

Phonetic Instruction in the EFL Classroom: Teachers' Beliefs and Practices

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Specialized Analytical Summary

Title	Phonetic Instruction in The EFL Classroom: Teachers' Beliefs and Practices
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Contents	<p>Hablar es una de las habilidades que los alumnos de inglés como lengua extranjera tienen más dudas en dominar. Autores como Srinivas (2019) afirman que la expresión oral se considera la más importante de las cuatro destrezas lingüísticas del inglés. Sin embargo, por muy importante que sea, es la habilidad que más retos representa tanto para los profesores como para los alumnos. Tiene un componente que impacta directamente en cómo los alumnos perciben la pronunciación. El objetivo de esta investigación descriptiva y exploratoria era describir las creencias y prácticas de diez profesores de inglés como lengua extranjera en relación con la enseñanza de la fonética como estrategia para mejorar la pronunciación de los alumnos, utilizando un método mixto. Se emplearon observaciones de clases, una</p>

	<p>encuesta y una entrevista semiestructurada para a) describir las creencias de los profesores respecto al papel de la fonética en el aula de inglés como lengua extranjera, b) identificar las estrategias pedagógicas que los profesores utilizan para enseñar la pronunciación, y c) analizar hasta qué punto las creencias de los profesores están vinculadas a la formación docente.</p> <p>Los resultados mostraron que los profesores de secundaria son conscientes de la importancia del impacto de la instrucción fonética para mejorar la pronunciación de los estudiantes, pero que, lamentablemente, la fonética no juega un papel relevante en el aula de inglés como lengua extranjera, ya que se priorizan otras competencias. Además, a pesar de la gran variedad de técnicas, los profesores siguen utilizando la repetición como estrategia principal para desarrollar la pronunciación. Por último, las prácticas de los profesores reflejan su formación docente; los profesores priorizarán el desarrollo de las competencias con las que se sientan más cómodos en lugar de las que puedan tener un mayor impacto en el aprendizaje de sus alumnos.</p>
Research Line	<p>Developing this research required implementing a mixed-method approach where the data was collected and analyzed using quantitative and qualitative methods to be pluralistic and complementary (Johnson & Onwuegbuzie, 2004). Although it was a mixed-method approach, it is relevant to highlight that it was mainly focused on the qualitative method for being useful to get non-numerical data and in-depth insights into a problem. The design was exploratory for being a matter little studied in our country and for allowing to discover participant's ideas using a mixed-method approach, where the instruments used were observation, survey, and interview to obtain people</p>

	<p>information like concepts, opinions, or experiences about a specific topic to provide different alternatives or solutions in an explicit matter. In this sense, this research is part of <i>Pedagogia, Didactica y Curriculo</i> of ECEDU at Universidad Nacional Abierta y a Distancia. Since this line is related to the way teachers teach and the material they use in the classroom, what is contemplated within this investigation.</p>
<p>Conclusions</p>	<p>The ample evidence collected through the years demonstrates that teachers' experiences as learners and in their daily life influence their perception of learning processes and teaching practices throughout their profession and becoming rooted beliefs would hardly change. Beliefs do not allow teachers to use strategies different from those they learned from their experience and be reinforced through feedback. Teachers' opinions do not allow teachers to use different teaching strategies or methodologies to perceive them as strange and isolated even though they are conscious they are necessary. Therefore, their teaching practices are distinct from their ideas.</p>
<p>Advisor</p>	<p>Magister Olga Lucia Fierro Leal</p>

Abstract

Speaking is one of the skills that EFL learners are more hesitant to master. Authors like Srinivas (2019) state that speaking is considered the most important of the four language skills of English. However, as important as it is, it is the skill that more challenges represent for both teachers and learners. It has a component that directly impacts how learners perceive themselves: pronunciation. This descriptive, exploratory research aimed to describe the beliefs and practices of ten EFL teachers regarding phonetic instruction as a strategy to improve students' pronunciation by using a mixed-method approach. Class observations, a survey, and semi-structured interview were employed to a) describe teachers' beliefs regarding the role of phonetics in the EFL classroom, b) identify the pedagogical strategies teachers use to teach pronunciation, and c) analyze to what extent teachers' beliefs are linked to teaching training. Findings showed that high school teachers are aware of the importance of the impact of phonetic instruction to improve students' pronunciation, but that, unfortunately, phonetics does not play a relevant role in the EFL classroom as other competencies are prioritized. Moreover, despite the wide variety of techniques, teachers still use repetition as the main strategy to develop pronunciation. Finally, teachers' practices reflect their teaching training; teachers will prioritize the development of the skills that they feel more comfortable with rather than the ones that might have a bigger impact on their students' learning.

Key Words: Phonetics, Pronunciation, Strategies, Beliefs, Training.

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Words cannot express my gratitude to my family and my dear boyfriend, who have been understanding, supportive, and motivated me during this process. It has not have been possible without their love, encouragement, and understanding. In addition, I would like to thank those who have participated in this research, allowed me to attend their classes, and kindly answered my questions.

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Table of Contents

	Page
Specialized Analytical Summary	2
Abstract	5
Acknowledgements	6
Table of Contents	7
List of Tables	9
List of Figures	10
Introduction.....	11
Significance of the Study.....	12
Statement of the Problem	13
Objectives	15
Literature Review.....	16
Conceptual Framework	16
Related Studies	39
Methodology	44
Research Approach.....	44
Type of Study	44
Participants	45
Instruments and Data Collection Procedure	46

Results and Discussion	8
Results and Discussion	50
Data Analysis.....	50
Conclusions and Recommendations	64
References.....	66

List of Tables

	Page
Table 1 Participants' Characteristics	50

List of Figures

Figure 1 The main elements of speech production, acoustic transmission and speech perception.....	17
Figure 2 Mid-sagittal section of the vocal tract with labels for place of articulation.....	20
Figure 3 Mid-sagittal section of the vocal tract with the outline of the tongue shape for each of four extreme vowels superimposed.....	26
Figure 4 The vowel quadrilateral.....	28
Figure 5 Students' pronunciation.....	52
Figure 6 Pronunciation aspects assessed in the classroom.	53
Figure 7 Importance of pronunciation in the classroom.....	54
Figure 8 Phonetics' definition.....	56
Figure 9 The significance of phonetics in the teaching and learning process.....	57
Figure 10 Knowledge of International Phonetic Alphabet.....	58
Figure 11 Role of phonetics in EFL classroom.....	59

Introduction

As part of my pedagogical practice at UNAD, I observed classes at a public school in Pitalito to analyze all the components we must include in a lesson and the strategies and methods teachers employ within the classroom. During my initial observations with ninth graders, it was evident that the English teachers were mainly focused on teaching grammar more than pronunciation and that students faced difficulties in pronunciation, such as obstacles in identifying phonemes. They were not able to differentiate the pronunciation of words like they/day, leave/live, or beer/bear, or they would pronounce words as "star" ['sta:r] by adding an "e" at the beginning; that is to say, [esta:r]. It also called to my attention that when students had difficulties pronouncing words with nonexistent phonemes in their first language, they tended to adopt the sounds or phonemes of their mother tongue as a pronunciation strategy.

Based on that experience, this research report portrays the beliefs and practices of ten English teachers regarding phonetic instruction as a strategy to improve students' pronunciation. This report analyzes phonetics' role in the EFL classroom and the pedagogical techniques teachers implement to teach pronunciation, and a reflection on how teachers' beliefs and practices are linked to their teaching training. The information is presented in five chapters: Chapter I describes the significance of the study and the research problem and gives the research question and objectives. Chapter II presents the theoretical background of the main constructs and the related studies used to strengthen the research. Chapter III explains the methodological design of the study, how the participants were selected, the instruments used, and the procedures to collect the data. Chapter IV presents the data analysis and the findings. At last, Chapter V includes the conclusions from the research and its pedagogical implications.

This first chapter discusses three segments. The first section contains the significance of the study and the importance of studying teachers' beliefs regarding phonetic instruction. The second section introduces the problem and the context of the study. Finally, it presents the research question and objectives.

Significance of the Study

This research explores the beliefs and practices of ten English teachers about the role of phonetic instruction as a strategy to improve pronunciation within the EFL classroom. Phonetic teaching plays an important part in communicative competence since words' sounds are fundamental for successful communication (Trofimovich, 2012); however, teaching learners to correct their pronunciation in a straightforward and controlled way has not been widely researched in Colombia.

Barrera Benitez (2009) states that being conscious of the phonetics of a language is essential to facilitate understanding and improve learners' speech production since phonetics instruction enriches the learning process. Phonetics is vital to master the new sound system when teaching English to produce good and fluent speakers (Al-Sawaf, 1979), especially considering that English is a language with no direct relationship between phonemes and graphemes. Phonetic instruction might be regarded as a strategy to improve pronunciation. It allows learners to assimilate the phonemes and be aware of their speech utterance while recognizing accents, intonation, and speech rhythm (Barrera Benitez, 2009, p. 2). If the learners' goal is to achieve understanding, they can perceive intelligibility problems as failing to align at phonetic/prosodic perception and production (Trofimovich, 2012, p. 5). Phonetics is a means to establish a good interaction without the barrier of mispronunciation or

misunderstandings as it allows learners to correct any issues before being fossilized, which hamper fluent and effective communication and has a positive impact on the development of cognitive functions and social and personal competencies in learners (Alvarez Diez, 2010).

Finally, this research raises awareness about phonetics' instruction relevance in teaching English at a school level to achieve efficient communication and ensure students' success in developing speaking skills. The findings of this research are useful for making relevant curricular adjustments in the educational field, which makes possible the practical and theoretical implementation of phonetic instruction in the EFL classroom (Barrera Benitez, 2009, p. 3).

Statement of the Problem

Celce-Murcia M., Brinton D., & Goodwin J. (1996) argue that "only through a thorough knowledge of the English sound system and a thorough familiarity with a variety of pedagogical techniques, many of which should be communicatively oriented, can teachers effectively address the pronunciation needs of their students" (p. 11). Moreover, it is essential to know phonetics when learning a language since it eases listening to comprehension and speech production (Barrera Benitez, 2009). One of the most outstanding characteristics in teaching pronunciation is the teachers' knowledge of the English sound system.

Phonetics and phonological instruction contribute to improving the individual's pronunciation (Elliot, 1997; Cortes Moreno, 2002; Derwing, Munro, & Wiebe, 1997). However, most English teachers tend to ignore phonetics teaching as they prioritize other aspects such as vocabulary and grammar (Barrera Benitez, 2009). Gilakjani & Sabouri (2017) and Borg (2011) state that teachers' beliefs influence their actions, methods, and decision-making and play a significant role in the way teachers do things and conceptualize projects and activities (Dobson

& Dobson, 1983; Nespov, 1987). Therefore, teaching practices are a reflection of teachers' beliefs and cognitions.

Research on EFL teachers' beliefs about teaching phonetics in the Colombian context is limited. Based on this, the current research attempts to make phonetics importance visible among EFL teachers and learners through the questions: What role does phonetic instruction play in the EFL classroom? What are the beliefs of ten EFL teachers regarding phonetics instruction as a strategy to improve students' pronunciation? How do EFL teachers teach pronunciation?

Objectives

General Objective

To describe the role of phonetic instruction in the EFL classroom of ten high school teachers in Pitalito.

Specific Objectives

To determine teachers' beliefs about the importance of phonetics for improving pronunciation.

To identify the pedagogical strategies teachers use to teach and improve students' pronunciation.

To analyze the relationship between teachers' beliefs about phonetic instruction in the EFL classroom and their teaching training.

Literature Review

The purpose of this chapter is to present the constructs and the related studies in which this research is grounded. The chapter is organized into two parts. The first part reviews the main concepts of this research, starting with the definition of phonetics, beliefs, and teachers' beliefs and concluding with the relation between phonetics and pronunciation and their importance in the EFL classroom. The second part introduces the reader to some studies conducted in Colombia and worldwide on teachers' beliefs about phonetic instruction.

