceptible compared to the Spanish /d/: *día*, *dado*, *diente*.

When students use the Spanish unaspirated /d/ instead of the English, plosive /d/, words sound as if this consonant had not been pronounced. The listener is expecting to hear a plosive sound, and instead, hears just a sound that is hard to process and interpret.

Failing to make the English /d/ sound when it is necessary, goes beyond a slight inconvenience for the listener. The consequences of not making this sound can make the listener have a really hard time trying to understand what the speaker is trying to communicate. Very often, beginning students will mispronounce the past form of regular verbs, by just adding an /ed/ sound at the end, using the Spanish, unaspirated /d/.

This general substitution is problematic, as listeners are used to hearing a distinct /d/ sound at the end of verbs whose last sound in the simple form is voiced (*played*, *loved*, *called*). If the speaker does not use the plosive /d/ at the end, the listener will first have to resort to the context around the word to determine if the speaker meant to use the present or the past form of the verb, and then will assume that the speaker failed at using the past simple form.

1.11.5 Spanish /t/ vs English /t/

Spanish and English both have the sound /t/ in their repertoire. That said, the way this sound is produced is different, which gives it a different quality. First of all, the English /t/ can be pronounced as an alveolar stop, just as in *train*, or as a flap, like in words such as *city*, *Betty*, and *butter*; and also, as a glottal stop, as in words like *button*, and *mittens*.

In the case of the alveolar stop, the /t/ sound is similar to that of the /d/ and the / δ /. The Spanish /t/ is usually unaspirated, whereas the English /t/ has a plosive quality. Moreover, the tongue is not pressed against the teeth, it is placed against the gum ridge. Compare the pronunciation of the word *task* with the word *tarea*.

Students can understand this difference in a practical way by noticing how the tip of their tongue is more clearly visible when producing the Spanish /t/ than when producing the English /t/. Also, the English /t/ is produced the same way as the English /d/, with the exception that the first one is voiced, and the second one, unvoiced.

As with the case of the /d/ sound described above, the production of the normative English sound /t/ is especially important when pronouncing verbs in the past form, where the last sound of the verb in the simple form is unvoiced, as the /t/ is the last sound that should be heard: watched, liked, worked, looked, etc. Once again, failing to use the plosive /t/ at the end will result in the listener assuming the speaker failed at using the past simple form of the verb.

1.11.6 The θ sound

The sound $/\theta$ / is not present in the Spanish language. This usually results in Spanish speakers frequently substituting this sound for a Spanish /t/, a Spanish /d/, or even an /f/. Words like *three, think*, and *thing* end up sounding like /tri/, /drɪŋk/, and /fɪŋg/. To help Latin American students produce this sound more easily, they can be made aware that it is the sound present in European Spanish when they say words with the letter z, like *zapato*. Also, they can start by producing the voiced sound /ð/ and then turn it into an unvoiced sound, leading to the production of the $/\theta$ /.

Words with the sound $/\theta$ / that are especially necessary for students to produce normatively are *Thursday, theater, think, three, thirty,* and *bathroom*.

1.11.7 /æ/, /ɑ:/, and / Λ /

Spanish speakers often find it hard to recognize the difference between the sounds /æ/, /α:/, /α/, and /a/; and end up mispronouncing words like *cat*, *hard*, *sun*, and *banana*.

Using the Spanish /a/ as the starting point, the /æ/ sound is somewhat longer, and the lips are pulled further back; also, the jaw goes further down. The resulting sound, in contrast to the Spanish /a/, has a "two-musical-note" quality.

In contrast to the Spanish /a/, the sound /ɑ:/ is produced further back in the mouth. The jaw is also pulled further down. The resulting sound is similar to the one that comes out when the doctor asks us to open our mouth wide and say "aaah". This sound also has a "two-tone" quality.

The sound /n/ is also difficult to produce for Spanish speakers since it is not part of the repertoire of sounds of this language. As a result, learners often pronounce words influenced by how vowels are spelled in their first language, ignoring the fact that this sound can be represented by different vowels, or a combination of them: *Monday, mother, sun, son,* and *double* end up being pronounced as /mondai/, /moder/, /son/, /son/, and /double/. To make this sound, it is a good idea to make students aware that, as a low-mid, back vowel, the sound is similar to that of the Spanish /a/, but the mouth is not as open. Also, they can try to visualize how the sound is produced back in the mouth, not at the front.

1.11.8 The schwa /ə/

The sound /ə/, is very special as it can take the form of any spelled vowel, or even combination of vowels, and it is not present in the Spanish language. This is a short, neutral sound that can appear at the beginning, middle or end or words: *about* /əbaʊt/, *vegetable* /vedʒtəbl/, and *banana* /bənænə/.

1.11.9 /d₃/ and /y/

The sounds /dʒ/ and /y/ are often pronounced as the Spanish /j/. When the Spanish /j/sound is produced, the upper and lower teeth make contact, and the tongue is placed toward the hard palate; when the English /y/ is produced, the tongue is still placed toward the hard palate, but the upper and lower teeth do not touch. The resulting sound may seem almost identical to that of the Spanish /j/. Nevertheless, it is necessary to produce it normatively since there is another similar sound: the /dʒ/. This sound is produced by adding a /d/ sound to the English /ʒ/. The sound produced will have a more plosive quality.

This distinction between the /dʒ/ and /y/ sounds is noticeable in words like *Johnathan* /dʒɑ:nəθən/, *Jessica* /dʒesikə/, *yellow* /yeləʊ/, and *yes* /yes/.

1.11.10 /r/ and /i:/

In Spanish, the vowel /i/ is pronounced only in one way. In English, this vowel has two different pronunciations represented as /ɪ/ and /i:/. The production of the /ɪ/ requires less tenseness in the mouth. It can be found in words like *sit* /sɪt/, and *six* /sɪks/. The /i:/ sound feels lightly more tense and sounds relatively longer than the /i:/. It also has a "two-tone" quality, where the sound can be heard in two musical notes.

The difference between these two sounds is essential to clearly differentiate words like *eat* /i:t/ and *it* /ɪt/, *heel* /hi:l/ and *hill* /hɪl/; and to produce words like *beach*, and *sheet* with confidence.

1.11.11 Spanish /r/ and English /r/

In Spanish, the sound of the letter /r/ is produced by placing the tip of the tongue against the gum ridge, and letting some air pass through. In English, the tongue never touches the gum ridge, or palate; it is only slightly rolled back and upward. Getting rid of "rolled r's" when speaking will help learners acquire a more normative and "listener friendly" speech.

Some words that have this distinctive /r/ sound are *red* /red/, *sorry* /sʌri/, *horrible* /hɔrɪbəl/, and *carry* /keri/.

This chapter presented a brief yet concise description of the concept of pronunciation: individual sounds, stress, rhythm, and intonation. There was an exploration of two approaches to teaching pronunciation, and of the notion of standard pronunciation. This chapter also addressed the role of pronunciation, as well as of segmental phonology, (individual sounds) in language teaching.

Finally, there was an examination of the sounds of English, their characteristics, and how the International Phonetic Alphabet, a system of symbols that represent the sounds of language, can help as a tool to bridge the inconsistency between English spelling and pronunciation. Sounds of English that present a particular challenge for Spanish speakers are also addressed.

The following chapter addresses the relation between the IPA and adult learners of English: the intricacies of learning the sounds of the language as an adult, the use of the IPA in the English classroom, and the factors than can enhance or diminish its ideal process of learning. Finally, there is an examination of what may be some realistic goals when teaching pronunciation.

CHAPTER 2.

TEACHING THE IPA TO ADULT BEGINNERS

Teaching English pronunciation to adult beginners, namely the teaching of individual sounds by using the International Phonetic Alphabet (IPA), poses a challenge in the realm of English language education. This challenge stems from various factors, including the teacher's training, the influence of the students' first language, the role of the teacher, and the methods employed in the classroom.

Both teachers and students recognize the importance of pronunciation in the development of their communicative English skills, yet neither of them receives enough instruction on it. "[T]eachers frequently regard pronunciation as overly difficult, technical or plain mysterious" (Carter & Nunan, 2001, p. 56).

Currently, many English teachers are faced with the dilemma of recognizing the importance or pronunciation, but feel uneasy when it comes to teaching it "because of their low confidence in their ability to teach it, insufficient formal training, and lack of appropriate materials" (Sardegna et al., 2017, p. 84).

Also, learning the sounds of English is not as easy for adult learners. The repertoire of sounds in the English language is often difficult to acquire for adult beginners because they automatically perceive the sounds of English as those of their first language. While children acquire the set of English sounds by just being exposed to the language, adults unconsciously compare the sounds of English to all of the prototypes stored for the Spanish sounds and pick the most similar one, thus distorting the sound that actually came into their ears (Gopnik et al., 2001, p. 108). Avery and Ehrlich (1992) explain this phenomenon: "It is as if learners hear the sound through a 'filter', the filter being the sound system of the native language" (p. 233).

An English student can spend years using the language and still not notice that the sounds they make to speak do not correspond to those of the language. However, direct instruction can help them to first, understand that English has a different set of sounds than that of Spanish; and second, to learn how to produce and incorporate those sounds into their speech. The IPA is a helpful resource than can help students fulfill both purposes.

While the IPA can help learners improve the way they pronounce the sounds of English, it is sensible to receive training from someone who has a deep understanding of how each symbol sounds, as well as how to produce them. In this respect, the International Phonetic Association (2011) states that "anyone intending to use the symbols should receive training in order to learn how to produce and recognize the corresponding sounds with a reasonable degree of accuracy" (p. 160). This is not supposed to be a deterrent for educators. Avery and Ehrlich (1992) offer some balance to this stance by saying that "one does not need to be an expert phonetician" (p. 147).

2.1 Adult Beginners of English

An adult learner, according to Harmer (2012) is any student aged eighteen and upwards. (p. 257). An adult in English language learning is a person who has just started learning English. According to The Companion Volume of the Common European Framework of Reference for Languages (2020), a beginner of a language would fall into the Pre-A1 level (p. 55). The levels presented in the CEFR did not include a Pre-A1 level (Council of Europe, 2001, p. 23). However, level Pre-A1 is now part of the level structure for language learning. The descriptors for a Pre-A1 level learner are the following:

- can make simple purchases where pointing or other gesture can support the verbal reference;
- can ask and tell day, time of day and date;
- can use some basic greetings;
- can say yes, no, excuse me, please, thank you, sorry;
- can fill in uncomplicated forms with personal details, name, address, nationality, marital status;
- can write a short, simple postcard'. (CEFR Section 3.5)

Adult beginners' spoken performance is very limited, as they still have not acquired a good amount of vocabulary or grammatical structures, and have not interacted with other speakers frequently, using English as the language of communication. In terms of overall speaking, a

Pre-A1 level English learner, "can produce short phrases about themselves, giving basic personal information (e.g. name, address, family, nationality)" (Council of Europe, 2020, p. 63).

2.2 Adults and the acquisition of the sounds of English

Often, when adults start learning English pronunciation, it is hard for them to assimilate that this language has a set of sounds different from that of Spanish. Later, when they are introduced to this new set of sounds, they find it hard to differentiate between these sounds and those of Spanish. Moreover, they struggle to find differences between similar sounds of English. Our first language, unfortunately, creates a perception system that leads to a loss of sensitivity to hearing the sounds of other languages (Fraser, 2000, p. 24).

Human beings start learning the sounds of language even before they can talk (Gopnik et al., 2001, p. 101). Babies can learn any language they are exposed to. During their first year of life, their brain *takes statistics* of the human sounds they hear, and by the time they turn one year old, they have already discarded sounds of languages they were not exposed to, and keep the sounds that are most used around them: the sounds of their native language(s) (Gopnik et al., 2001, p. 152). That being the case, this ability to acquire the sounds of any language is time-sensitive. The authors further expand that "[w]hen we learn a second language past puberty, we speak with a foreign accent—in other words, with phonetics, intonation, and stress patterns that are not appropriate for the new language." (Gopnik et al., p. 192).

Some scientists suggest the possibility of a critical period for language acquisition. The Critical Period Hypothesis states that, among other skills, language will be fully developed before brain lateralization is complete. Once this takes place, usually during puberty, acquiring a first or second language will be more difficult (Rothman et al., 2019, p. 26). Moreover, a second language learned after this period will invariably exhibit non-native features (Carter & Nunan, 2001, p. 220). Notably, this hypothesis was challenged soon after its presentation (Vančová, 2019, p. 142). Evidently, if the CPH were true for language learning, there would be no cases of native-like adult L2 learners, which, as uncommon as they are, are not truly exceptional (Rothman et al., 2019, p. 26).

The fact that humans decode and store the sounds of whatever language they are exposed to during their first year of life, and that later, as children, they may have a higher chance of developing their speaking skill more easily, does not mean that adults are impeded to learn the sounds of a foreign language, too.

Birdsong (1992) supports the idea that once past puberty, age is not a determining factor anymore. He states that "there may be well a correlation between age of initial learning and ultimate achievement, but it does not necessarily follow that age is a causal factor in that relation" (p. 162). Moyer (2013), more recently, agrees on this idea by commenting that "age does not provide a unitary explanation for L2 phonology outcomes" (p. 10).

The general agreement among psycholinguists and phonologists is that the difficulty in learning how to pronounce a foreign language is cognitive, rather than physical (Gilakjani, 2011, p. 74). Most of the literature leans towards the idea that individuals who start learning later in life can still achieve success as learners (Rahman et al., 2017, p. 4). Of course, it is sensible to consider that as human beings age, there are some factors that might interfere with the acquisition of the sounds of English, such as the natural cognitive decline and hearing loss. Muñoz (2019) points out that "the effects of age cannot be studied in isolation of many other factors. The amount and quality of input is one such relevant factor" (p. 444).

It seems that the success of an L2 learner in speaking with native-like pronunciation, may depend in great part, on their own motivation, influence from their first language, cognitive differences, learning context (classroom environment vs immersion), and linguistic aptitude, among many other variables (Rothman et al., 2019, p. 26). Moyer (2013) adds to the individual factor: "individual variation is ubiquitous [...]. Beyond knowing that cognition and neurobiology shift over the lifespan of the individual, there is fundamental uncertainty whether neurobiological age actually determines language acquisition outcomes." (p. 47).

Furthermore, age can be approached as an advantage. Adult learners have the capacity to understand abstract concepts more easily than young learners: for example, the IPA, the production of speech sounds, rules of pronunciation, etc. (Reid, 2016, p. 23). Having adults

learn the individual sounds of English in an intellectual way may help them learn the IPA system and its use more easily.

Fullana (2006, as cited in Moyer, 2013) found that once formal instruction reached a certain number of hours, there was little difference between age groups on a vowel and consonant discrimination task (p. 24). The common belief that suggests that the older the learner, the more difficult it will be for them to learn new sounds, seems highly questionable, after all.

The fact that motivation may be the most important factor in improving an adult's pronunciation and acquisition of the sounds of English can actually play in the students' favor. Acquiring the sounds of English may boost their confidence to keep learning English, helping them reach their ultimate goal: becoming bilingual.

Jones (1997) comments in this matter:

Creating a stronger link between pronunciation and communication can help increase learners' motivation by bringing pronunciation beyond the lowest common denominator of "intelligibility" and encouraging students' awareness of its potential as a tool for making their language not only easier to understand but more effective. (p. 109)

2.3 Using the IPA in the classroom

Learning about the IPA and how to use it in the classroom to acquire the sounds of English may sound quite challenging, as it is a specific alphabet that is rarely used in daily life. On the other hand, the use of the IPA offers several advantages. Atkielski (2019) lists some of the most relevant:

- It offers a precise representation of how letters and words sound
- It helps as a visual way to analyze, compare and correct a learner's pronunciation, as both teachers and students are able to see what sounds need to be changed
- It serves as a clear way to understand connected speech, by visually being able to identify what sounds are omitted or assimilated

• It supports learners and teachers as an additional resource to identify how words sound, as opposed to only using an audio recorder, or traditional "repeat after me" techniques.

Harmer (2015) points out the positive aspect of learning the IPA:

[...] since English is, for many students, apparently bedevilled by a lack of sound and spelling correspondence [...] it may make sense for them to be aware of the different phonemes, and the clearest way of promoting this awareness is to introduce the symbols for them. (p. 280)

The teacher can then explain that the IPA is an alphabet that represents sounds. This is important, because English has different sounds from those of their native language. Also, because there is no correspondence between the way a word is spelled and how it is pronounced. The teacher can then demonstrate this difference by saying a few common words, preferably ones that have a stark difference between their spelling and pronunciation. The teacher will pronounce the words with the sounds of their language, and those of English. After a few examples, the students will ideally be able to recognize the need for a second alphabet.

Once the use of the IPA in the English class has been presented, the teacher will have to make use of it consistently. It is not an aspect of the class that will be addressed only at specific times; it will preferably be present at all times. Every time a student has a question about the pronunciation of a word, the teacher will have a visual aid ready to be used.

Several activities can help teachers to use the IPA. For example, when students see a word written in the Roman alphabet, they often pronounce it using sounds that are familiar to them. By writing the word in IPA, the teacher can help their students become aware of how clearly they are actually pronouncing that word. Another opportunity to use the IPA in class is when learners look up words in a dictionary. The class can also address the way the words are represented. A visual representation of the sounds needed for the production of words helps students find order and predictability in English pronunciation.

Moreover, when a student mispronounces a word, the teacher, or other students will be able to help them adjust their pronunciation by using the IPA symbols. This way, the students will be able to know exactly which phoneme(s) they will have to modify to accurately enhance their pronunciation.

It is important to consider that learning to make the sounds of a different language can make some students feel vulnerable and exposed. Providing feedback should be done in the most respectful way, yet clearly and explicitly. Yates and Zielinski (2009) comment that "many adult learners find that pronunciation is one of the most difficult aspects of English to master, and feel the benefit of explicit help right from the beginning of their language learning" (p. 11). Harmer (2015) also points out that when correcting students, teachers have to make sure they do it in a constructive way; always offering help on what parts of their mouth they should use, and offering them opportunities to hear instances where the sounds in question are being used correctly (p. 282). Hedge (2001) says that the correction of pronunciation must always be in a positive way as possible as awkwardness, inhibition, embarrassment and fear of losing face tend to be strongly present (p. 287).

Indirect feedback, such as the teacher only repeating the mispronounced word, may not be enough. Nonexplicit feedback may be ambiguous, as learners may associate a recast as a way to confirm the meaning of the utterance, not its form (Darcy, 2018, p. 28).