Conceptual Framework

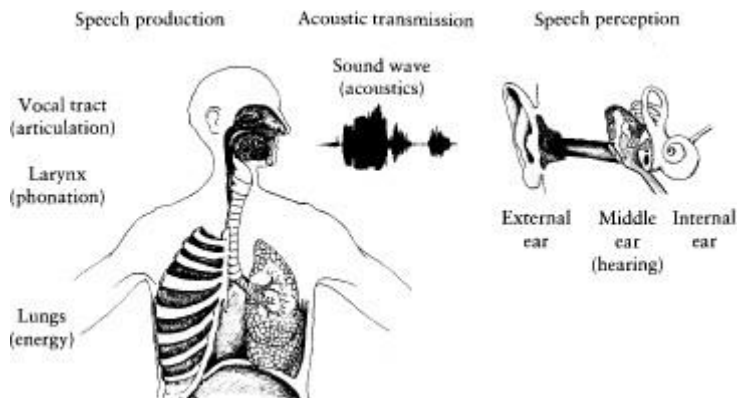
Phonetics

Phonetics can be considered a set of distinct phonetic sciences separated by different facets at speech's anatomic and physiological levels (Clark & Yallop, 1990). It is the study of speech sounds (Singh, S. & Singh, K. S, 2006; Gil, 2007; Ogden, 2009) that are physical and observable (Ogden, 2009). It includes the systematic classification of sounds in speech according to how the speakers produced them and how the listeners perceive them (Singh, S. & Singh, K. S, 2006) and addresses the articulatory and acoustic variation of sounds and their perception (Llisterri, 2003). Then phonetics is a linguistic discipline that studies how the physical nature of human speech sounds are produced and perceived, irrespective of which language is being spoken (Lodge, 2009, p. 9).

Phonetics is divided into articulatory phonetics, acoustic phonetics, and auditory phonetics.

Figure 1

The main elements of speech production, acoustic transmission and speech perception.



Note. Adapted from *Phonetics: Transcription, Production, Acoustics, and Perception* (p. 2), by Henning Reetz and Allard Jongman, 2009. Wiley-Blackwell.

Articulatory phonetics. According to Collins & Mees (2003), articulatory phonetics is the study of how the speech organs move or articulate to form speech sounds, where speech is produced by modulating air in numerous ways inside our bodies.

It worries about how the articulations or organs of speech - the lungs, throat, tongue, nose, and lips- can be moved into several manners to produce the diverse sounds we discern when listening to the spoken language (Lodge, 2009). In other words, it concerns speech production and the study of sounds from the physiological point of view.

Acoustic phonetics. For Reetz and Jongman (2009), acoustic phonetics studies how speech is produced and requires an understanding of the physiology of the speaking apparatus; acoustic phonetics investigate the acoustic characteristic of speech, such as frequency, intensity, and duration; and requires knowledge of sound waves. It studies the physical nature of sound variations produced by the movement and pressure of air molecules in several ways known as sound waves (Lodge, 2009). It describes speech sounds based on what the listener can hear

(Ladefoged, 2001). In other words, it studies the physical features of speech sounds and their transmission as sound waves.

Auditory phonetics. According to Ashby (2011), auditory phonetics can be considered the study of speech perception and how sound speech sounds. It studies how the hearer receives the speech signal through the ear (Collins & Mees, 2003) and handles how speech influences and is interpreted by the listener (Lodge, 2009). Therefore, auditory phonetics is focused on how a listener hears, analyzes, and processes a speech sound or a sound wave.

International Phonetic Alphabet (IPA)

The International Phonetic Alphabet is a devising a system that allows transcribing the speech sounds independent of the language. The main goal of the International Phonetic Alphabet is to provide a universal system of symbols to represent the sounds of languages in written form, which deals with the wide variety of language sounds of the world and be useful for phoneticians and others concerned with language. Besides, it seeks to promote the study of phonetics science and its practical applications (The International Phonetic Association, 1999).

The International Phonetic Alphabet can be used for several purposes because it designates sounds unambiguous. According to The International Phonetic Association (1999), the IPA can be used:

To know a word's pronunciation.

To record a language in linguistic fieldwork.

As a base to create new writing systems for languages not reported before.

To annotate acoustic and other manifestations in the analysis of speech.

To transcribe the speech sounds written with no Latin alphabet in some textbooks and books on expressions of foreign languages.

Phonetic description of the IPA chart. The International Phonetic Association

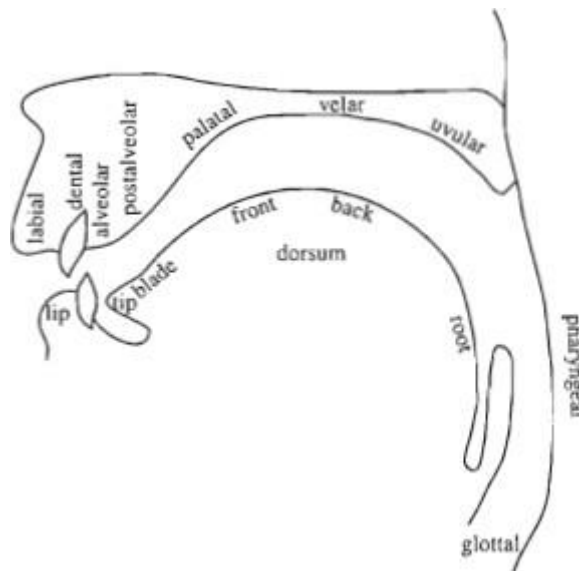
(1999) claims that the separate section for vowels and consonants reflects the different techniques for describing them on the IPA chart. The various methods arise from the more closed articulation of consonants and the more open articulation of vowels (p. 6). It also upholds numerous theoretical assumptions about how the IPA can be analyzed. These include the following:

- Segments can partially represent speech.
- Speech can be divided into two main categories, consonants and vowels.
- Consonants and vowels can be phonetically described concerning their acoustic characteristics and how they are articulated or produced.

Consonants. Consonants have been classified by phoneticians according to the place and manner of obstruction or "place of articulation" because they involve a narrow or "stricture" place in the vocal tract (The International Phonetic Association, 1999). For consonants, the airstream is also altered through the vocal tract obstructing some way, which produces stop consonants, affricatives, and nasal consonants. Then, consonants are produced when somehow the airstream in the vocal tract is blocked, and they can be classified according to the place and manner of articulation. Figure 1 shows the different areas of articulation through a mid-sagittal section of the vocal tract.

Figure 2

Mid-sagittal section of the vocal tract with labels for place of articulation.



Note. Adapted from *Handbook of the International Phonetic Association. A guide to the use of the International Alphabet* (p. 7), by The International Phonetic Association, 1999, Cambridge University Press.

The principal terms used to refer to the vocal tract are: bilabial, where the speaker uses the two lips; for instance, the [p] on *pen* is bilabial because the sound is produced with both lips through the closure between the upper and lower lips; velar, [k] of *Ken*, where the sound is made raising the back of the tongue to the soft palate or velum to block the airflow (The International Phonetic Association, 1999). Dental sounds are made with the tongue tip and the upper front teeth; alveolar sounds are made with the tip or the blade of the tongue; in retroflex sounds the tip of the tongue is curled back behind the alveolar ridge (The International Phonetic Association, 1999 p. 8); palato-alveolar, is made between the blade of the tongue and the back part of the teeth ridge; palatal, front of the tongue and hard palate.

On the other hand, the “manner of articulation” is another significant descriptive dimension for consonants. It refers to the way they are produced and can be classified according

to the degree of airstream obstruction expressed by the following terms:

Plosive: also called stops, occurs when there is a complete closure of the articulators to block off the airstream for a moment and accumulate pressure to then let it out in a burst. One example is [t] as in tailor and tail (The International Phonetic Association, 1999). According to Ladefoged, P. & Johnson K., (2010) there are two kinds of stops: oral stops, and nasal stops. In oral stops, the soft palate is raised to blockade the nasal cavity and obstruct the airstream completely; and in nasal stops, the air is diverted through the nasal tract to go out through the nose. Examples of nasal stops are the beginning of the word *my, me* (Bilabial), *no, nigh* (alveolar), and oral stops are at the end of words like *sang* or *long* (velar).

Fricatives: a fricative implies a sibilant sound produced by the approximation of two articulators, this sound is known as frication. It creates a narrow passage that partially obstructs the airstream producing a turbulent airflow (Ladefoged, P. & Johnson K., 2010). Fricatives can be sustained in isolation because there is no complete airstream block off (Reetz, H. & Jongman, A., 2009). Some linguists classify fricatives and sibilants by their higher-pitched sound with an obvious hiss, like in the words *sigh* and *shy* (Ladefoged, P. & Johnson K., 2010); and non-sibilants as those in *fie* and *thigh* (Ladefoged P. N., 2014). Examples of fricatives are the initial sounds in words like [s] sin, [f] fie, fin [ʃ] shy, shin, and [z] zoo.

Approximants: occur when one articulator approaches another, narrowing the vocal tract to generate turbulent airflow (Ladefoged P. N., 2014). This closure is not enough to create friction, and hence there is no audible frication (The International Phonetic Association, 1999). Approximants are sometimes called semi-vowels because they have some attributes of both vowels and consonants. Like vowels, they do not involve extreme constriction of the vocal tract, but like consonants, airflow is partially blocked (Reetz, H. & Jongman, A., 2009). Examples of approximants are the sounds [j] yet, [w] way, [j] you.

Nasals: also known as nasal stops, refer to the sounds where the air flows out through the nose. These resonances of the nasal cavity are produced when the velum is lowered (The International Phonetic Association, 1999). Nasals like plosives occur when a complete blockade in the oral cavity, so the air cannot be let out through the mouth. However, the air can escape through the nose for the nasals because the velum is lowered. Besides, nasals and plosives have some similar characteristics. They both have a similar articulation in the oral cavity and occur at the same three places of articulation; the only difference is that the velum is lowered to produce a nasal sound (Reetz, H. & Jongman, A., 2009). Examples of nasals are, [m] and [n] in man, [m] me, [n] no, [ŋ] sing and long.

Laterals: also called lateral approximants “are sounds where air escapes not in the mid-line of the vocal tract but at the side” (The International Phonetic Association, 1999). In laterals, exists an obstruction of the airstream in the central pathway of the vocal tract; however, this obstruction does not interrupt the airflow because the air flows from one side of the tongue. Reetz, H. & Jongman, A. (2009) affirm that in English, there is one lateral approximant with an alveolar place of articulation where “the tip of the tongue makes full contact with the alveolar ridge”; this word is: *lie*. Besides, although the consonants in these kinds of terms are classified as alveolar lateral approximants, they are usually called alveolar laterals. Other examples of approximants are [l] let and laugh.

Trills: are sounds "in which the air is repeatedly interrupted by an articulator vibrating in an airstream" (The International Phonetic Association, 1999, p. 8). A trill occurs when one articulator close to another vibrates quickly because the air flows out. Although the tongue tip and blade, lips, and uvula are the only articulators which can be used in trills, the most common trill involves the tongue of the tip fluttering against the dental or alveolar region of the mouth like in the Scottish English words *rye* and *ire* (Ladefoged P. N., 2014).

Tap: These sounds are produced when the tongue is thrown against the upper teeth or the alveolar ridge, making a single tap (Ladefoged, P. & Johnson K., 2010). Examples of taps are the consonants in the middle of words such as *letter*, *betty*, and *pity*.

Non-pulmonic consonants: non-pulmonic consonants use other "airstream mechanisms" instead of air from the lungs, as in "pulmonic" consonants.

Non-pulmonic sounds include three other possible airstream mechanisms, "click," "implosives," and "ejectives."

Clicks: are known by the technical term "velaric." In clicks, the air direction is ingressive; in other words, it goes into the vocal tract. Clicks "involve creating an enclosed cavity in which the pressure of the air can be changed" (The International Phonetic Association, 1999 p. 9), where the sound is produced with the back of the tongue against the velum or soft palate. According to (Ladefoged, P. & Johnson K. 2010):

In the production of click sounds, there is a velar closure, and the body of air involved is in front of this closure. Consequently, it is possible to produce a velar sound with a glottalic or pulmonic airstream mechanism while a click is being made. (p. 145)

Therefore, you can make clicks while holding your breath or breathing inwards. Examples of clicks in English are the sounds "tut-tut" or "tsk-tsk" which are used by English speakers to show disapprobation.