Although, at the beginning, learning the IPA may seem like extra work for the learners, it is a tool that, when patiently taught, does benefit students in the short, medium and long term. "If they (students) are only asked to recognize, rather than produce, the different symbols, then the strain is not so great, especially if they are introduced to the various symbols gradually rather than all at once." (Harmer, 2015, p. 281).

2.4 Variables that can influence the learning of the IPA

Teachers and learners have been, for a while now, facing a confusing contradiction because the IPA symbols come up in their textbooks, yet they are not used in their English classes. Kodirova and Henrichsen (2022) comment in this respect:

[on] the one hand, most dictionaries, many computer-assisted language learning sources, applications, textbooks, and even YouTube videos on pronunciation employ phonetic symbols, expecting users to know what the symbols stand for [...]. However, in language classroom teaching the use of phonetic symbols is not usually considered indispensable and often depends on the teacher's personal decision. (p. 1)

When talking about teaching pronunciation and using the IPA in the classroom, it's important to consider a few major factors: the teacher's training and beliefs about the IPA, the students' backgrounds (including whether they share the same first language as the teacher), and the teaching methods used.

2.4.1 The teacher

An important variable for an adult to acquire some form of normative pronunciation of the sounds of English is the teacher. Many English teachers are not properly trained to teach pronunciation, much less the IPA. They actually complain that they themselves have never been trained to teach it (Reid, 2016, p. 20).

Some teachers take English teaching training, classes and courses, but very often, pronunciation is simply not approached as something to teach. As a result, teachers may not feel confident enough, and neglect this aspect of the skill of speaking.

In a study conducted at Indiana University, fourteen teachers of an Intensive English Program were asked about their practices and beliefs about pronunciation. They all agreed that "pronunciation instruction plays a very important or crucial role in the lives of their students across almost all contexts and situations" (Darcy, 2018, p. 16). Curiously, only two out of those fourteen teachers were satisfied with the way they teach pronunciation.

Almost all English language teachers get students to study grammar and vocabulary, practice functional dialogues, take part in productive skill activities, and try to become competent in listening and reading. Yet, some of these same teachers make little attempt to teach pronunciation in an overt way (Harmer, 2015, p. 277). In fact, many teachers are not even aware of the importance of pronunciation (Gilakjani, 2016, p. 3). In any case, educators need

to be able to understand the segmental and suprasegmental aspects of the English pronunciation (Quarto, 2022, p. 3).

Even if the students are highly motivated to learn the sounds of English and integrate the use of the IPA to their learning, if their teacher is not knowledgeable enough to approach pronunciation in the classroom, the result will not be satisfying, and both the teacher and the students will not see any particular progress.

When untrained teachers are asked a question about pronunciation, they may just say the word in question more slowly, or several times. The students may repeat the word, the class may go on, but both the teacher and the students will not feel completely satisfied with this clarification. They may not be really able to point at what was missing in the explanation, but they both may certainly have a feeling of incompleteness, which leads to a sensation of insecurity every time they happen to say the word in question.

While training in teaching the IPA applies to both native and non-native teachers, non-native teachers also face another challenge: they may have not assimilated the sounds of English, thus, teaching the language by using the sounds of their first language. What is more serious is that they may not even be aware of this discrepancy between the sounds of English and the sounds they use to speak the language, which would make the process of assimilation of the sounds even more difficult. By doing certain activities such as reading materials out loud or having students repeat after them, the teacher can further exacerbate the problem.

Another way the teacher can influence students in the learning process of the IPA is when they themselves do not believe the IPA or pronunciation is important enough to be addressed in the classroom. There is research that shows that "teachers' beliefs on teaching and learning exert an influence on their actual classroom practices" (Shah et al., 2017, p. 193).

As an example, Kodirova and Henrichsen (2022) conducted a study where 120 teachers (most of them experienced in teaching pronunciation) answered an online survey about the use of phonetic symbols in teaching ESL pronunciation. The results were surprising. While 80% of them had positive attitudes towards the use of phonetic symbols, one third of them did not report using phonetic symbols in their practice (p. 1).

Teachers' beliefs about pronunciation can influence the way they cover the aspects of pronunciation in their classes, as the role pronunciation plays in an English language program varies and the amount of time and effort devoted to it seems to depend to a large degree on the individual teacher (Purwanto, 2019, p. 83). If they do not think this is important, they will very likely dedicate little to no time to it.

Although this is not the general sentiment among teachers, it is important to consider that pronunciation-related tasks presented in the classroom are "mostly based on what they believe the focus on pronunciation should be and their limited knowledge about pronunciation content and instructions" (Shah et al., 2017, p. 202).

A teacher who is going to help his students learn to integrate the IPA into their students' learning process needs to, at least, have basic knowledge of the sound system of English (Derwing & Munro, 2015, p. 14). Other ideal characteristics would be to:

- have already integrated the sounds of English to his own speech
- have a clear understanding of how to make the sounds of English (Gilakjani, 2017, p.
 1252)
- know the differences between the sounds of English and the sounds of their students' first language
- be able to help learners identify differences among similar English sounds

Teachers who set off to incorporate the use of the IPA in their classes must have already made an effort to acquire the most normative pronunciation possible, for one simple reason: they will be their students' role model. Whether they like it or not, the most frequent example of pronunciation will be themselves; the teacher's pronunciation will be, in a way, the model the students will aspire to acquire. A teacher with standard pronunciation will be more likely to help his students acquire theirs.

Sometimes, non-native teachers may feel uncomfortable teaching the sounds of English. However, being a non-native speaker does not mean that one is not capable to teach the sounds of English. On the contrary, they can actually use that in their favor, as they have already gone through the process of learning and acquiring the sounds. They have a well-

developed understanding of the articulation of the sounds of both languages, which can help them guide their students more efficiently.

Harmer (2015) explains that:

Learning a foreign language often presents us with the problem of physical unfamiliarity (i.e., it is actually physically difficult to make the sound using particular parts of the mouth, uvula or nasal cavity). To counter this problem, we need to be able to show and explain exactly where sounds are produced (e.g., where is the tongue in relation to the teeth? What is the shape of the lips when making a certain vowel sound?). (p. 280)

Brown (2007) comments on this potential advantage that non-native teachers have over native ones: "Clearly, the native language is the most influential factor affecting a learner's pronunciation. If you are familiar with the sound system of a learner's native language, you will be able to diagnose student difficulties" (p. 340).

2.4.2 First language interference

When adults set off to learn a second language, there are already well-established neural pathways from their first language that may tend to influence their perception and production of the sounds of the second language.

Moreover, even when learners are aware of the differences between the two languages, the deeply ingrained patterns of their first language can be hard to override, thus making pronunciation a persistent challenge. Almost all researchers agree that a person's first language interferes when learning a second language (Derakshan & Karimi, 2015, p. 2112).

However, the influence and interference from the first language varies from person to person. With effective language learning strategies, learners can gradually minimize such interference and improve their proficiency in the second language.

The use of the IPA can be useful from the very early stages of learning. By associating a unique symbol to a specific sound, students are more likely to distinguish differences between the sounds of English and the sounds of Spanish, and how they are produced.

Once students become familiar with the sounds of English and their visual representations, it is necessary to help them go through a process where they can distinguish between similar English sounds as well.

The teacher can ease this stage of the process by exaggerating how sounds are produced so they sound as different as possible from a Spanish sound, or a similar English sound. Gopnik et al. (2001) suggest: "exaggerating the sounds of English may break past the interference" (p. 193).

2.4.3 The student

While the teacher as well as the learners' first language can play an important role in the development of learners' segmental aspect of pronunciation, their individual perception and approach to it can play an even more crucial role.

Some adults may find the sound discrimination practice more challenging than others. Not only will they have to learn how to produce a completely different set of sounds for the new language, they also need to understand the differences between both sets of sounds. Moreover, they have to practice constantly to be able to distinguish between similar sounds of English. That said, the physiological and cognitive elements to develop this are present and fully functional in adults.

Another learner factor is the amount of exposure to the language. Not all English learners have a strong desire to learn to speak the language as clearly as possible. Some may just need it for work or school. As a result, their exposure to the language may only be the time they spend in class, thus limiting their exposure to the language. If learners consume most of their entertainment and academic materials in their first language, they will not have many opportunities throughout their day to practice and exercise their awareness and production of the sounds of English.

The most influential factor for the learner, interestingly, may be their own motivation. As with the previous issue, some learners may not have a deep interest in learning to speak clearly. They may be more interested in strengthening other skills, and may question the value

of investing time and effort in pronunciation improvement. In such cases, it is perfectly valid to let learners establish their own priorities, as long as they do it from a place of knowledge. English learners need to be aware that improving their pronunciation definitely enhances their communication abilities. If they are aware of this and still do not find it significant, it is best not to insist, as this can create reticence to learn not only pronunciation, but English in general. The teacher will have to trust that the student knows best the scenarios where they will use the language.

2.4.4 When teachers and learners share a common language

In many English learning environments, both the teacher and the learners happen to share the same first language. This can affect both in a negative but also positive way. A teacher who speaks their learners' first language may overlook a good amount of pronunciation issues, which may give the false impression that the students' speaking skills are higher than they actually are. Gilakjani (2016) mentions that, often, teachers do not correct their students' pronunciation mistakes, because they are used to "bad English" (p. 3).

This absence of feedback can be intentional, as teachers may fear overwhelming learners with constant feedback, or because they prioritize fluency and comprehension over accuracy; but this can also happen involuntarily. When both the teacher and students share the same first language, they may, unknowingly, speak English using the same pronunciation patterns (those of their first language) and may make the same mistakes (Gilakjani, 2016, p. 3). The teacher will inevitably understand their students' speech more easily than a person who does not speak the same first language, even if the students mispronounce words.

On the other hand, teachers themselves may mispronounce words throughout their speech, either deliberately – to make the word more similar to Spanish, or unintentionally –because they actually do not know the standard pronunciation of the mispronounced word.

When the teacher and the student share the same first language, a vicious cycle of nonnormative pronunciation may sometimes take life, where both the teacher and the students understand each other, but do not correct each other; where students make progress in different areas of the language, but do not make progress in terms of pronunciation.

In unfortunate yet frequent occasions, learners will study English with one teacher with whom they share the same first language, and go on to the next level with another teacher who also happens to speak the same first language, and so on. In these environments, the teachers will understand their students, and the students will understand each other, but they will very likely be just immersed in a shared illusion, where the first language features of stress, rhythm, intonation, and individual sounds, will act as shortcuts for actual comprehension.

The effect of this vicious cycle is, unfortunately, revealed when learners encounter themselves in situations where they have to speak English with speakers with whom they do no share their first language. They will find it very hard to understand them despite the fact that they *speak* English in the classroom.

A teacher who shares his students' native language may be, at this point, a disadvantage for the class. However, Brown (2007) points out a positive aspect of a teacher sharing his students' native language by stating that "clearly, the native language is the most influential factor affecting a learner's pronunciation (p. 340). If you are familiar with the sound system of a learner's native language, you will be able to diagnose student difficulties". A teacher who speaks his student's native language may be more likely to know what aspects of pronunciation will be more difficult than others to explain and work on, what words are students more prone to mispronounce, and how certain sounds can be contrasted for a more effective clarity.

2.4.5 The approach in the classroom

The way individual sounds and pronunciation in general are actually approached in the classroom can be crucial to the development of the learners' clarity when speaking. First of all, how a learner utters words or even sounds is not something that can be assessed easily.

Other variables to consider are the way the teacher helps learners acquire the sounds of English, as well as the time they devote to actual exercises to practice segmentals.

Often, teachers and students dedicate little to no time to pronunciation, and learners feel confident about their progress, since teachers can score their students' progress quantitatively, and students can see and compare their progress numerically. Judy Gilbert (2008) states that "pronunciation is more psychologically sensitive and harder to score objectively" (p. 44). It is necessary, then, to consider that even if pronunciation, or the production of the sounds of English is something that cannot be numerically assessed as easily, it is still necessary to devote some time to it. Pronunciation exercises may be difficult to assess, of course, but if we eliminate everything difficult from our teaching, we may end up doing very little beyond getting students to play little communication games (Roach, 2012, p. 4).

One of the primary deficiencies in the teaching method is the lack of specificity in pronunciation guidance. Spanish learners might not receive targeted instruction on tongue placement, lip rounding, or airflow, which are essential for mastering English sounds. Without such detailed guidance, they can struggle to produce English phonemes accurately.

Another major issue in the delivery of teaching the sounds of English is the actual time devoted to activities to learn it. In a traditional classroom, there is little to no focus on pronunciation during speaking activities. Since a lot of current English teachers are the children of the Communicative Approach, there is more emphasis on just getting one's message across. That said, it is important to provide opportunities for speaking activities that are more focused on not just conveying a message, but doing so clearly and confidently. Providing feedback can be a very time-consuming activity, but learners deserve to be offered such opportunities so they can learn the language in a balanced way.

Many English teachers think pronunciation exercises are a boring and an unnecessary task. Exercises such as repeating phrases, tongue twisters, or mimicking native speakers are often frowned upon. But the reality is that these are some really useful ways to get students to practice in a more detailed way. Having students practice complete conversations is really

useful to practice stress, rhythm, and intonation, but small, detailed exercises that focus on just one or two aspects of pronunciation at a time can be also very useful.

These variables can play a decisive role in the learner's development of segmental phonology. It is important to consider that "[t]here is no well-established systematic method of deciding what to teach, when, and how to do it" (Gilakjani, 2016, p. 1). Every classroom is a unique, specific ecosystem, and there is not only one way to teach segmental phonology, or the IPA, but teachers need to be aware of these variables so they can have a more educated control over them.

2.5 Realistic goals of pronunciation teaching and learning

Aspiring to acquire a native-like pronunciation just because one can make the sounds of English is unrealistic, as the sounds of English are just one of the features of pronunciation of the language. Moreover, acquiring native-like pronunciation is not an impossible goal, but it is an exceptional occurrence among some very talented and motivated students (Prodanovksa-Poposka, 2017, p. 779).

Adult beginners do not need to sound like a native speaker to be competent at speaking. Celce-Murcia (2001) makes the point that striving for nativelike accuracy is practically setting students up for failure (p. 118). Gilbert (2008) warns about what negative effect this might cause: "Pronunciation has traditionally been taught with a goal of 'speaking like a native speaker' but this is not practical. In fact, it is a recipe for discouragement both for teachers and for students" (p. 42). Gilakjani addressed this stance as well by saying that the goal of pronunciation instruction is not to ask learners to pronounce like native speakers, they just need to sound intelligible (2016, p. 2), (2016, p. 969).

English learners are not supposed to learn the whole IPA and its use in a short time or a few sessions. Learning to use the IPA is a process that takes time: time to become familiar with the IPA, time to be able to connect the sounds of English to their visual equivalent, and time to incorporate them into their regular learning of the language. Despite this process being long and slow, progress is always evident and students notice it. Brown (2007) states that

"[a]t the beginning levels, we want learners to surpass that threshold beneath which pronunciation detracts from their ability to communicate" (p. 340).

Patience really needs to be part of this process. Learning how to use the IPA is a quite time-consuming task which requires constant practice. Trinh et al. (2022) state that "[u]sing the IPA to teach pronunciation frequently takes time, so teachers are advised to consider it thoroughly before thinking of how to maximize its potentials" (p. 751).

When setting realistic goals for pronunciation teaching in general, it is important to take into consideration possible exceptions. While some students may aim at only sounding intelligible, some other students may want to indeed sound as close to a native speaker of the language; in which case, the teacher should be able to provide them with as much help as possible.

Ultimately, it is really important to preserve a sense of perspective. The production of the individual sounds of English is not the only factor that makes a person sound clear. There is also stress, rhythm and intonation, and these four factors only pertain to the pronunciation aspect of the speaking skill. A learner with a bad production of individual sounds but good stress and intonation patterns is still very easy to understand (Gilakjani, 2011, p. 75).

This chapter examined the definition of an adult learner of English, and how the process of learning the sounds of English may differ from that of young learners. It also talked about some of the variables that play a role in the effective learning of the sounds of English, and how, as well as why the IPA can be beneficial in the language learning process of adult beginners. It was also noted how teaching pronunciation, and more specifically, individual sounds, does not mean learners are expected to sound native-like.

The following chapter presents a series of exercises that teachers (and students) can use in the classroom to develop the phonological awareness of the sounds of English, as well as how to pronounce these sounds in familiar vocabulary contexts.

CHAPTER 3.

USING THE IPA AS A TOOL TO DEVELOP ENGLISH PRONUNCIATION IN ADULT BEGINNERS

The consistent use of the IPA in class can be an empowering tool for students to develop their pronunciation, and their speaking skill overall.

Teaching the sounds of English and the IPA can seem, at first sight, challenging, or overwhelming even. However, the incorporation of this practice can be done smoothly and connected to knowledge that is already familiar to the students.

The following exercises may seem unpretentious, as they present simple, basic vocabulary that most students will likely be familiar with, but this is actually an advantage, as these exercises are aimed at helping learners understand how to use the IPA and learn the sounds of English, not to learn new vocabulary. Each exercise contains notes that the teacher can use to make the most benefit out of each practice session.

The exercises are organized in a progressive way. The first four exercises are to help students become familiar with the sounds of English, their IPA representation and words that can serve as examples of each sound. Exercises 5-9 offer basic vocabulary and their IPA representation for students to practice how to read complete words in IPA representation, while being guided by their familiarity with the vocabulary. Exercises 10-14 focus on specific sounds, that tend to be specially challenging for Spanish speakers. Finally, students are presented with exercises 15-19, which present the concept of minimal pairs, as these exercises can help them further refine their production and identification of similar sounds.

3.1 A note on tense, lax, short and long vowels

Some language specialists and textbooks make a distinction that divides vowels into tense and lax. Tense vowels are produced "with more tension and constriction in the vocal tract than lax vowels, and they are usually of longer duration" (Rowe & Levine, 2018, p. 40). Lax vowels have less tension and constriction and are shorter in duration. Others categorize vowels as short and long. This categorization is more common to find in British English.

However, in the context of second language learning, categorizing vowels as short and long, or tense and lax may cause some confusion, as the length of a vowel is not an unchangeable feature. The length of a vowel is actually affected by the sound after the vowel in question, as well as the stress pattern (Gilbert, 2008, p. 24).

Any vowel can be long or short, depending on the sound that comes after it. When a vowel precedes a voiced consonant, it will sound shorter than when preceding a voiceless consonant. The words *bed* and *bet* have the same vowel sound, but their length is different. The /e/ in bet sounds shorter because the /t/ sound is an unvoiced consonant. Labeling vowels as long and short would cause situations where vowels would be long, as well as short at the same time: "it would be confusing to say that *hen* has a long, short vowel" (Cook, 2017, p. vi).