Implosives: sounds are stops produced with an ingressive glottalic airflow system (Ladefoged, P. & Johnson K., 2010). They use an airstream mechanism known as "glottalic," where the air direction is ingressive. However, it is different from clicks because it does not involve sucking air inwards, and an implosive is still a plosive. The "glottalic" mechanism specifically comprises the larynx's movement, the glottis closure. They are made by closing the vocal tract somewhere above the larynx, moving downwards. The downward moving larynx

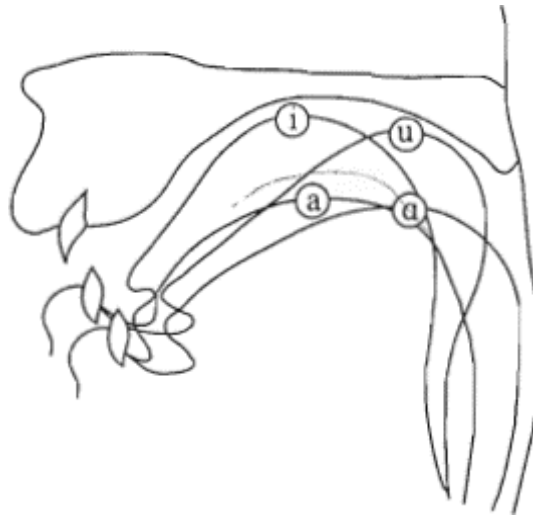
causes the air trapped in the lungs, which are still being pushed out move through the glottis, producing sound (Ladefoged, P. & Johnson K., 2010). An example of implosives is [ɓ]. Here the larynx moves downwards first, and then the air is released.

Ejectives: like implosives, use a "glottalic" airstream mechanism. Still, in this case, a glottalic egressive airstream mechanism which is the opposite of implosives because the air flows out from the vocal tract. In this sense, ejectives share the characteristics of plosive or stop sounds, like [p] or [t] (Ladefoged, P. & Johnson K., 2010); where the only difference between them is that there is a second closure at the glottis. Finally, ejectives are embodied by the diacritic apostrophe after a voiceless consonant symbol as in [p'], [s']" (The International Phonetic Association, 1999; Ladefoged, P. & Johnson K., 2010).

Vowels: In contrast to consonants, vowels are sounds produced without any obstruction. In vowel production, an articulator does not come as close to another as consonants, and therefore there is no airstream blockage (Ladefoged, P. & Johnson K., 2010; Reetz, H. & Jongman, A., 2009). According to The International Phonetic Association (1999), vowel sounds "occur at syllable centers, and (...) involve a less extreme narrowing of the vocal tract than consonants" (p. 10); because of this, the airstream is not blocked off significantly (Reetz, H. & Jongman, A., 2009). In addition, considering that vowels are produced with a relatively open oral cavity, they cannot be effortlessly classified in terms of "place of articulation" but in terms of an abstract vowel space, which is represented through the figure known as "Vowel Quadrilateral" (The International Phonetic Association, 1999). In other words, vowel sounds can be described in terms of the position of the highest point of the tongue. However, to better understand the "vowel quadrilateral," we will study the location of the tongue in the production of vowels because it bears a relation with the four-sided figure usually known as Vowel Quadrilateral (The International Phonetic Association, 1999).

Figure 3

Mid-sagittal section of the vocal tract with the outline of the tongue shape for each of four extreme vowels superimposed.



Note. Adapted from *Handbook of the International Phonetic Association. A guide to the use of the International Alphabet* (p. 11), by The International Phonetic Association, 1999, Cambridge University Press.

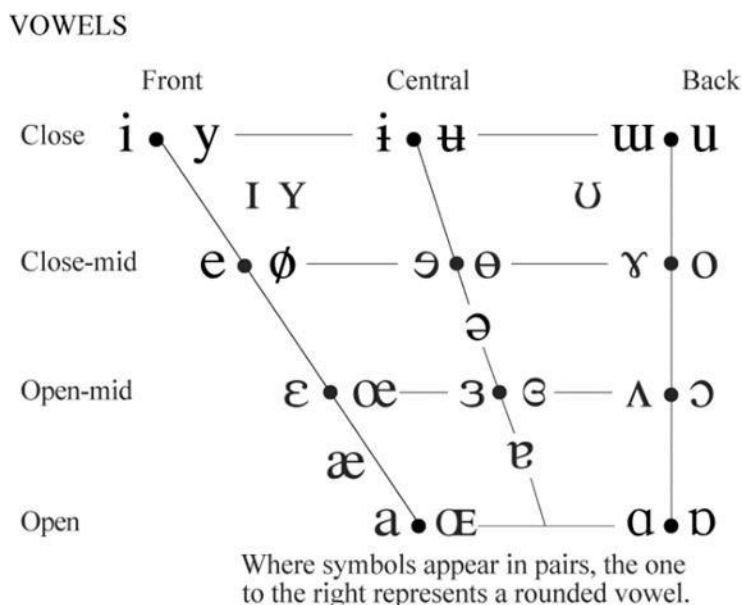
The before figure shows an outline of the tongue's shape for the vowel sounds; where for the vowel [i] (heed), "the body of the tongue is displaced forwards and upwards in the mouth, towards the hard palate" (The International Phonetic Association, 1999; p 10). The figure shows an extreme version of this vowel to take it as a fixed point of reference for vowel description (The International Phonetic Association, 1999). In contrast, for the vowel [ɑ], the body of the tongue is moved downward and backward, narrowing down the larynx.

Likewise, The International Phonetic Association (1999) explains that when the body of the tongue is close to the back surface of the mouth, and the lips are rounded and juttred simultaneously the close back vowel [u] (food) results. On the contrary, if the highest point of the tongue is at the front of the mouth and the mouth is as open as possible, [a] is the result. Hence, we can consider that vowels have complex structures where the position of both the

highest point of the tongue and the place of the lips play a key role in their description.

On the other hand, vowels can be described in terms of three main articulatory features: (1) height, which refers to the vertical dimension where the body of the tongue moves up and down within the lower jaw, narrowing or widening the oral cavity; (2) frontness, also called backness refers to the horizontal dimension in which the tongue is arched in the oral cavity towards the center, front or back; and (3) lip rounding, which relates to the movement of the lips due to jaw rising and lowering, and as a result of the lips rounding vowels may be rounded or neutral (Reetz & Jongman, 2009). To sum up, there are three dimensions in categorizing vowels: the tongue's body height, the position of the tongue, and the lips' shape.

In addition, according to the parameters used to describe how vowels are produced, their articulation can determine the position for their production; that is to say, according to the height of the tongue, vowels can be high, mid, or low. The same applies to frontness, where the frontness of the tongue defines if a vowel is front, central, or back. Lastly, according to lips, rounding vowels may be rounded or unrounded.

Figure 4*The vowel quadrilateral*

Note. Adapted from *Handbook of the International Phonetic Association. A guide to the use of the International Alphabet* (n. p), by The International Phonetic Association, 1999, Cambridge University Press.

The Vowel Quadrilateral figure is used to represent and understand the sound of vowels. It "is for vowels what the vocal tract diagram is for consonants. It allows us to represent a sound in diagram form" (Ashby, 2011, p. 87). The vowel diagram tries to represent the tongue's position for different vowels in relation to the mouth at the time of producing a vowel. According to Ashby (2011), the vowel quadrilateral marks the boundaries of the articulatory space of vowels within the vocal tract through an outline of a two-dimensional tongue placement scheme. It provides a reference point in the vowel space (The International Phonetic Association, 1999). It may lightly represent different sounds in diverse languages, although it hardly illustrates some vowel symbols suitably in particular dialects because of their condition as a reference point (The International Phonetic Association, 1999).

Pronunciation

Authors such as Seidlhofer (2001), Seidlhofer (2011), and Setter & Jenkins (2005) state that pronunciation refers to the production and perception of segmental sounds -alone and in speech-, in interaction with suprasegmental features like stress and intonation in a language to achieve meaning in contexts of language use. This definition is also shared by language researchers such as Dieling & Hirschfeld (2000; cited by Bartoli Rigol, 2005) and Cantero Serena (2003), who state that pronunciation is not only about speech production but also the perception of speech sounds, accent, and intonation. For her part, Bartoli Rigol (2005) affirms that pronunciation is the materialization of oral expression. Consequently, pronunciation is both production and perception of speech sounds, hence the importance of pronunciation to communication success.

Yates (2002) argues that:

“Pronunciation refers to the production of sounds that we use to make meaning. It includes attention to the sounds of a language (segments), aspects of speech beyond the level of the individual sound, such as intonation, phrasing, stress, timing, rhythm (suprasegmental features), how the voice is projected (voice quality) and, in its broadest definition, attention to gestures and expressions that are closely related to the way we speak a language” (p. 1).

In this sense, pronunciation plays a key role in the communication process. It refers to producing sounds and lies in knowing how to integrate them to produce fluid and coherent speeches and allow the speakers to exchange meaning.

Richards & Schmidt (2010) contend that pronunciation refers to how different sounds or a sound is produced and is mainly focused on how the listener perceives sounds. Sadeghi & Mashhadi Heidar (2016) extend this definition and hold that pronunciation is the act of

pronouncing words in an accepted and understood way.

Pronunciation is a fundamental part of foreign language learning. It affects language learners' communicative competence and performance since while a good pronunciation leads to learning, a limited pronunciation can discourage students' language learning (Gilakjani, 2012). So, pronunciation is transcendental in developing communicative competence in foreign language learning.

Additionally, Gilakjani (2012) points out that pronunciation involves two main groups of features in the production of English sounds. First are the segmental features, which refer to sounds at the micro-level. They include phonemes, consonants and vowels, and specific sounds within words. Second, the suprasegmental features related to the sounds at the macro level. They consist of linking, connecting speech, intonation, and word stress. Therefore, pronunciation is the production and perception of sounds at the segmental and suprasegmental levels to effectively express a message and exchange meaning.

Levis (2005) refers to this by pointing out that both research and pedagogy concerning pronunciation had been influenced by two contradictory points: on one side, the principle of native accent which establishes that one of the most important objectives of the students should be the accent acquisition like the native speaker. On the other hand, the principle of intelligibility, in the words of Derwing & Munro (1997), refers to the extent to which the native speaker understands the speaker's utterance and the speaker's message. Two things are certain. First, a foreign language learner's accent is not a problem if it does not hinder the communication process. Second, the acquisition of proper pronunciation is vital to be understandable and avoid misinterpretations.

Although Munro, Derwing, & Morton (2006) posit that accent can represent several troubles for listeners, difficulties in understanding the different oral production patterns that

they are accustomed to lead to a loss of intelligibility. Fraser (1999) holds that it is unlikely that learners get a native-like accent. Still, they can improve intelligibility through effective pronunciation teaching since pronunciation influences overall intelligibility (Gass & Varonis, 1984). It is also important to highlight that accent takes part in learners' identity, is deep-rooted, and hardly can be changed. Then, the correct pronunciation can improve communication without the need to promote the impossibility of acquiring a native accent.

Despite recognizing the importance of pronunciation, it is still being ignored, and it receives a secondary role in the classroom. Ponce de León (2015) contends that the teaching of phonetics has been left out, and the study of the English sounds is not observed in the classroom. She also adds that pronunciation is a critical part of teaching English, for if we change a vowel or consonant sound, and even if a diphthong is not correctly pronounced, the word's meaning can change. It can give rise to confusion or misunderstandings because of poor pronunciation. Also, it can lead to a loss of intelligibility, and learners could feel insecure.

Overall, good pronunciation allows the speaker to be intelligible, while with poor pronunciation, the speaker can be misunderstood, which will hinder communication. Besides, pronunciation plays a meaningful role in a conversation and affects the personal and social life of foreign language learners (Setter & Jenkins, 2005). It allows learners to gain confidence and interact with native speakers, which is vital for all aspects of learners' linguistic development (Fraser, 1999) and professional and personal growth since pronunciation is an important factor in acquiring communicative competence.

Phonetics and pronunciation

According to Stern (1983), in the IPA articles about principles of L2 teaching, the spoken language has a primary role, and the training in phonetics is crucial for both teachers and learners, so the first aim of teachers should be to familiarize their pupils with the sounds of the

foreign language. Phonetics is helpful in teaching pronunciation because "it provides the teacher with a diagnostic understanding of how speech sounds are produced" (Stern, 1983, p. 131) and the student with a tool to overcome the barrier of misunderstanding. Good communication requires the student to have good pronunciation, and for this, the student must know phonetics and phonology. Therefore, without phonetics, communication is practically impossible (Fornes LLodra, 2014).

Cantero Serena (2003) states that pronunciation is the production and perception of speech sounds, and phonetics studies the speech sounds involved in human communication, production, and perception. Consequently, phonetics is fundamental to understanding oral communication, so the application area of phonetics is mainly pronunciation teaching. "The focus of English pronunciation instruction, therefore, should be to give learners the prosodic framework within which the sounds are organized" (Gilbert, 2008, p. 8), knowledge about phonetics, and how to articulate them and how they are organized.