When teaching English, especially American English, labeling vowels in terms of "tense" and "lax", or "long" and "short", may not really offer any crucial advantage.

3.2 Exercise 1: the IPA

This is an exercise that both students and the teacher can use to become familiar with the IPA and a few example words. The list below shows only the symbols pertaining to American English.

A full list of sounds can be found at

https://www.oxfordlearnersdictionaries.com/about/english/pronunciation_english.

This list will ideally be presented on numerous occasions, either together or divided into consonants first, and then vowels and diphthongs. The class will go over the individual production of each sound, without going into too much detail, at least not during the first occasions. To offer an interesting approach to the list every time, though, the teacher can highlight different aspect(s) of it on different occasions, such as:

- The first sixteen consonants are organized in voiceless-voiced pairs. This can be a
 good exercise learners can do to become aware of the voiced-voiceless feature of
 consonants.
- The /m/, /n/, and $/\eta/$ are sounds where the air comes out through the nose. This serves learners with the development of phonological awareness.
- The /ŋ/ sound, typically difficult to make, is easy to approach when learners realize it is the same sound in words such as *banco* and *mango*. They will later use it at the end of words in English.
- The a and the a: are written differently for a reason: the a is used only when the I is next to it. Consider the words hard /ha:rd/ and bike /baɪk/. Each of these vowel sounds have distinct characteristics.

This exercise can also be used at the beginning of some (or all) lessons to help students become more acquainted with both the symbols and the sounds of the language.

The International Phonetic Language: IPA

Consonants

p	pen	/pen/	s	see	/si:/
b	bad	/bæd/	Z	zoo	/zu:/
t	tea	/ti:/	∫	shoe	/ʃu:/
d	did	/dɪd/	3	division	/dɪvɪʒn/
k g	cat get	/kæt/ /get/	h	hat	/hæt/
tſ dʒ	chain jam	/tʃeɪn/ /dʒæm/	m n ŋ	man now sing	/mæn/ /naʊ/ /sɪŋ/
f	flower	/flauər/	l	leg	/leg/
v	very	/veri/	r	red	/red/
θ	thin	/θɪn/	j	yes	/jes/
ð	this	/ðɪs/	w	witch	/witʃ/

Vowels and diphthongs

i:	tree	/tri:/			
I	sit	/sɪt/	eı	train	/trein/
e	ten	/ten/	OΩ	no	/nou/
æ	cat	/kæt/	aı	my	/maɪ/
a:	father	/fa:ðər/	IC	boy	/Icd/
ɔ :	horse	/hɔ:rs/	au	now	/naʊ/
Ω	book	/bʊk/	ır	near	/nɪər/
u:	boot	/bu:t/	er	chair	/tʃer/
Λ	cup	/knp/	or	tourist	/torist/
3.	bird	/b3:rd/			
Э	about	/əbaut/			

3.3 Exercise 2: The Alphabet

This is an exercise to familiarize learners to the IPA by presenting them with the Roman alphabet (the alphabet they already know) and the IPA transcription of the letters.

In this way, learners can make the first connection between both alphabets: the IPA will help them *really see* how to pronounce what they read and write.

The teacher can go over the letter one by one, and focus on the ones that cause the most confusion: a and i, b and v, c and z, g and j, k and q, for example. The teacher can later present the alphabet without the phonetic transcription and have students, as a group or individually, write the transcription of the letters. Alternatively, the teacher can also show the transcription and ask students to write the letters.

It is important to consider that the alphabet should be practiced not only in the traditional order, i.e., from a to z, as students may have some previous musical memory of the alphabet in English.

After a few lessons, the teacher can come back to this exercise when practicing, for example spelling of names, emails, or social network usernames.

The Alphabet

A	/eɪ/	J	/dʒeɪ/	S	/es/
В	/bi:/	K	/keɪ/	T	/ti:/
C	/si:/	L	/el/	U	/ju:/
D	/di:/	M	/em/	V	/vi:/
E	/i:/	N	/en/	W	/dʌbəljuː/
F	/ef/	O	/0ʊ/	X	/eks/
G	/dʒi:/	P	/pi:/	Y	/waɪ/
Н	/eɪtʃ/	Q	/kju:/	Z	/ zi :/
I	/aɪ/	R	/a:r/		

3.4 Exercise 3: Vowels and examples

This exercise can help students focus on vowels and some examples of words with their IPA transcription.

As they go through each vowel and the different words, they will be able to feel how the targeted sound is consistent across the words. The last transcription of each word can be omitted in case the teacher decides to have their students practice the IPA representation.

Vowels				
	tree	meet	read	
i:	/tri:/	/mi:t/	/ri:d/	
	sit	give	six	
I	/sɪt/	/gɪv/	/sɪks/	
	ten	bed	well	
e	/ten/	/bed/	/wel/	
	cat	bad	rat	
æ	/kæt/	/bæd/	/ræt/	
	father	car	got	
a:	/fa:ðər/	/kaːr/	/ga:t/	
	horse	before	door	
ა:	/hɔ:rs/	/bɪfɔːr/	/dɔ:r/	
	cookie	look	book	
σ	/kʊki/	/lok/	/bʊk/	
	boot	soup	true	
u:	/bu:t/	/su:p/	/tru:/	
	brother	money	love	
Λ	/brʌðər/	/mʌni/	/lav/	
	bird	shirt	first	
3.	/b з:rd/	/ʃ 3:rt/	/f ɜːrst/	
	about	paper	pencil	
Э	/əbaut/	/peipər/	/pensəl/	

Diphtongs				
	baby	wait	train	
eı	/beɪbi/	/weɪt/	/treɪn/	
	no	rose	moment	
ου	/noʊ/	/rous/	/moument/	
	pie	five	my	
aı	/paɪ/	/faɪv/	/maɪ/	
	boy	toy	noise	
91	/boɪ/	/toɪ/	/nois/	
	now	house	down	
au	/naʊ/	/haʊs/	/daun/	
	near	hear	rear	
Ir	/nɪr/	/hɪr/	/rɪr/	
	chair	wear	pear	
er	/tʃer/	/wer/	/per/	
	obscure	sure	tour	
Ur	/əbˈskjʊr/	/ʃʊr/	/tor/	

3.5 Exercise 4: Consonants and examples

This is an exercise that students can do in order to go over a few words of each consonant to help them notice how the targeted sound is consistent across the words. Also, this worksheet helps students notice how the first sixteen consonants are paired as unvoiced and voiced counterparts. This is helpful because, if they have difficulty making one of these sounds, the teacher can point out that they can make that sound's counterpart and then either make it voiced or voiceless.

Some words addressed in the previous exercise are present in this one, to help with familiarity. Also, some commonly mispronounced words are present in this exercise, such as *bird*, *beach*, *yellow*, *jello*, and *please*, which can spark observations and a further interest in the exercise. The last transcription of each word can be omitted in case the teacher decides to have their students practice the IPA representation.

Consonants			
	pen	pet	lap
p	/pen/	/pet/	/læp/
_	bad	bird	bread
b	/bæd/	/b 3:rd/	/bred/
	tea	plant	part
t	/ti:/	/plænt/	/pært/
.1	did	dad	day
d	/dɪd/	/dæd/	/deɪ/
k	cat	kiss	black
K	/kæt/	/kɪs/	/blæk/
<i>a</i>	get	girl	bag
g	/get/	/g3:r1/	/bæg/
40	chain	chocolate	beach
t∫	/tʃeɪn/	/tʃa:klet/	/biːtʃ/
da	jam	joke	jello
dʒ	/dʒæm/	/дзэик/	/dʒeloʊ/
f	flower	face	left
1	/flauər/	/feis/	/left/
	very	love	have
V	/veri/	/lav/	/hæv/
θ	thin	nothing	three
U	$/\theta$ In/	/naqiŋ/	/θri:/
ð	this	mother	father
U	/ðis/	/mʌðər/	/fa:ðər/
s	see	receive	miss
8	/si:/	/rɪsiːv/	/mɪs/
7	Z00	zebra	please
Z	/zu:/	/zi:brə/	/pli:z/

C	shoe	shark	fish
ſ	/ʃu:/	/ʃaːrk/	/fɪʃ/
_	television	pleasure	division
3	/telɪvɪʃn/	/pleʃər/	/dɪvɪʃn/
h	hat	hard	home
11	/hæt/	/hærd/	/houm/
	man	mouse	minute
m	/mæn/	/maus/	/mɪnət/
	now	no	never
n	/naʊ	/noʊ/	/nevər/
	mango	monkey	bank
ŋ	/mæŋgou/	/mʌŋki/	/bæŋk/
1	leg	Albert	whale
1	/leg/	/a:lbərt/	/weɪl/
	red	bird	repeat
r	/red/	/b 3:rd/	/rɪpi:t/
:	yes	yo-yo	yellow
j	/jes/	/jəʊ-jəʊ/	/jeləʊ/
	witch	whale	wish
W	/witʃ/	/weɪl/	/wɪʃ/

3.7 Exercise 5: Numbers 0 - 10

In this exercise, the students can practice the basic numbers in English, but focusing on their pronunciation.

The teacher can go over the list and have the students pay special attention to frequently mispronounced sounds:

- the /z/ in zero
- the $/\Lambda$ in one, as well as the usual addition of a /g at the beginning
- the two-musical note quality in the /u:/ in two
- the θ in three
- the /2:/ in four
- the /v/ in five
- the /ɪ/ in six
- the /v/ in seven
- the omission of the /g/ sound in eight
- the final /n/ sound in nine, and
- the /e/ sound in ten.

Numbers 0-10

0.	zero	/veriz/	6.	six	/siks/
1.	one	/wan/	7.	seven	/sevən/
2.	two	/tu:/	8.	eight	/eɪt/
3.	three	/θri:/	9.	nine	/naɪn/
4.	four	/fə:r/	10.	ten	/ten/
5.	five	/faɪv/			

3.8 Exercise 6: Numbers 11 – 20

This exercise helps students learn and/or refine their pronunciation of numbers 11-20, which is especially useful to focus on the two ways numbers 13-19 can be pronounced. This question sometimes comes up and it is necessary that students learn that both ways are accepted and used. It is also useful because this is a good time to emphasize the importance of the symbol that represents primary stress: '.

- 11. eleven /ɪlevən/
- 12. twelve /twelv/
- 13. thirteen /' θ 3:ti:n/, / θ 3:'ti:n/
- 14. fourteen /'fɔ:ti:n/, /fɔ:'ti:n/
- 15. fifteen /'fifti:n/, /fif'ti:n/
- sixteen /'sıksti:n/, /sıks'ti:n/
- 17. seventeen /'sevənti:n/, /sevən'ti:n/
- 18. eighteen /'eɪtiːn/, /eɪ'tiːn/
- 19. nineteen /'naınti:n/, /naın'ti:n/
- 20. twenty /twenti/, /tweni/

3.9 Exercise 7: Days of the week

This exercise helps learners with the standard pronunciation of the days of the week, which can be particularly difficult. The teacher and students can go over each day and the teacher will help out with specific challenging and / or mispronounced sounds, such as:

- the $/\Lambda$ /in Monday
- the pronunciation of Wednesday, which is commonly mispronounced as /wednes 'dai/
- the θ in Thursday
- the $/\Lambda$ in Sunday

Days of the week

Wednesday

Thursday

Monday /mʌndeɪ/

Tuesday / 'tju:zdeɪ/

/'wenzdei/

/ˈθɜːrzdeɪ/

Friday / fraidei/

Saturday /'sætərdeɪ/

Sunday /'sʌndeɪ/

3.10 Exercise 8: Months of the year

This exercise helps learners with the standard pronunciation of the months of the year, which can be commonly mispronounced by usually pronouncing a similar version of how the month sounds in Spanish. The teacher and students can go over each month, and the teacher will help out with specific challenging and/or mispronounced sounds and features of these words, such as:

- the $\frac{d}{3}$ in January, as learners usually substitute it for a Spanish j, as in jirafa
- the /e/ in January
- the stressed syllable in January, as learners typically do not stress the first syllable, rather the second one, like in Spanish
- the fact that February has two valid pronunciations
- the /ə/ in April
- the /aɪ/ in July, as as learners typically pronounce it as /ˈdʒuːli/
- the /a:/ in October
- the /ou/ in November
- the /I/ in December

Months of the year

January	/'dʒænjueri/	July	/dʒuˈlaɪ/
February	/ˈfebrueri/	August	/ɔːˈgʌst/
	/ˈfebjueri/	September	/sep'tembər/
March	/ma:rtf/	October	/a:k'təʊbər/
April	/'eɪprəl/	November	/nəʊˈvembər/
May	/meɪ/	December	/dɪˈsembər/
June	/dʒu:n/		

3.11 Exercise 9: Family members

This exercise helps learners with the pronunciation of words that they may already know the spelling of, but not their pronunciation. Learning the IPA with familiar words can help students feel more at ease as they already know the words and their meaning.

The teacher and students can go over each word and the teacher will help out with specific challenging and / or mispronounced sounds and features of these words, such as:

- the $/\Lambda$ and $/\vartheta$ in mother
- the $\frac{\alpha}{\alpha}$ and $\frac{\beta}{n}$ mother
- the /æ/ in dad, as well as the /d/, which are frequently pronounced with the Spanish d
- the $/\Lambda$ and \Rightarrow in brother
- the /ɪ/ and /ə/ in sister
- the $/\Lambda$ in son
- the $\sqrt{3}$ in daughter
- the /æ/ in aunt as some may point out the fact that British English has a different pronunciation for this word
- the $/\Lambda$ in uncle, as well as the omission of the final /e/
- the $/\Lambda$ and /z in cousin.

Family Members

mother / mom	/mʌðər / /mɑːm/	daughter	/'dɔ:tər/
father / dad	/ˈfɑːðər/ /dæd/	aunt	/ænt/
brother	/ˈbrʌðər/	uncle	/ˈʌŋkl/
sister	/'sistər/	cousin	/ˈkʌzn/
son	/san/		

3.12 Exercise 10: /ə/

This exercise helps learners focus on just this one sound which is usually challenging. The teacher can point out that this specific sound is the most frequent in English, which is why its production is really important.

/ 9 /			
about	/əˈbaʊt/	telephone	/ˈteləfoʊn/
brother	/ˈbrʌðər/	television	/ˈteləvɪʒən/
second	/ˈsekənd/	summer	/ˈsʌmər/
apple	/ˈæpəl/	attention	/əˈten∫ən/
cousin	/ˈkʌzən/		

3.13 Exercise 11: middle and final /z/ sound

This exercise helps the learners focus on just this challenging sound, which does not exist in Latin American Spanish, and is usually very difficult to notice and produce especially in the middle of words or at the end of them.

Middle and final /z/ sound

jazz	/dʒæz/	cheese	/tʃiːz/
buzz	/bʌz/	please	/pli:z/
quiz	/kwiz/	is	/i:z/
wizard	/ˈwɪzərd/	has	/hæz/
puzzle	/ˈpʌzəl/	does	$/d\Lambda z/$
sneeze	/sni:z/	because	/bɪkɔːz/
freeze	/fri:z/	please	/pli:z/

3.14 Exercise 12: /θ/

This exercise helps the learners focus on this specific sound, which is usually hard to produce, as it does not exist in Latin American Spanish.

1	1	٦	1
1	Į	J	/

thirst	/θa:rst/	toothbrush	/ˈtuːθˌbrʌʃ/
thank	/θæŋk/	path	$/pæ\theta/$
theater	/ˈθiːətər/	faith	/fe _I θ/
thumb	$/\theta$ Am/	fifth	/fifθ/
anything	/ˈɛnɪˌθɪŋ/	health	$/h\epsilon l\theta /$

3.15 Exercise 13: /t/

This exercise helps learners focus on just this one sound, which is usually confused with the Spanish t (see Chapter 1). It is important to point out that the words with an asterisk * can also be (and are more commonly) pronounced with a flap t. Also, the words with two asterisks can also be (and are more commonly) pronounced with glottal stop.

/t/

tiger / targər/ foot /fot/

table / terbəl/ thought / θ o:t/

taxi /'tæksi/ night /naɪt/

towel/'tavəl/ butterfly/'bʌtərflaɪ/*

cartoon /ka:r'tu:n/ bottle /'bptl/*

cat /kæt/ button /'bʌtn/**

light /laɪt/ cotton /'kʌtn/**

sweet /swi:t/

3.16 Exercise 14: Consonant clusters

As seen in Chapter 1, consonant clusters that start with an s sound can present difficulty for learners whose first language is Spanish. This exercise helps learners practice words that start with these clusters. The teacher can go over the words and help students with the production of the sounds by having them exaggerate and stretch the /s/ so they can become more familiar with the production of this sound clusters.

Consonant clusters

```
s+t:
    stop, start, strong, stick, stand
s+p:
    spoon, space, special, spin, spot
s+m:
    small, smile, smoke, smell, smart
s+k:
    sky, school, skeleton, skate, skill
s+l:
    sleep, slow, slip, slide, small
s+n:
    snack, snake, sneeze, snow, snail
s+c:
    school, scream, squirrel, scare, scarf
```

3.17 Minimal Pairs

Traditionally, minimal pairs have had a bad reputation, but they can be very helpful when presented in a useful way. These exercises can serve as a warm-up activity, a transition between activities, or an activity at the end of the class. It is recommended that these exercises be kept short. Also, during the first times these exercises are presented in class, it is important not to focus too much on accuracy as it can turn into a frustrating exercise. The teacher can do the following exercises in the stages presented here:

Stage 1: The teacher explains that some sounds in English may sound very similar, but they are distinct to the native ear. The teacher can also comment that this is very important to consider, as pronouncing a word with a different sound may cause confusion or misunderstandings. The teacher can provide an example of similar words in Spanish that have only one different sound, and have students come up with others: mesa - misa, bala - vela, etc.

Stage 2: The teacher reads the words and phrases, and has the students repeat after him/her.

Stage 3: The teacher writes words with one sound in one column on the left of the whiteboard / screen and writes the number 1 on top, and the other set of words with the other sound on the right, with the number 2 on top. The teacher then says one of the words and asks which word they said. Students have to then tell the teacher what column corresponds to the word the teacher said: one or two. They can do so by just lifting their index finger or index and middle finger, as this stage is just to practice sound discrimination.

Stage 4: The teacher then has students volunteer to read one of the words and get the rest of the class show with their fingers what column the word they said belongs to.