As Fornes LLodra (2014) states, in English, there is no correspondence between the written phonemes and their pronunciation like in Spanish, hence the difficulties of learning English as a foreign language. Therefore, it is significant to learn phonetics in foreign language acquisition because learners can absorb the English phonemes with which they can carry out the difficult task of pronouncing words. Learning the phonetic system means acquiring the phonetic aspects that will help learners to differentiate the pronunciation between terms such as *eat* from *it*, *seat* from *sit*, or the vowel sound of "ea" in words such as *read*, *peach*, and *beach* correspond to the phonetic symbol /I:/ (Fornes LLodra, 2014). Consequently, the learning of phonetics can provide the learner with tools for pronouncing, distinguishing, and discerning between the speech sounds in foreign language learning.

On the contrary, authors like Bartolí Rigol (2005) affirm that, although phonetics and pronunciation are closely linked and can be useful on some occasions or in specific cases, such as learners with some language fossilization, they should not be taught in the classroom. Since phonetics is a science that studies sound and, in a way, is supported by writing, learners do not need to study the sounds of a foreign language, but they need to pronounce it.

Then, phonetic instruction has little effect on learners' pronunciation accuracy (Tominaga, 2009). It does not improve comprehensibility (Derwing, Munro, & Wiebe, 1997), and overall, phonetics instruction produces measured improvement in learners' pronunciation (González Bueno, 1997).

However, Saito (2011), after conducting research with twenty adult learners of English of intermediate proficiency, measured the effect of phonetic instruction by comparing two groups; the *experimental group* with *instructed* learners, and the *control group* with *uninstructed* learners, found noteworthy results. On the one hand, explicit instruction benefited English language learners' comprehensibility in the experimental group, especially at the controlled speech level. On the other, participants revealed a general comprehensibility improvement in cases of spontaneous speech.

Llisterri (2003), contrary to Saito (2011), considers that teaching phonetics lies in an explicit reflection on the phonetic system. It seeks to acquire a detailed and formal knowledge of articulatory, acoustic, and perceptive characteristics of segmental and suprasegmental elements of the spoken language.

However, in terms of teaching pronunciation, phonetics instruction has demonstrated significant benefits and improvements in language learners (Lord, 2005). Likewise, research studies such as "Effects of Form-Focused Instruction and Corrective Feedback on L2 Pronunciation Development of /ɪ/ by Japanese Learners of English", made by Saito & Lyster

(2012), have demonstrated the benefits of explicit phonetic instruction in the learning of pronunciation.

While some authors consider that phonetics and pronunciation are closely tied, some think phonetic instruction is important in learning a foreign language. It has positive benefits, and others believe that phonetics is irrelevant. However, the truth is that phonetics provides learners with a system of symbols and patterns of pronunciation, which can help them improve their pronunciation and language skills.

Phonetics importance

According to Johnson & Kozikowska (2009), learning and using the International Phonetic Alphabet could improve pronunciation because we could use these symbols to help our pronunciation. Also, it allows one to recognize the small and crucial differences between sounds, avoid confusion with similar sounds from the L1, and help learners to produce the target language new sounds. Then, phonetics facilitates the ability to understand, listen, and reproduce different vowel qualities. As Atkielski (2019) notes, the relationship between phonetic transcription and spoken language is like that between a printed musical score and a musical performance, so it has many advantages for teaching pronunciation.

Lord (2010), who suggested a two-month summer immersion program, analyzed the recordings from both groups. One had previously taken a phonetics course, and the other one had not taken the course. He concluded that although it was beneficial for all students, those who once received lessons in phonetics improved noticeably. Bongaerts (1999), who conducted three studies on this matter, concludes that it is feasible to enhance pronunciation through extensive explicit phonetics training since two of these researches showed language learners enhanced utterance (cited by Arteaga, 2000).

Teachers' beliefs

It is vital to understand the definition of belief itself to understand teachers' beliefs. Based on the literature about teachers' beliefs, it was found that the term belief can be described as "an elusive concept to define" (Ferreira Barcelos, 2003, p. 7) by its complexity and because it "does not lend itself easily to the empirical investigation" (Pajares, 1992, p. 308). It also covers the reflection of diverse research fields such as anthropology, psychology, philosophy, sociology, medicine, and many others (Zheng, 2009; Pajares, 1992); in consequence, the term belief can be defined in several ways and can represent numerous difficulties at the time of explaining it (Pehkonen & Pietilä, 2003).

Despite the many attempts to define beliefs, the term was often associated with other concepts such as opinion, knowledge, assumptions, or cognitions (Busch, 2010). For example, Abelson (1979) refers to beliefs as a cultural dimension acquired from personal experience, a kind of tacit knowledge that is "subjective, experience-based, often implicit" (Pehkonen & Pietilä, 2003, p. 2). Raymond (1997) describes a belief as personal judgment formulated from experiences that have "a strong evaluative and affective component, which provide a basis for action and is resistant to change" (Borg, 2011, p. 371). However, we can differentiate belief from other concepts by arguing that: "there are some things that we "just believe" and other things that we "more than believe –we know." Those things we "more than believing" we refer to as knowledge and those things we "just believe" we refer to as beliefs." (Leatham, 2006, p. 92) Thus, a belief can be defined as an individual perspective, a statement that the individual recognizes as true, although others may not accept it as reliable. A belief is "deeply personal, rather than universal and unaffected by persuasion" (Pajares, 1992, p. 309). As Pehkonen & Pietilä (2003) state, a belief is something unique that the individual usually possesses and acquires through his own experience and understanding.

On the other hand, Borg M. (2001) holds that a belief is "a mental state which has as its content a proposition that is accepted as true by the individual holding it, although the individual may recognize that alternative beliefs may be held by other" adding that "this is one of the key differences between belief and knowledge, in that knowledge must actually be true in some external sense" (p. 186). Therefore "beliefs cannot be directly observed or measured but must be inferred from what people say, intend, and do" (Pajares, 1992, p. 314), and although a belief may seem contradictory to an external observer, it is not to the one who believes in it.

Additionally, Pajares (1992) points out that all human perception seems to be influenced by the entire generic knowledge structure he owns. This structure is formed by information, schemata, constructs, and beliefs. However, this generic knowledge structure is unreliable because personal views also affect it. Beliefs that influence how individuals characterize phenomena make sense of the world, estimate covariation, and even affect cognitive knowledge. Consequently, the structure itself is not a trustworthy guide to the nature of reality. From the preceding, it can infer that the conception of knowledge as something pure is not true because even knowledge is based on evaluation and judgments like beliefs.

Overall, a belief is a subjective knowledge that can be acquired from the cultural transmission, experience, or a succession of events that allow the individual to establish judgments or concepts that he considers true.

Likewise, beliefs play a crucial role in many aspects of teaching and life since beliefs strongly influence human behavior (Nespor, 1987). They guide people's thinking and conduct (Borg, 2001), influencing future actions or events.

Teachers' beliefs and their importance. Concerning teachers' beliefs, Kagan (1992) defines them as "teachers' implicit assumptions about students, learning, classrooms, and the subject matter to be taught" (p. 66). Richards (1998) argues that teachers' beliefs are

“the information, attitudes, values, expectation, theories, and assumptions about teaching and learning that teachers build up over time and bring with them to the classroom” (p. 66). The “psychologically held understandings, premises, or propositions about the world that are felt to be true” (Richardson, 1996, p. 103). These assumptions and insights are constructed by teachers throughout their experience as individuals and language learners and are deeply linked to the way they see the world and teaching practice. They do not allow the teacher to apply different teaching strategies in the classroom to those they already know and use every lesson. Their beliefs make them feel uncomfortable and fearful of using a strategy or tool such as phonetics in the classroom. As explained in Chapter IV, teachers are not willing to teach phonetics at the school because it was not the way they learned English as a foreign language. Furthermore, although they received phonetic instruction at the university and are slightly familiar with its definition, some are unfamiliar with the IPA.

Basturkmen, Loewen, & Ellis (2004) define beliefs as “statements teachers made about their ideas, thoughts, and knowledge that are expressed as evaluations of what should be done should be the case and is preferable” (p. 244). Basturkmen, Loewen, & Ellis (2004) state that teachers have two kinds of beliefs; on one side, those beliefs of which they are aware and can express them, and on the other, teachers have beliefs of which they are not fully aware and yet they guide their practice. It could explain why their teaching practices do not reflect their opinion. For example, during the survey, every teacher stated that phonetics instruction was important in learning a foreign language because it closely relates to pronunciation and could help learners improve speech production. However, the results displayed that although every participant was aware of the importance of phonetics, none of them used it in classes.

Authors like Dobson & Dobson (1983) consider that teachers' beliefs influence their teaching practices and how they conduct tasks and activities in the classroom. Pajares (1992)

suggests that there is a "strong relationship between teachers' educational beliefs and their planning, instructional decisions, and classroom practices" (pp. 326) because teachers are highly influenced by their beliefs (Xu, 2012; Ghaffarzadeh Hassankiadeh, 2012). Consequently, teachers' "beliefs are far more influential than knowledge in determining how individuals organize and define tasks and problems and are stronger predictors of behavior" (Nespor, 1987, p. 311).

Additionally, teachers bring many prior beliefs that influence their actions, teaching, and what they do in the classroom. These prior beliefs come from their previous learning experiences and observation (Breen, Hird, Milton, Oliver, & Thwaite, 2001; Lortie, 2002) and may represent a big deal considering that teachers use "beliefs and beliefs structures with all their problems and inconsistencies" (Pajares, 1992, p. 312). It becomes a problem when it makes teachers feel unable to employ different strategies or unqualified even though they have received phonetic instruction. It was noted, for example, that most of the teachers were dissatisfied with the students' pronunciation, yet none of them made any changes in the classroom. As mentioned in Chapter IV, teachers remained using the same strategies they used every day even though they were aware they were not working.

It is worth highlighting that "teachers often teach the course content according to the values held of the content itself" (Pajares, 1992, p. 309). Indeed, two teachers could have similar knowledge about a topic, but they will teach in different ways because of their prior experiences in learning during school. For instance, Nespor (1987) describes how Ms. Skylark created a fun and friendly ideal teaching environment focused on what she wanted in classes when she was a child.

The importance of teachers' beliefs lies in these allows us to understand teachers' thought processes and their instructional practices (Zheng, 2009; Pajares, 1992). Beliefs are

related to "what teachers know, believe and think" (Borg S., 2003, p. 81) and play a key role in teachers' teaching practices because they are a manifestation of their beliefs (Nespor, 1987; Ghaffarzadeh Hassankiadeh, 2012; Kagan, 1992; Pajares, 1992). They influence teachers' teaching attitudes, policies, and methods (Xu, 2012; Ghaffarzadeh Hassankiadeh, 2012). Also, considering that teachers' beliefs strongly influence teachers' development process (Richards, Gallo, & Renandya, 2001), they may be able to measure teachers' professional growth (Kagan, 1992).

On the other hand, teachers' beliefs studies suggest that beliefs and the beliefs system have two substantial uses for teachers: on one side, task definition and selection of cognitive strategies; on the other, it facilitates the recuperation and reconstruction of processes of memory (Nespor, 1987).

So, "the study of teachers' beliefs forms a part of the process of understanding how teachers conceptualize their work" (Ghaffarzadeh Hassankiadeh, 2012, p. 20) and is "of crucial importance to the success or failure of learners' efforts to master a foreign language" (Rifkin, 2000, p. 394; cited by Ghaffarzadeh Hassankiadeh, 2012).

Therefore, as Freeman and Richards (1996) suggest:

In order to better understand language teaching, we need to know more about language teachers: what they do, how they think, what they know, and how they learn. Specifically, we need to understand how language teachers conceive what they do: what they know about language teaching, how they think about their classroom practice and how that knowledge and those thinking processes are learned through formal teacher education and informal experience on the job. (p.1)

Teachers' beliefs have a powerful impact on their teaching practices and are useful predictors of teachers' decision-making. Then, teachers' beliefs are essential as they can reveal

their philosophy in classroom teaching practices.

Related Studies

The phonetics teaching for improving English learners' pronunciation represents a big challenge to English teachers because the phonetics field is broad and far-reaching, which arouses fear. Consequently, finding information sources was a little bit difficult. However, some researchers have carried out different investigations to solve this learner's trouble. These previous studies are mentioned below.

The first antecedent is a research article presented by Tlazalo Tejada & Basurto Santos (2014) titled "Pronunciation instruction and Students' Practice to Develop Their Confidence in EFL Oral Skills." The main goals of their study were to understand if pronunciation instruction influenced students' confidence and to inform how teachers educated elementary students of EFL in pronunciation at a Mexican University.