At this stage of the exercise, it may happen that the student who reads the word may have said a word from one column, but, because the majority of the group showed a different number, they may say that, in fact, they chose that column, thus defeating the purpose of the exercise, and in some cases, confusing a few students.

In order for this not to happen, the teacher can flip a coin, where heads is any word from column number 1, and tails, any words from column two. After flipping the coin, the teacher will show the result only to the student who is going to say the word. By doing this, the teacher knows what column the student has to choose, and can help them in case they pronounce the word similar to that of the opposite column.

It is strongly suggested not to turn these exercises into competitions. Competition adds an unnecessary layer of tension to the exercise, which can cause students become reticent to this kind of exercises in the future. The teacher has to remind students these are exercises to fine-tune their ears and voice.

3.17.1 Exercise 15: /i:/ vs /ɪ/

/i:/

Deep sea

Beans and cheese

Sweet dreams

I

Big city

Innocent victim

Drink your milk

Minimal pairs

2 1 leave live fee1 fill least list cheap chip beat bit still steal sick seek feet fit ship sheep beach bitch sheet shit

Note: Although the last two pairs of words of this exercise are usually organically brought up, it is a good idea to address them in a tactful manner, and not spend too much time on them.

3.17.2 Exercise 16: /æ/ vs /a:/

/æ/

Bad example

Angry man

Last chance

/a:/

Common problem

Got it!

Logical

Minimal pairs

12hathotcapcopaddoddrackrock

tap top

3.17.3 Exercise 17: /b/ vs /v/

/v/

Violet is very loving

I have five dollars

I love November

/b/

The baby bottle is empty

I like baseball and basketball

I have a beautiful cabin

Minimal pairs

12vestbestveryberryvowbowvetbetcurvecurbvoteboat

3.17.4 Exercise 18: /k/ vs /g/

/k/

We love cakes and cookies

The clock is in the car

The kid broke the computer

/**g**/

The gloves look elegant

The glass is in the garden

The tour guide is in the gallery

Minimal pairs:

1 2

coat goat

cap gap

crepe grape

crate great

3.17.5 Exercise 19: /d/ and /ð/

/**d**/

The doctor's at the door

The dog is in the bedroom

The dictionary is on the desk

/ð/

My brother is there

The box is in the other room

These are my leather shoes

Minimal pairs

1 2

dare there

den then

bad bath

day they

CONCLUSIONS AND SUGGESTIONS

Learning a language is a process where the learner has to develop four abilities or skills: reading, writing, listening, and speaking.

As the world becomes more unified and there is a pressing need for quick and effective communication, speaking has increasingly gained more importance.

English learners can benefit from incorporating the practice of pronunciation into their language learning. The first step to go through this process is to become aware that every language has a specific repertoire of sounds, and that it is necessary to learn how to produce them.

Adult beginners can have a difficult time trying to learn the sounds of English because of "categorical perception", a phenomenon that makes them categorize the sounds of a foreign language as ones they are familiar with in their own language. However, with formal instruction, adults can learn to identify and produce the sounds of English.

A visual tool that adults can make use of in the English classroom to learn pronunciation is the International Phonetic Alphabet. This alphabet offers a consistent symbol for every sound of English. By using the IPA, learners can actually *see* how a word is pronounced.

Using the IPA is definitely not an easy task for English teachers to approach. As the children of a generation where pronunciation was neglected, many English teachers are not equipped enough to address pronunciation in the classroom. It is also necessary for teachers to learn how to teach pronunciation, and how the IPA can help them reach this objective.

Learning English pronunciation is, without a doubt, a slow, but gradual process. As both teachers and learners acquire a normative clear pronunciation of the sounds of English, neither is expected to develop a native-like pronunciation. The ultimate goal is to achieve a *listener friendly* pronunciation to communicate confidently and effectively.

As stated in the objectives of this work, there was an exploration of how effective it is to integrate the IPA as an aid to develop adult learners' English pronunciation. It is clear from

the information presented, that learning to use the IPA is not an easy task, and it requires dedication, time, patience, and consistency. This is why the exercises presented in chapter were offered in familiar vocabulary contexts. By doing this, the conceptual complexity of learning a new language system is reduced and more easily approachable.

The above mentioned is related to the first specific objective, which was to examine the practical implementation of the IPA in the classroom. The vocabulary offered in the exercises in chapter three is congruent to the topics that are explored in English courses for beginning students, which makes their use and application, indeed, more practical.

The third specific objective was to inform teachers about the use of the IPA to improve English pronunciation, as some teachers do not address pronunciation in the classroom despite knowing its importance, and some other teachers simply do not have enough knowledge of the role of the pronunciation of English sounds in the development of pronunciation. Chapter two presented information that can help teachers how to approach this in class with as less friction as possible. This chapter also helps teachers become aware of other variables that may influence students in the process of learning the sounds of English as well as the IPA.

As it was commented in the limitations of this work, it is worth mentioning that the exercises in chapter three are congruent to vocabulary and pronunciation of American English. Were these exercises to be used in classes where British English is the target variation, adaptations would have to be made. Also, the IPA notation used is the same used in the Oxford Learner's Dictionary. Ignoring these specifics and using these exercises in a different set of conditions may create confusion, frustration, and even possibly, aversion to using the IPA.

A possible next step for this research may be to explore the teaching of suprasegmental features of pronunciation in adult beginners, this being another important aspect for the development of clear speech. Even though stress, rhythm and intonation are closely related to one another, intonation could be one of the first features to address, as this offers a very attractive, fascinating peek into the subconscious processing of information of the mind of native speakers.

REFERENCES

- Abad Olaya, J. V. (2020). *The Sounds of English. Theory and Practice for Latin American Speakers*. Fondo Editorial Universidad Católica Luis Amigó. https://www.funlam.edu.co/
- Afshari, S., & Ketabi, S. (2016). Changing Paradigms in Teaching English Pronunciation: A Historical Overview. *International Journal of Research Studies in Language Learning*, 6(2), 69-81. https://doi.org/10.5861/ijrsll.2016.1423
- Anderson, C. (2018). *Chapter 2: Producing Speech Sounds*. Essentials of Linguistics: https://pressbooks.pub/essentialsoflinguistics/chapter/2-8-vowels/
- Ashby, P. (2011). *Understanding Phonetics*. Hodder Education.
- Atkielski, A. (2019). *Using Phonetic Transcription in Class*. atkielski.com: https://www.atkielski.com/ data/documents/Using-Phonetic-Transcription.pdf
- Avery, P., & Ehrlich, S. (1992). *Teaching American English Pronunciation*. Oxford University Press.
- Birdsong, D. (1999). Second Language Acquisition and the Critical Period Hypothesis. Laurence Erlbaum Associates.
- Brown, H. D. (2007). *Teaching by Principles. An Interactive Approach to Language Pedagogy* (3rd ed.). Pearson Education.
- Cameron, S. (2012). Perfecting your English Pronunciation. McGraw Hill.
- Carter, R., & Nunan, D. (2001). *The Cambridge Guide to Teaching English to Speakers of Other Languages*. Cambridge University Press.
- Celce-Murcia, M. (2001). *Teaching English as a Second or Foreign Language. (3rd. ed.)*. Heinle ELT.
- Celce-Murcia, M., Brinton, D., & Goodwin, J. M. (1996). *Teaching Pronunciation: A Reference for Teachers of English to Speakers of Other Languages*. Cambridge University Press.
- Cook, A. (2017). *American Accent Training* (3rd ed.). Hauppauge: Barron's.
- Council of Europe. (2001). Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Cambridge University Press.
- Council of Europe. (2020). Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume. https://rm.coe.int/commoneuropean-framework-of-reference-for-languages-learning-teaching/16809ea0d4

- Crystal, D. (1981). Clinical Linguistics. Disorders of Human Communication, vol 3. Springer.
- Darcy, I. (2018). Powerful and Effective Pronunciation Instruction: How Can We Achieve It? *The CATESOL Journal*, 30(1), 13-45.
- Derakshan, A., & Karimi, E. (2015). The Interference of First Language and Second. *Theory and Practice in Language Studies*, *5*(10), 2112-2117. https://doi.org/http://dx.doi.org/10.17507/tpls.0510.19
- Derwing, T. M., & Munro, M. J. (2015). *Pronunciation Fundamentals. Evidence-based Perspectives for L2 Teaching and Research.* (Vol. 42). (N. Spada, & N. Van Desusen-Scholl, Eds.) John Benjamins Publishing Company.
- Ellis, R. (1997). Second Language Acquisition. Oxford University Press.
- Florez, M. C. (1998, 12). Improving Adult ESL Learners' Pronunciation Skills. *ERIC Digest*, pp. 1-8. https://files.eric.ed.gov/fulltext/ED427553.pdf
- Fraser, H. (2000). *Coordinating Improvements in Pronunciation Teaching*. Commonwealth of Australia.
- Gilakjani, A. P. (2011). Why is Pronunciation So Difficult to Learn? *Canadian Center of Science and Education*, 4(3), 74-83. https://doi.org/10.5539/elt.v4n3p74
- Gilakjani, A. P. (2016). English Pronunciation Instruction: A Literature Review. *International Journal of Research in English Education*, *1*(1). http://ijreeonline.com/article-1-21-en.html
- Gilakjani, A. P. (2016, September). How Can EFL Teachers Help EFL Learners Improve Their English Pronunciation? *Journal of Language Teaching and Research*, 7(5), 967-972. https://doi.org/http://dx.doi.org/10.17507/jltr.0705.18
- Gilakjani, A. P. (2017, November). English Pronunciation Instruction: Views and Recommendations. *Journal of Language Teaching and Research*, 8(6), 1249-1255. https://doi.org/http://dx.doi.org/10.17507/jltr.0806.30
- Gilbert, J. B. (2008). *Teaching Pronunciation Using the Prosody Pyramid*. Cambridge University Press.
- Gopnik, A., Meltzoff, A. N., & Kuhl, P. K. (2001). The Scientist in the Crib: What Early Learning Tells us About the Mind. Harper Collins.
- Harmer, J. (2012). Essential Teacher Knowledge. Core Concepts in English Language Teaching. Pearson Education.
- Harmer, J. (2015). The Practice of English Language Teaching (5th ed.). Pearson.

- Hedge, T. (2001). *Teaching and Learning in the Language Classroom*. Oxford University Press.
- Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2014). *Metodología de la Investigación* (6th ed.). McGraw Hill.
- Hewings, M. (2007). English Pronunciation in Use. Cambridge University Press.
- Hicks, E. (2010). *Voiced and Voiceless Consonants*. https://campusweb.howardcc.edu/ehicks/YE618/Mastering%20American%20Pronunciation/Voiced_Voiceless_Sounds/Voiced_Voiceless_Sounds_print.html
- Isaacs, T. (2009). Integrating Form and Meaning in L2 Pronunciation Instruction. *TESL Canada Journal*, 1-12.
- Jones, R. H. (1997). Beyond "Listen and Repeat": Pronunciation Teaching Materials and Theories of Second Language Acquisition. *System*(25), 103-112. https://doi.org/10.1016/S0346-251X(96)00064-4
- Kang, O., Thomson, R. I., & Murphy, J. M. (Eds.). (2018). *The Routledge Handbook of Contemporary English Pronunciation*. Routledge.
- Kelly, L. G. (1969). 25 Centuries of Language Teaching. 500 BC 1969. Newbury House Publishers.
- Kodirova, O., & Henrichsen, L. (2022). Experienced ESL teachers' attitudes towards using phonetic symbols in teaching. *Proceedings of the 12th Pronunciation in Second Language Learning and Teaching Conference*. St. Catharines. https://doi.org/https://doi.org/10.31274/psllt.13337
- Levis, J. M. (2008). Spoken English, TESOL, and Applied Linguistics. Challenges for Theory and Practice. (R. Hughes, Ed.) Palgrave Macmillan.
- Levis, J. M. (2022). Teaching Pronunciation: Truths and Lies. In C. Bardel, C. Hedman, K. Rejman, & E. Zetterholm (Eds.), *Exploring Language Education. Global and Local Perspectives* (pp. 39-72). Stockholm University Press. https://doi.org/https://doi.org/10.16993/bbz
- Lightbown, P. M., & Spada, N. (2017). *How Languages are Learned* (4th ed.). Oxford University Press.
- Lindsey, G. (2019). *English After RP: Standard British Pronunciation Today*. Palgrave Macmillan. https://doi.org/https://doi.org/10.1007/978-3-030-04357-5
- Moyer, A. (2013). Foreign Accent: The Phenomenon of Non-Native Speech. Cambridge University Press.

- Muñoz, C. (2019). A New Look at "Age": Young and Old L2 Learners. In J. W. Schwieter, & A. Benatti (Eds.), *The Cambridge Handbook of Language Learning* (pp. 430-450). Cambridge University Press.
- Nair, R., Krishnasamy, R., & De Mello, G. (2006). Rethinking the Teaching of Pronunciation in the ESL Classroom. *The English Teacher*, 35(14), 27-40.
- Newton, J. (2018). Pronunciation and Speaking. In *The Routledge Handbook of Contemporary English Pronunciation* (pp. 337-351). Routledge.
- Nunan, D. (2015). *Teaching English to Speakers of Other Languages. An Introduction*. Routledge.
- Oxford University Press. (2023). *Pronunciation Guide*. Retrieved 10 7, 2023, from Oxford Learner's Dictionaries:

 https://www.oxfordlearnersdictionaries.com/about/english/pronunciation_english
- Pardede, P. (2018, October). Improving EFL Students' English Pronunciation. *Journal of English Teaching*, 4(3), 143-155.
- Pennington, M. C. (2021). Teaching Pronunciation: The State of the Art 2021. *Regional Language Center Journal*, 52(1), 3-21. https://doi.org/https://doi.org/10.1177/00336882211002283
- Phonetic Notation in Foreign Language Teaching and Learning: Potential Advantages and Learners' Views. (2015). *Research in Language*, 13(3), 292-314.
- Prator Jr., C. H., & Wallace Robinett, B. (1985). *Manual of American English Pronunciation*. Holt, Rinehart, and Winston, Inc.
- Prodanovksa-Poposka, V. (2017). A Study of Proper Pronunciation as a Factor in Successful Communication. *International Conference on Innovations in Science and Education*. Prague. https://doi.org/http://dx.doi.org/10.12955/cbup.v5.1024
- Purwanto, A. (2019, March). Teaching Pronunciation Using Varieties of Pronunciation Teaching Materials and Practices. *Journal of English Language Teaching*, 3(2), 81-92.
- Quarto, M. P. (2022). Teaching American English Pronunciation in a Spanish Speaking Context: A Guide for EFL Teachers in Chile [Master's Field Project]. University of San Francisco.
- Rahman, M. M., Pandian, A., Karim, A., & Shahed, F. (2017). Effect of Age in Second Language Acquisition: A Critical Review from the Perspective of Critical Period Hypothesis and Ultimate Attainment. *International Journal of English Linguistics*, 7(5), 1-7. https://doi.org/http://doi.org/10.5539/ijel.v7n5p1

- Reid, E. (2016). Teaching English Pronunciation to Different Age Groups. *Jazykovedné*, *literárnovedné a didaktické kolokvium xxxixi: Zborník vedeckých prác a vedeckých štúdií*, (pp. 19-30).
- Roach, P. (2012). *English Phonetics and Phonology. A Practical Course*. Cambridge University Press.
- Rogerson-Revell, P. (2018). English Vowels and Consonants. In O. Kang, R. I. Thomson, & J. M. Murphy (Eds.), *The Routledge Handbook of Contemporary English Pronunciation* (pp. 93-121). Routledge.
- Rothman, J., Bayram, F., Cunnings, I., & González A, J. (2019). The Cambridge Handbook of Language Learning. In J. W. Scwieter, & A. Benatti (Eds.). Cambridge University Press.
- Rowe, B. M., & Levine, D. P. (2018). A Concise Introduction to Linguistics. Routledge.
- Sadiku, L. M. (2015). The Importance of Four Skills. Reading, Speaking, Writing, Listening in a Lesson Hour. *European Journal of Language and Literature*, *1*(1), 29-31.
- Saito, K., & Plonsky, L. (2019, April). Effects of Second Language Pronunciation Teaching Revisited: A Proposed Measurement Framework and Meta-Analysis. *Language Learning*, 69(3), 652-708. https://doi.org/https://doi.org/10.1111/lang.12345
- Sardegna, V. G., Lee, J., & Kusey, C. (2017). Self-Efficacy, Attitudes, and Choice of Strategies for English Pronunciation Learning. *Language Learning*, 68(1), 83-114. https://doi.org/10.1111/lang.12263
- Shah, S. S., Othman, J., & Senom, F. (2017). The Pronunciation Component in ESL Lessons: Teacher's Beliefs and Practices. *Indonesian Journal of Applied Linguistics*, 6(2), 193-203.
- Shak, P., Chang, S. L., & Stephen, J. (2016). Pronunciation Problems: A Case Study on English Pronunciation Errors of Low Proficient Students. *International Journal of Language Education and Applied Linguistics*, 4, 25-35.
- statista.com. (2023, September 28). *The Most Spoken Languages Worldwide in 2023*. statista: https://www.statista.com/statistics/266808/the-most-spoken-languages-worldwide/
- Szpyra-Kozłowska, J. (2014). Pronunciation in EFL Instruction: A Research-Based Approach. Multilingual Matters.
- The International Phonetic Association. (2011). *Handbook of the International Phonetic Association*. Cambridge University Press.

- Trinh, Q. L., Nguyen, T. D., & Le, T. T. (2022). Using Explicit Instruction of the International Phonetic Alphabet System in English as a Foreign Language Adult Classes. *European Journal of Educational Research*, 11(2), 749-761. https://doi.org/https://doi.org/10.12973/eu-jer.11.2.749
- Ur, P. (2012). A Course in English Language Teaching. Cambridge University Press.
- Vančová, H. (2019). Current Issues in Pronunciation Teaching to Non-Native Learners of English. *Journal of Language and Cultural Education*, 7(2), 140-155. https://doi.org/10.2478/jolace-2019-0015
- Yates, L., & Zielinski, B. (2009). *Give it a Go: Teaching Pronunciation to Adults*. Adult Migrant English Program (AMEP) Research Centre, Macquarie University.
- Zainnuri, H. (2014). The Effectiveness of Using Tell me More to Assist Teaching Pronunciation of English Viewed from Students' Self-Confidence. *English Language Curriculum Development: Implications for Innovations in Language Policy and Planning, Pedagogical Practices, and Teacher Professional Development*, (pp. 942-945).