In their research, Tlazalo Tejada & Basurto Santos (2014) insist that to be understood, avoid problems of intelligibility in a foreign language, and communicate in real contexts is essential to have a good pronunciation. Likewise, they highlight that good pronunciation does not mean sounding like a native speaker but being comprehended in the target language.

Tlazalo Tejada & Basurto Santos (2014) developed their research with 29 students divided into two groups, Group A with 18 students and Group B with 11. Nevertheless, they interviewed only eight students to gather the data. The study provided the information described below: the pronunciation instruction was mainly focused on correction in situ, drilling, and the "repeat after me" method because they are considered useful pronunciation techniques. They concluded that if EFL teachers want to avoid the fossilization of pronunciation errors and learners' perception of speech as unimportant, teachers must accompany their current pronunciation teaching practices with other types of pronunciation exercises.

Likewise, Saito (2007), in his research "The influence of explicit phonetic instruction on pronunciation in EFL settings: the case of English vowels and Japanese learners of English," relates the importance of phonetic instruction in Japanese learners of English to solve difficulties with their pronunciation. Saito (2007), who sought to make a beneficial contribution to the field of TEFL, conducted an experimental phonetic study with 6 Japanese learners of English to determine that explicit phonetic instruction is a profitable and effective strategy to improve pronunciation in English as L2 in Japanese learners. By doing so, he concluded two significant implications: the first one: although all 6 Japanese learners of English worked on the pronunciation of the English-specific vowel /æ/, only those participants who received explicit instruction in phonetics showed a noticeable improvement in pronunciation.

The second one, in the words of Saito (2007), "this activity encourages students to become more aware of their pronunciation than exposure to the natural speech production of English in an immersion setting" (p. 16), which demonstrates that explicit phonetic instruction is efficient and successful.

On the other hand, Vera Diettes, (2014) in her research called "Fenómenos de reducción vocálica por hablantes colombianos de inglés como L2: un estudio acústico" mention the Speech Learning Model which suggests the L2 speakers could create phonetic categories for new sounds. Vera Diettes (2014) evaluated the capacities of a speaker's group of English as L2; Secondly, she instructed the students in phonetics for the process of vowel reduction and Schwa pronunciation. Lastly, she evaluated the evaluation the same aspects after the training.

Vera's research objective was to know how the speakers of English as L2 perceived and produced the English vowel Schwa /ə/ regarding native speakers of English. At the same time, it appraised the hypothesis suggested by the Speech Learning Model, using a variable concerning orthography, which was one of the most important innovations applied in her research. Vera

considered the influence of written words as a potential factor in phonemes acquisition of L2. The obtained findings hinted that L2 speakers of English were influenced by orthography, and hence, they did not discern the Schwa as a new phoneme. But on the contrary, they seem to assimilate them as different L1 vowels. Therefore, the results reveal that the influence of orthography over speakers makes them produce Schwas which seem to be their native vowels.

Another antecedent corresponds to the research "Teaching and Learning Pronunciation in ESL/EFL classes of Bangladesh" carried out by Jahan (2011). His research expresses the importance of teaching pronunciation since speech production could become worthless without learning the correct pronunciation of other aspects of English, such as vocabulary and grammar. To Jahan (2011), the communication process includes many notable features that occur only with the correct pronunciation and make successful communication.

Jahan (2011) considers that although teaching pronunciation is one of the most complicated, it is also the most significant aspect of ESL/EFL teaching. He also states that students' poor pronunciation becomes the cause of anxiety for teachers; the objectives of his study were to explore the obstacles that Bangladeshi teachers and students face while working with pronunciation. Jahan conducted his research with fifty-one teachers and some students from private and public universities in Bangladesh. He employed the survey and focus group discussion and concluded that most of the teachers were unsatisfied with students' pronunciation because most of the students were poor in utterance, and their mother tongue influenced them.

In his research, Jahan (2011) found that sound imitation, repetition, and dictionary use are predominant teaching methods. He also discovered that some students believed that teachers were not proficient and felt uncomfortable with them. They felt afraid while practicing drills when teachers made corrections to their pronunciation and criticized them. Therefore,

teachers should prioritize helping students improve their pronunciation skills, use different teaching methods and new technologies, and introduce IPA symbols in language classrooms.

The last antecedent is a proposal conducted by Suaza Mena (2014) called “Propuesta de enseñanza basada en el modelo speaking: desarrollo de la producción oral”. To contribute to the growth of speech production in English, Suaza Mena (2014) carried out a study about the teaching practices of a group of students to design a teaching proposal focused on the *Speaking* model. So, through qualitative research and descriptive study, she worked with 35 students between 13 and 15 years old, using the unstructured interview, the analysis matrix of the Speaking model, and the interaction model to make the diagnosis. In this regard, three phases were proposed: in the first one, called diagnosis, she determined the scope of national politics in terms of English teaching, and in particular in the English oral production; in the second one, she analyzed the speaking method to know how the teaching and learning processes of orality were conducted; in the last one, the didactic proposal was designed as a way out of the problem.

Suaza Mena's (2014) research showed that teachers were motivated to improve the learning of English in students; they used the production of monologues and dialogues, English songs, and English day contests. Still, there were troubles with developing oral communication in students. In interviews, the teachers expressed their interest in lessons. They also expressed their interest in learners' motivation and efforts to help learners understand and interact in the L2 through warming activities. However, Suaza Mena's (2014) observations allowed evidence that there were no warming activities in the classroom. Likewise, the teacher did not achieve a coherent conversation with the students. There were troubles related to vocabulary, pronunciation, participation, and interaction since the education model centered on content, repetition, and transmission. Therefore, although this study and proposal are not directly

focused on phonetics, it is important because it makes evident the need to change certain areas in the education environment.

Methodology

This chapter illustrates the methodological design that guided this research. The chapter begins by explaining the research approach, the selected method, and the reason for the choice. Then the type of study. This is followed by a description of the participants, who they were, and how and why they were sampled for this study. Lastly, the instruments and data collection process are described.

Research Approach

This research followed a mixed-methods approach, as I collected, analyzed, and integrated data using quantitative and qualitative methods. According to Tashakkori & Creswell (2007), combining the two techniques provides better research information than either approach alone. Likewise, this study adopted a mixed-method, prioritizing the qualitative method, which seeks that the results of the first method, in this case qualitative, can help develop or inform the second method, quantitative (Greene, Caracelli, & Graham, 1989).

Johnson & Onwuegbuzie (2004) argue that mixed methods are pluralistic and complementary; consequently, they allow the researcher an eclectic approach. It is highly important to use pluralistic educational and social research approaches to understand the issue (Tashakkori & Teddlie, 1998). It allows researchers to produce a larger variety of divergent and complementary views (Venkatesh, Brown, & Sullivan, 2016).

Type of Study

The type of study in this research is an exploratory design that, according to Edmonds & Kennedy (2017), is a sequential approach and is used when the researcher is interested in following up qualitative findings with quantitative analysis to discover participants' ideas and knowledge.

In addition, it is also appropriate when a researcher wants to generalize results to different groups. A researcher may identify emergent categories from the qualitative data and then use the quantitative phase to examine the prevalence of these categories within different samples (Morse, 1991).

Furthermore, it is an exploratory study because this research tried to discover what teachers think of using phonetics in the EFL classroom. Researchers to produce a greater assortment of divergent and complementary views (Venkatesh, Brown, & Sullivan, 2016).

Participants

The present research project is realized with a sample of ten English teachers from public schools in Pitalito; their ages are around twenty and sixty years old. Some of them work in rural areas and others in the urban area. The participants were chosen based on their accessibility to the researcher. Therefore, to select the participants, I followed the principles of convenience sampling, “a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study” (Dudovskiy, n.d).

Moreover, convenience sampling, also known as opportunity sampling, emphasizes “ensuring that the knowledge gained is representative of the population from which the sample was drawn” (Etikan, Musa, & Alkassim, 2016 p. 4). Likewise, convenience sampling is the most common type of sampling in L2 studies where the only criterion, according to Dornyei (2007), is the researcher's convenience (Farrokhi & Mahmoudi-Hamidabad, 2012).

On the other hand, although they had been chosen according to convenience sampling, it is important to highlight that each participant selected has a unique and different teaching and learning experience. It is relevant because expert language teachers use their experiential knowledge to decide the best method for their learners, anticipate problems, and respond to

their needs technically and sensitively (Borg S., 2003).

It is important to mention that the teachers invited to participate in the research were informed about the research purposes and the confidentiality of the information, and the data collection procedures.

Instruments and Data Collection Procedure

The research was carried out under the mixed-method approach to complement the findings and substantiate the research method by combining two quantitative and qualitative instruments collected through a survey representing the quantitative data and qualitative data from class observations and interviews.

Both instruments cover teachers' views about teaching phonetics in the EFL classroom. In mixed-method research, the data collection strategies can be according to closed or open-ended questions where the participants can talk openly about a topic. The data type may also be numeric or text, audio recordings of participants' voices, or written notes (Creswell, 2003).

Observation

According to Denscombe (2010), observation offers the researcher a different way of collecting data because it does not depend on what people say, think, or do; instead, it is focused on the evidence and the principle that, for certain purposes, it is best to observe what happens. To Denscombe (2010), two types of observation are used in research. The first is *systematic observation* studies the interaction in settings such as school classrooms, and it has its origins in social psychology. The second is *participant observation*, which means infiltrating or becoming involved in situations and contexts to understand a group's culture and processes. So, considering the researcher's interests and the important contributions that systematic observation can make to this study regarding spontaneous behavior and uncontrolled environment in everyday contexts, the current research is focused on it.

Observation is a useful method for collecting, processing, and analyzing information that cannot be studied in artificial settings (Anguera, Portell, Chacón Moscoso, & Sanduvete Chaves, 2018). Anguera, Portell, Chacón Moscoso, & Sanduvete Chaves (2018) consider that observation provides the researcher the opportunity to capture valuable pieces of everyday life without having to ask for facts because people's behavior, expressions, or gestures contain a lot of information (Shaughnessy, Zechmeister, & Zechmeister, 2012). The researcher can capture verbal and non-verbal messages (gestures, facial expressions, and voice tone) easily perceived through visual or auditory channels (Anguera, Portell, Chacón Moscoso, & Sanduvete Chaves, 2018). Observation, therefore, is an appropriate method for studying participants' behavior in natural settings.

Following the above, a systematic observation was made during three lessons for two hours to observe the dynamic pedagogical strategies and topics taught in classes. It is worth highlighting that these observations were supported by the English teacher in charge of the lesson. Most of the sessions were mainly focused on speaking, which allowed the researcher to identify the facts that would complement the information gathered through the survey.

The observation method was chosen to determine the pedagogical strategies teachers use in the classroom to teach pronunciation. Because it allows the researchers to interact with the context without interfering in their teaching-learning practices, observation is a non-intrusive method. It offers more reliable information because it is focused on natural settings. As a result, observation plays a key role in this research due to its high trustworthiness.

Survey

Jackson (2011) contends that the survey is a questionnaire in which the pollster can question individuals about a topic to reveal their points of view through both open and closed questions. Also, in the words of Dillman 2007 (cited by Denscombe, 2010), it is important to

emphasize that the major advance of the 21st century so far is the recognition of survey modalities, as each has strengths and weaknesses that allow doing things other modalities cannot do. They are still in use, and it does not appear that any of them will disappear.

The survey is a quantitative technique used by researchers to gather information about thoughts, feelings, attitudes, beliefs, values, perceptions, personalities, and participants' behavioral intentions (Johnson & Christensen, 2014) with both open-ended and close-ended questions within different scales, between them numerical rating scale, ranking, and Likert scale. In this particular case, this instrument was applied to better understand teachers' points of view and reveal the teacher's beliefs about teaching phonetics in the EFL classroom, rather than exploring their understanding or conceptualization of phonetics. It searched individuals' general opinions at first sight.

The questionnaire used in this study is a written instrument that the participants have to complete independently. It consists of fifteen questions about their opinions, teaching practices, and facts in the classroom. According to Vecaldo (2017), general attitudes and values about the teaching profession result from a group of beliefs fostered through experience and practice. The survey is applied to participants before the interview. In contrast, the quantitative study is conducted before the qualitative research in the sequential mixed approach to acquire complementarity in interviews about the teachers' beliefs.

Interview

The semi-structured interview consisted of five open-ended and evolving questions according to the stages of a qualitative interview proposed by Charmaz (2002), who distinguishes three types: initial open-ended questions, intermediate questions, and ending questions to gather information about teachers' beliefs in-depth, which sought to explore teachers' opinions about teaching phonetics in EFL classroom as well as to know how the

contextual factors may have influenced their beliefs and their experience teaching English, since, this type of questions are typically used when the researcher seeks to gain insights into people's opinions, emotions, feeling or experiences, as in words of Connolly (1998) is explained in terms of familial, social and teaching processes and experiences within a specific context.

Furthermore, through the interview, teachers are asked to share their schooling and professional experiences in teaching and learning practices in phonetics and pronunciation. This is done using cell phones and emails as not all teachers can have a face-to-face interview. The cellphone interview is also recorded for analyzing purposes and avoiding misconceptions or some type of bias. In the interview, the first questions are about personal and professional information. The intermediate questions are asked to determine the teachers' academic exposure to phonetics or teaching pronunciation methods. The end questions are about phonetic instruction. Therefore, the data collected through the qualitative interview help to assess the reliability of the obtained inferences from the quantitative survey.

Consequently, the interview provided additional complementary perceptions from a different alternative perspective to better understand the teachers' beliefs. In addition, the use of a qualitative method for acquiring in-depth points of view about the studied phenomena is useful to assess the boundary conditions for the results from the quantitative study, opening fresh avenues for future research bearing in mind that it is exploratory research (Venkatesh, Brown, & Bala, 2003).

Results and Discussion

This chapter describes the procedure followed to analyze the information collected from the instruments and discusses the findings of the classroom observations, survey, and semi-structured interview data gathered from 10 English teachers regarding their beliefs about teaching phonetics in the EFL classroom as a strategy to improve pronunciation.

Data Analysis

Demographics

Participants were 10 English teachers from different high schools in Pitalito. To collect information about their background, they answered a survey. Table 1 shows the characteristics of the participants.

Table 1

Participants' Characteristics

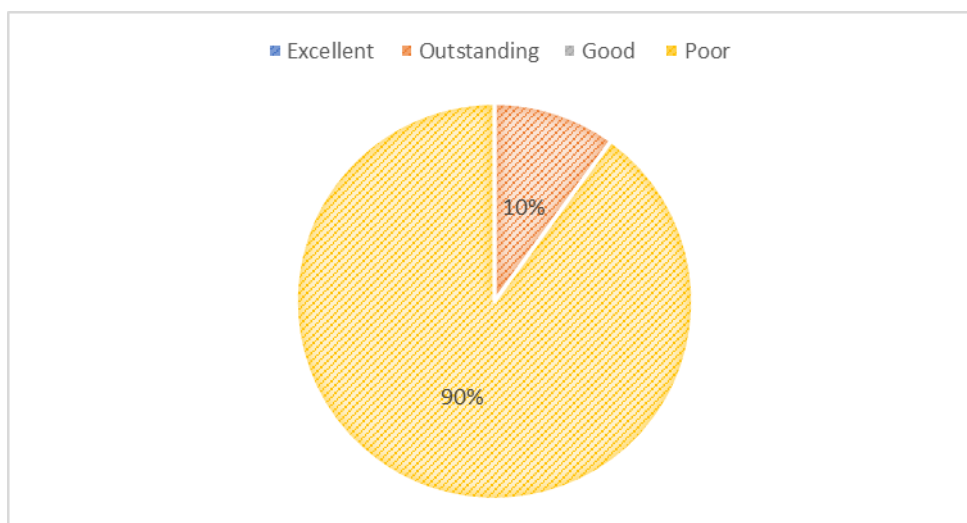
ASPECT	DESCRIPTION
Number	10 English teachers
Age	< 30: 2
	30-40: 4
	40-50: 2
	> 50: 2
Gender	4 men
	6 women
Academic Degree	6 B.A in Basic Education with Emphasis in English 3 B.A in English 1 Master in Ludic Pedagogy
Years of Experience	< 5: 4
	5-10: 1
	10-20: 3
	> 20: 2

Note. This table shows the number of teachers who participated in this project and their characteristics in terms of five factors.

In the same survey, some questions were asked about the importance of phonetical instruction in their pedagogical practice. The analysis of the items in the survey is presented below.

Figure 5

Students' pronunciation

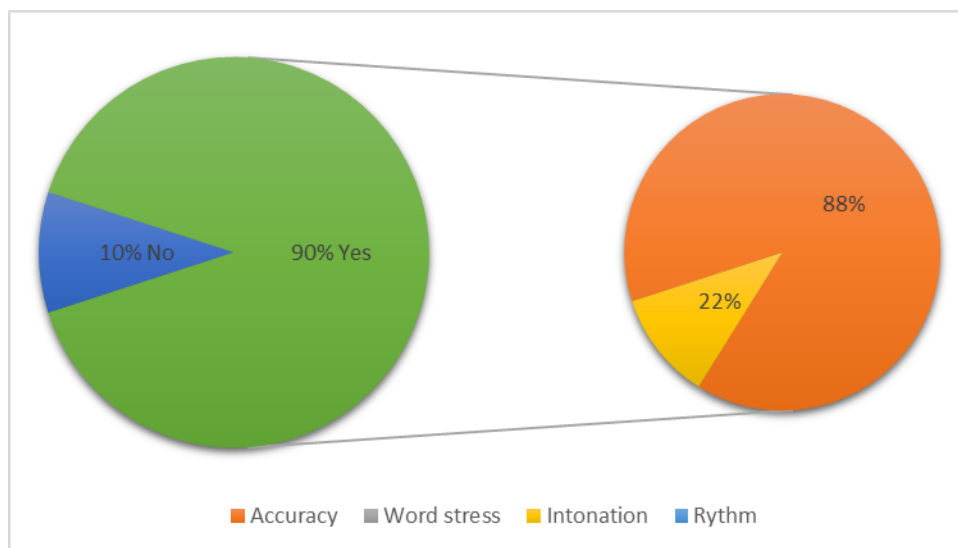


Note. The graphic represents teachers' points of view regarding their students' pronunciation and, therefore, their ability to communicate in the foreign language.

The first item of the survey asked participants to indicate whether they considered their students had an excellent, good, fair, or poor pronunciation ability. Of 10 participants, 9 thought their students had poor pronunciation, and one considered his students had outstanding speech production. Despite this, I realized that although teachers were aware of their students' poor pronunciation and lack of confidence during the observations, their inputs and teaching practices remained the same. They used to teach the language in a decontextualized way and pronounce it word by word with the strategy of repeating after me. I recognized the importance of identifying whether teachers graded pronunciation and what aspects of pronunciation they assessed.

Figure 6

Pronunciation aspects assessed in the classroom.

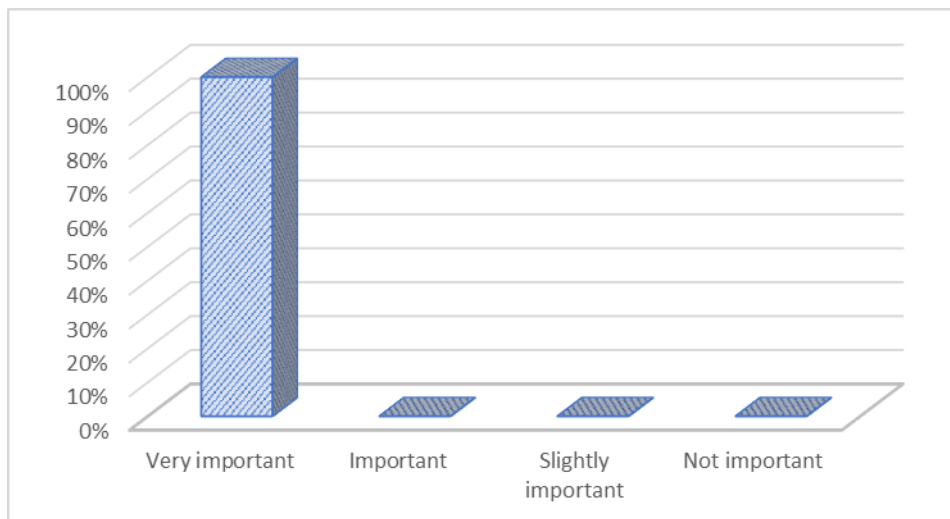


Note. The figure displays the number of teachers who evaluate pronunciation in their classroom and the elements they measure and, therefore, those they consider most relevant.

According to the figure, 90% of the participants graded pronunciation in the classroom, and from that group, 88% of teachers graded accuracy, and only 22% graded intonation. I validated during the observations most teachers used tools like the radio or podcasts and were mainly focused on the pronunciation accuracy word by word. They usually asked the students to repeat the word trying to do it similar to the native speaker on the radio. In contrast, others were focused on the proper pronunciation of the term, emphasizing intonation and even accent. Students had a neutral pronunciation while repeating. Teachers often asked them to stress when it was a question, negation, or affirmation since the intonation could be helpful when having a conversation. A good intonation would enable the listener to understand what the speaker tries to express, as Kanoksilapatham (2020) affirms; using appropriate intonation patterns is crucial to improve intelligibility and prevent cross-cultural misunderstandings in communication.

Figure 7

Importance of pronunciation in the classroom.



Note. The figure shows the number of teachers who considers pronunciation a significant matter in teaching English.

Questioning teachers about the importance of teaching pronunciation in the classroom, all participants agreed that teaching pronunciation was particularly important. However, when I asked them to enumerate their teaching priorities from a list that included grammar, pronunciation, writing, reading, and speaking, 6 participants chose grammar as the most relevant, 2 chose reading, 1 pronunciation, and 1 speaking. During the observation, it was reinforced. It may seem contradictory. In theory, most teachers consider pronunciation a significant part of the teaching practice, but they mainly focus on teaching grammar and structures in the classroom.

It may be comprehended by examining their responses to the survey and interview. When teachers were asked for their instruction in phonetics, most of them affirmed have received phonetics instruction at the university.

“Interviewer: Did you receive any kind of phonetic or pronunciation instruction during

your academic training?

Interviewee (Teacher 4): Yes, two semesters of phonetics and phonology."

When they were asked if they would feel comfortable teaching phonetics, most said no for different reasons.

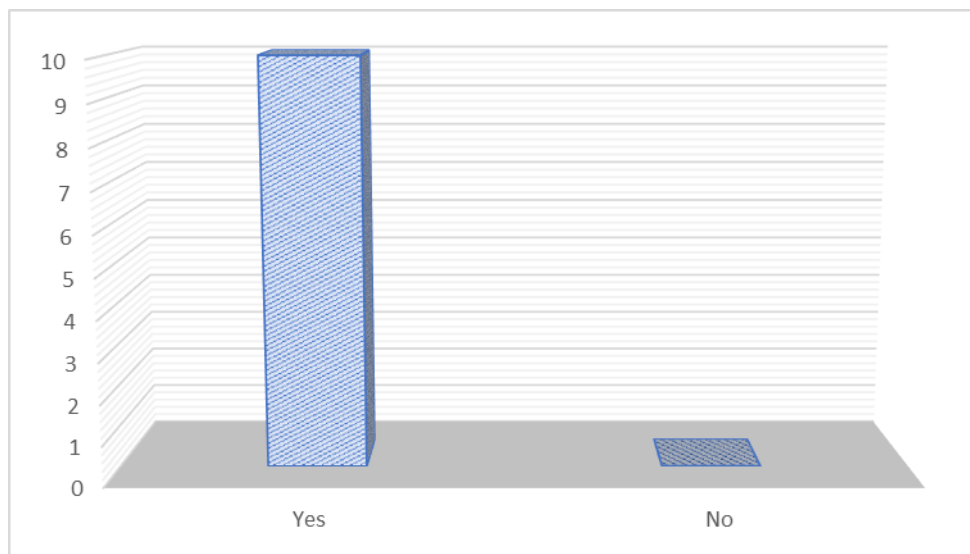
“Interviewer: Do you consider yourself prepared to teach pronunciation classes making explicit use of phonetics?

Interviewee (Teacher 4): No

Interviewer: Is there any reason why you would not teach phonetics?

Interviewee (Teacher 4): It is complicated to teach phonetics, but it should be very meaningful and fruitful with the right strategy and methodology. I think teaching phonetics by itself should depend on the students' age, level of English, and purpose of why they are learning English."

As Kagan (1992) and Pajares (1992) explain, teacher's practices are understood through prior expectations, former training, and habits where beliefs act as filters and are understood by the whole structure of generic knowledge possessed by the individual. Thus, despite having received phonetic instruction in college, their beliefs were unlikely to change, as they already had established their beliefs about teaching by the time they entered university (Pajares, 1992). For this reason, although teachers perceive pronunciation as something meaningful, it is not included in their lessons as relevant. Pronunciation and phonetic instruction must begin early in the language learning process. If it is postponed, learners are likely to view phonetics as something unfamiliar and difficult and develop habits to undo in the future.

Figure 8*Phonetics' definition*

Note. The figure shows the number of teachers who know the term phonetics and, therefore, those who had contact with the IPA.

Based on the participants' responses, I can affirm that, in some way, they understand the use of phonetics and its applicability in learning a foreign language, even if they are not clear about the concept. However, only 60% of participants are familiar with the International Phonetic Alphabet, which would be a handicap and hamper pronunciation teaching through phonetics in the classroom.

“Pollster: Do you know what phonetic is?”

Survey respondent (Teacher 1): Yes

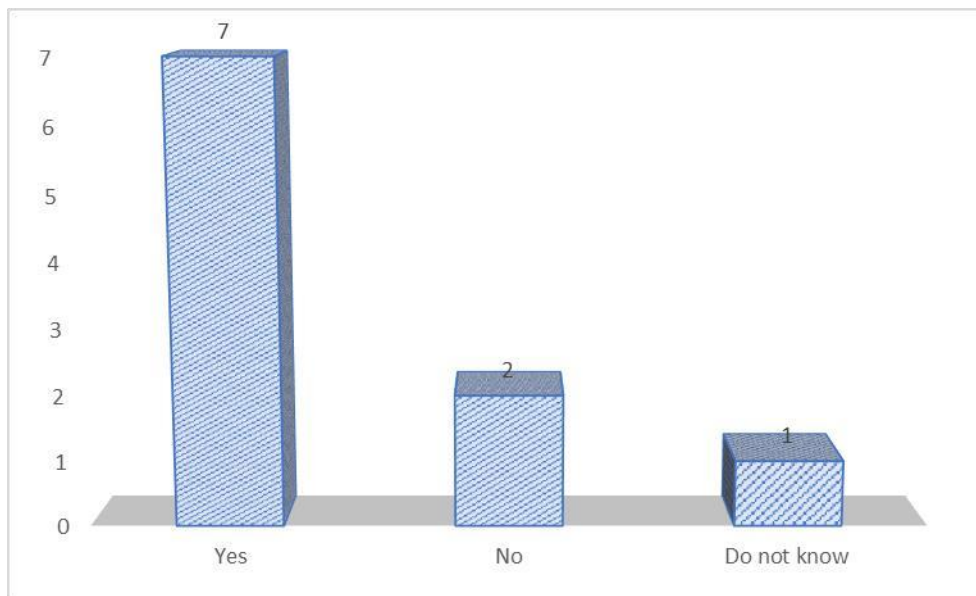
Pollster: If your answer is yes, what is the definition?”

Survey respondent (Teacher 1): Es una parte del lenguaje o enseñanza del lenguaje que trata acerca de los sonidos y/o pronunciación [It is a part of language or language teaching that deals with sounds and/or pronunciation]”.

Although they have had approaches to phonetics and have received instruction within the educational process, the definition of the term remains unclear. However, it is clear to them that phonetics is related to sounds.

Figure 9

The significance of phonetics in the teaching and learning process



Note. The figure shows those teachers who believed that the introduction of phonetics in the teaching and learning process could be meaningful.

When I asked the participants if they believed that phonetics could contribute relevant aspects to the English teaching-learning process, seven of them said yes, two said no, and one did not know. Later, in the interview, I asked them what those aspects would be, and they told me that it would certainly be to improve the students' pronunciation.

“Interviewer: Which do you consider is the most relevant aspects that teaching phonetics can provide in learning English?”

Interviewee (Teacher 3): Considero que los aspectos más importantes son: 1. Mejora la pronunciación del hispanohablante y le ayuda a reproducir sonidos más naturales los cuales le van a ayudar a comunicarse mejor en el idioma extranjero. 2. Alienta a las personas a tener cultura por los símbolos fonéticos en vista de que son parte esencial en el idioma inglés, así como lo son por ejemplo el vocabulario y la gramática [I consider the most significant aspects

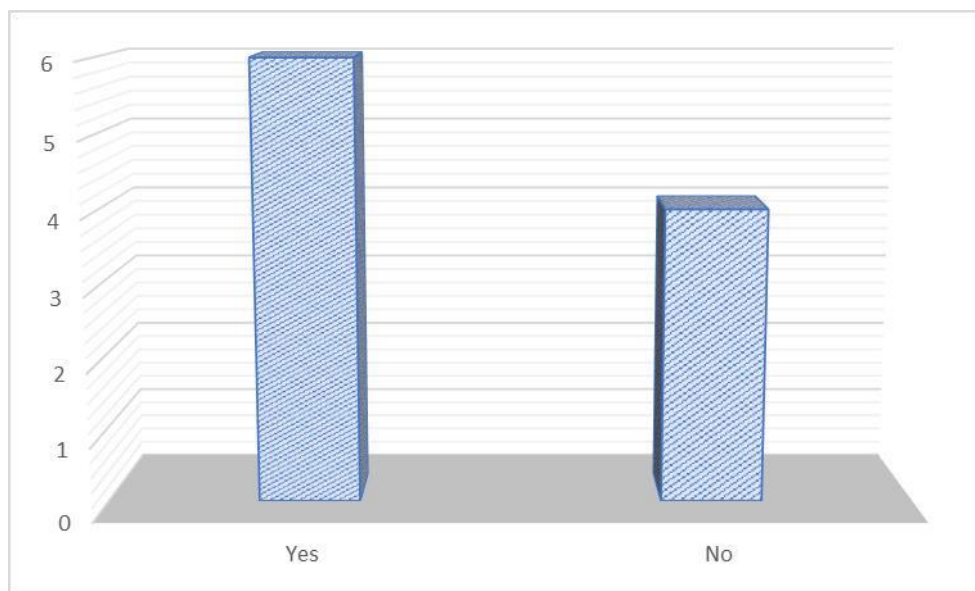
are: 1. It improves the Spanish speaker's pronunciation and helps him/her to reproduce more natural sounds which will help him/her to communicate better in the foreign language. 2. It encourages people to have a culture for phonetic symbols since they are an essential part of the English language, as well as vocabulary and grammar, for example].

“Interviewer: Which do you consider is the most relevant aspects that teaching phonetics can provide in learning English?

Interviewee (Teacher 4): The pronunciation is definitely the most relevant aspect here because it will be 100% improved”.

Figure 10

Knowledge of International Phonetic Alphabet



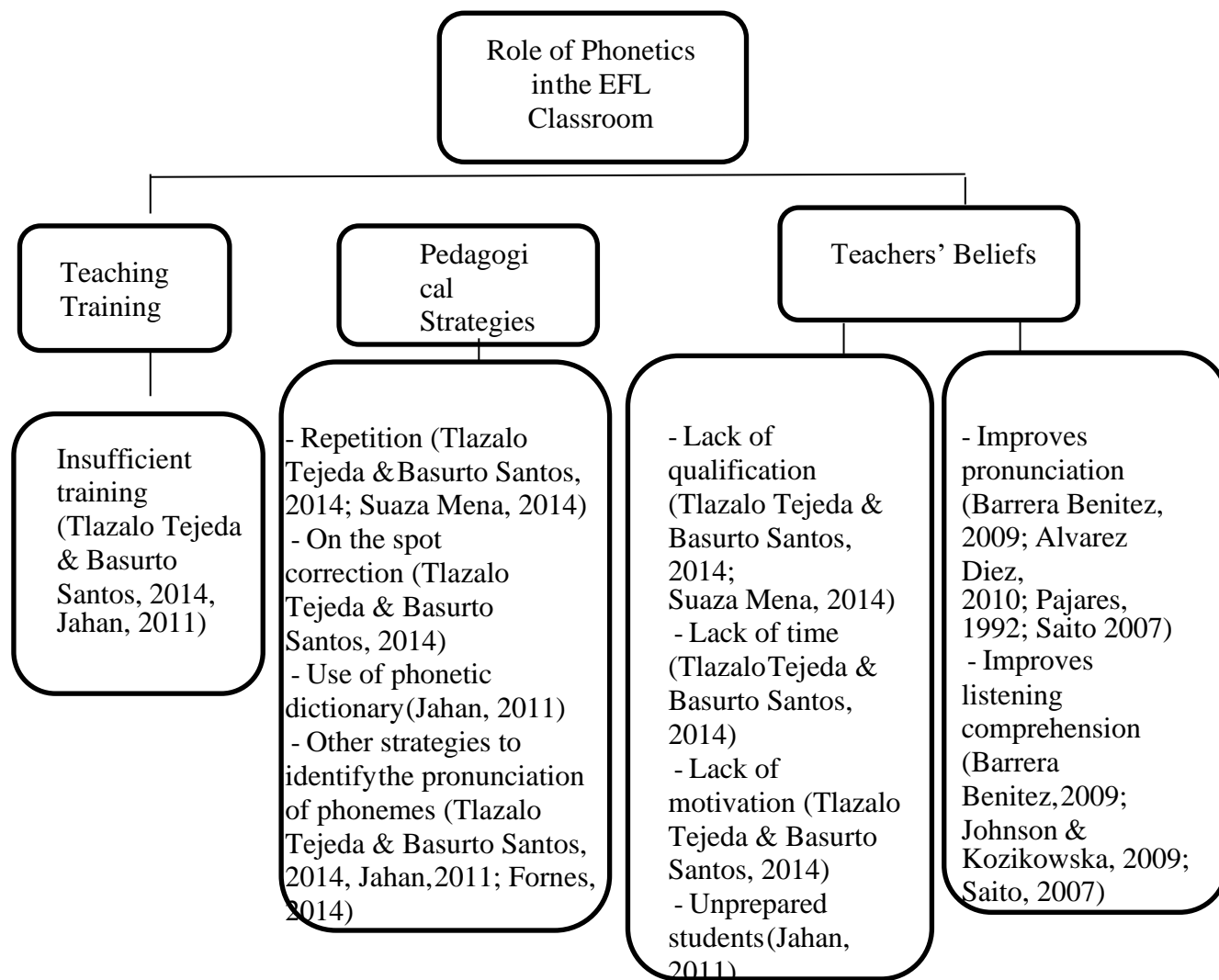
Note. The figure shows the number of participants who knows the IPA.

Even though they all claim to know the definition of phonetics and have received phonetics instruction during their university learning process, only six are familiar with the IPA. The preceding shows that there are still many gaps in the phonetics teaching strategies in the educational classroom, even at the university level.

I used ATLAS.ti to analyze and categorize the data gathered with the instruments, and I tried to organize the information accordingly to the research objectives to answer the guiding research questions.

Figure 11

Role of phonetics in EFL classroom



Note. This figure presents the categories and subcategories found in the data analysis.

By analyzing the information gathered, I determined that teachers are aware of the importance of phonetics in developing speaking skills. Moreover, they are also mindful that learners could improve their pronunciation with phonetic instructions, especially accuracy and listening comprehension. Furthermore, I was able to infer those teachers consider that exists a direct relationship between phonetics and pronunciation. The next extracts are an example of it:

"Interviewer: What do you think about including phonetics in the EFL classroom?"

Interviewee (Teacher 4): I think it is indeed important to teach phonetics because it will help students to learn the right pronunciation of the English language. However, it should be seen as a way to instruct and improve pronunciation rather than the isolated study of the letters' sounds. The inclusion of phonetics is intrinsically associated with learning a second language."

Despite acknowledging its importance, I also found that most participants did not consider they qualified to give phonetic instruction to their students. They recognized that they did not have enough knowledge to teach phonetics and pronunciation in the classroom, so they first had to acquire sufficient knowledge to teach phonetics and pronunciation. They felt phonetics could be complicated and confusing at times. As mentioned by Tlazalo Tejada and Basurto Santos (2014), teachers themselves likely need to improve their pronunciation skills to teach it. "Interviewer: Is there any reason why you would not teach phonetics? Interview (Teacher 3): El idioma inglés es diferente al español en cuanto a que las palabras no se pronuncian como se escriben, pero a pesar de que a algunas personas se les dificulta reproducir ciertos sonidos, es importante que al menos conozcan cómo reproducirlos. Sin embargo, aunque es difícil enseñaría fonética en las clases de inglés [The English language differs from Spanish in the sense that words are not pronounced as they are spelled, but even if some people have difficulty reproducing certain sounds, it is important that they at least know how to reproduce them. However, even if it is difficult, I would teach phonetics in English classes]."

motivation towards learning because it would be so time-consuming that it would not be possible to achieve due to the time constraints. In contradiction, participants also stated that improving students' overall pronunciation and fluency would increase their motivation and self-confidence when speaking in English. Gilbert (2008) backs up this finding by asserting that if students are not intelligible, they may become discouraged when using what they have learned in class in practical situations.

Pedagogical Strategies

When asked if they implemented any strategies to teach pronunciation, 60% of the participants stated that they knew different methods for teaching pronunciation. In comparison, 40% declared that they did not undergo any pronunciation teaching methods. The participants who said they implemented strategies to teach pronunciation mentioned repetition during the lessons, audios, songs, videos, a phonetic dictionary, and other techniques to inductively and deductively identify the pronunciation of phonemes.

“Pollster: What do you consider is the most effective way to teach pronunciation?”

Survey respondent (Teacher 3): A través de canciones en inglés, escuchar y practicar palabras de mayor dificultad [Through songs in English, listening and practicing the most difficult words].”

According to the data gathered, pronunciation assessment is still of two types: drilling and on-the-spot correction of student mistakes. Tlazalo Tejeda and Basurto Santos (2014) state that pronunciation is still being taught isolated and marginal. The teaching mainly focuses on the correction word by word and not by context, not through the language. Overall, teachers consider that repetition is the best way to learn, teach, and correct pronunciation.

On the other hand, when participants were asked if they thought their students were prepared to receive phonetics instruction, 60% argued that students were not ready to take training

in phonetics either because studying phonetics may be so difficult. It reduces students'

“Pollster: What do you consider is the most effective way to teach pronunciation?

Survey respondent (Teacher 5): La repetición de las palabras, escuchando videos, CDs, nativos, ver películas, escuchar canciones, etc. [Repetition of words, listening to videos, CDs, native speakers, watching movies, listening to songs, etc.]”

Furthermore, Cantero Serena (2003) considers that often the teaching of pronunciation is confused with the phonetic correction, which in his view, is like confusing the instruction of the written language with the orthographic correction. Pronunciation must be considered like the teaching strategies focused on formulating and understanding an oral, genuine, and spontaneous speech. Besides the prominent use of the "repeat after me" technique, some participants mentioned that there is not enough time to give phonetic instruction during the classes.

When analyzing the main challenges participants faced when teaching pronunciation in the EFL classroom, they stated that among the issues they found the most predominant is the considerable number of students per classroom, the lack of time devoted to English classes, and the student's willingness to learn about phonetics. Tlazalo Tejada & Basurto Santos (2014) supports this when saying that there is not enough time to practice, as the time used to teach pronunciation is extremely limited. Most of the time, it is used to do textbook pronunciation activities.

Teaching training

Although the participants were trained in phonetics during their university studies and became aware of its importance, it is evident that the coaching is not sufficient to leave an established capacity in the pre-service teachers. As Pajares (1992) affirms in his fundamental assumptions:

Beliefs are formed early, through a process of cultural transmission, and tend to self-perpetuate, persevering even against contradictions caused by reason, time, schooling, or experience. (p. 324)

If we recall the interview, we can realize that teachers are afraid of using new strategies in teaching English. When I asked one of the participants about teaching phonetics in the classroom and if there was any reason she would not teach phonetics, she explained that it was not how she learned to speak the foreign language.

“Interviewer: Is there any reason why you would not teach phonetics?”

Interviewee (Teacher 8): Tal vez porque si nos remitimos a la forma en que aprendimos a hablar no fue inicialmente por medio de la fonética [Perhaps because if we refer to the way we learned to speak it was not initially through phonetics].”

In congruence with the guidelines proposed by Pajares (1992), Borg (2003) states that teachers acquire their beliefs toward teaching and learning pronunciation through personal experience and their ample experience as learners. Therefore, being established at an early age, they resist change despite contradictory evidence. This empirical knowledge shapes the teacher's cognitions, beliefs, and instructional decisions as it is ingrained in their growth and learning process.

During the interview, participants reported that they felt that they were not qualified to teach phonetics as they considered phonetic instruction a complicated matter that required time to master. When asking them if they thought they had good pronunciation, 60% accepted that they were not as fluent as they wished. The before shows the necessity of teaching future English teachers' strategies to promote pronunciation development to improve their oral competencies. As Sajavaara and Dufva (2001) state, it takes time for learners to identify the phonetic aspects of a language, and it requires a great deal of experience to master it.

At first sight, phonetics instruction is significant in teachers' practices and plays a key role in teaching English as a foreign language. Nevertheless, phonetics instruction in the EFL classroom plays no role; teachers remain to use the strategies and techniques they have learned throughout their learning process and are comfortable with despite not seeing any change or improvement in their students' pronunciation

Conclusions and Recommendations

In brief, there is ample evidence that teachers' personal experiences and their experiences as learners can influence their teaching practices and how they perceive learning processes. These experiences, which later become beliefs, continue to influence teachers throughout their profession.

It was also possible to observe that beliefs and practices feedback reinforce the teachers' beliefs. Whether it is because of the context of the knowledge the teachers possess, teachers will always prefer to use the strategy they learned from their experience. Despite contradictory evidence, a posteriori knowledge resists change because it is strongly rooted in the teacher's perception of the teaching and learning process.

Likewise, the data obtained show that teachers' teaching practices are not congruent with their ideas. In some cases, external and contextual factors play a significant role in teaching and learning a foreign language. Teachers perceive phonetics as something strange and isolated.

Teachers avoid teaching pronunciation to emphasize grammar and writing production, as they consider their knowledge is insufficient to teach phonetics and even pronunciation.

The findings in this research imply thinking of the future of phonetics instructions to improve pronunciation in the EFL classroom. Teachers should receive instruction in the teaching and the inclusion of pronunciation instruction in students' lessons from an early age to avoid fossilizing mispronunciation and not acquiring misconceptions about phonetic education in EFL for the future.

Similarly, the results of this study have implications for what teachers' beliefs mean and represent in the classroom. It is intended for teachers to know the importance of the use and teaching of phonetics in the school and its relationship to oral production and auditory

perception. In other words, teachers should continually receive training on using different pedagogical strategies and including phonetics in their EFL classrooms.

As for the study's limitations, I highlight that the sample was small, and although it is significant, it cannot be generalized concerning teaching practices and teachers' beliefs. Moreover, only teachers' perceptions were considered and not those of the students who are also important.

References

- Abelson, R. P. (1979). Differences Between Belief and Knowledge Systems. *Cognitive Science*, 3(4) 355-366. [https://doi.org/10.1016/S0364-0213\(79\)80013-0](https://doi.org/10.1016/S0364-0213(79)80013-0)
- Al-Sawaf, H. B. (1979). A Defense of Phonetics and RP. *English Language Teaching Journal*, 33(4), 287-289.
- Alvarez Diez, V. (2010). El inglés mejor a edades tempranas. *Pedagogía Magna*, 5, 251-256.
- Anguera, T., Portell, M., Chacón Moscoso, S., & Sanduvete Chaves, S. (2018). Indirect Observation in Everyday Contexts: Concepts and Methodological Guidelines within a Mixed Methods Framework. *Frontiers in Psychology*, 9(13), 1-20. <https://doi.org/10.3389/fpsyg.2018.00013>
- Arteaga, D. (2000). Articulatory Phonetics in the First-Year Spanish Classroom. *The Modern Language Journal*, 84(3), 339-354. <https://doi.org/10.1111/0026-7902.00073>
- Ashby, P. (2011). *Understanding phonetics*. Abingdon: Hodder Education.
- Atkielski, A. (2019). *Phonetic transcription can be a useful tool for teaching or correcting pronunciation in the ESL/EFL classroom*. Anthony's Home Page. https://www.atkielski.com/_data/documents/Using-Phonetic-Transcription.pdf
- Bartoli Rigol, M. (2005). La pronunciación en la clase de lenguas extranjeras. *Phonica*, 1, 1-27. <https://doi.org/10.1344/phonica.2005.1.%25p>
- Barrera Benitez, I. (2009). La importancia de enseñar fonética en el aula de inglés. *Revista Digital Innovación y Experiencias Educativas*.
- Basturkmen, H., Loewen, S., & Ellis, R. (2004). Teachers' Stated Beliefs about Incidental Focus on Form and Their Classroom Practices. *Applied Linguistics*, 25(2), 243-272. <https://doi.org/10.1093/applin/25.2.243>
- Borg, M. (2001). Key Concepts in ELT. Teachers' beliefs. *ELT Journal*, 5(22), 186-189.

- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, 36(2), 81-109.
<https://doi.org/10.1017/S0261444803001903>
- Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System*, 39(3), 370-380. <https://doi.org/10.1016/j.system.2011.07.009>
- Breen, M., Hird, B., Milton, M., Oliver, R., & Thwaite, A. (2001). Making sense of language teaching: Teachers' principles and classroom practices. *Applied Linguistics Journal*, 22(4), 470-501. <https://doi.org/10.1093/applin/22.4.470>
- Busch, D. (2010). Pre-service teacher beliefs about language learning: The second language acquisition course as an agent for change. *Language Teaching Research*, 14(3) 318-337.
<https://doi.org/10.1177/1362168810365239>
- Cantero Serena, F. J. (2003). Fonética y didáctica de la pronunciación. *Didáctica de la lengua y la literatura*, 545-572.
- Celce-Murcia M., Brinton D., & Goodwin J. (1996). *Teaching Pronunciation: A reference for Teachers of English to Speakers of other*. New York: Cambridge University Press.
- Charmaz, K. (2002). Grounded Theory Analysis. In J. Gubrium, & J. Holstein, *Handbook of inter-view research* (pp. 675-694). Thousand Oaks: Sage.
- Clark, J. & Yallop, C. (1990). *An Introduction to Phonetics and Phonology*. Oxford: Blackwell.
- Collins, B., & Mees, I. (2003). *The Phonetics of English and Dutch*. Leiden: Brill.
- Connolly, P. (1998). Dancing to the wrong tune: ethnography, generalisation and research on racism in schools. In P. Connolly, & B. Troyna, *Researching Racism in Education: Politics, Theory and Practice* (pp. 122-139). Buckingham: Open University Press.

- Cortes Moreno, M. (2002). Dificultades de pronunciación de los esloveno hablantes que aprenden español como lengua extranjera. *Revista de Profesores, Revista Electrónica de la Editorial Espasa.*, 1-30.
- Creswell, J. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks: Sage Publications Inc.
- Derwing, T., & Munro, M. (1997). Accent, intelligibility, and comprehensibility: Evidence from four L1s. *Studies in Second Language Acquisition*, 9(1), 1-16.
<https://doi.org/10.1017/S0272263197001010>
- Derwing, T., Munro, M., & Wiebe, G. (1997). Pronunciation Instruction for Fossilized Learners. Can it Help? *Applied Language Learning*, 8(2), 217-235.
- Denscombe, M. (2010). *The Good Research Guide for Small Scale Research Projects* (4th ed.). Buckingham. Open University Press.
- Dobson, R., & Dobson, J. (1983). Teacher Beliefs-Practice Congruency. *Viewpoints in Teaching and Learning*, 59(1), 20-27.
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Dudovskiy, J. (n.d.). *Convenience Sampling*. Research Methodology. <https://research-methodology.net/sampling-in-primary-data-collection/convenience-sampling/>
- Edmonds, A., & Kennedy, T. (2017). *An Applied Guide to Research Designs. Quantitative, Qualitative, and Mixed Methods*. Thousand Oaks: Sage Publications Inc.
- Elliot, R. A. (1997). On the Teaching and Acquisition of Pronunciation within a Communicative Approach. *Hispania*, 80(1), 95-108. <https://doi.org/10.2307/345983>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
<https://doi.org/10.11648/j.ajtas.20160501.11>

- Farrokhi, F., & Mahmoudi-Hamidabad, A. (2012). Rethinking convenience sampling: Defining quality criteria. *Theory and Practice in Language Studies*, 2(4), 784–792.
<https://doi.org/10.4304/tpls.2.4.784-792>
- Ferreira Barcelos, A., M. (2003). *Researching Beliefs about SLA: a Critical Review*. In: Kalaja, P., Barcelos, A.M.F. (eds) *Beliefs about SLA*. Educational Linguistics.
https://doi.org/10.1007/978-1-4020-4751-0_1
- Fraser, H. (1999). ESL Pronunciation Teaching: Could it be more effective? *ALAA Conference*, (pp. 1-8). Perth.
- Freeman, D. and Richards, J. C. (1996). *Teacher Learning in Language Teaching*. New York. Cambridge University Press.
- Fornes Llodra, M., D. (2014) Propuesta de mejora de los aspectos fonéticos en el aula de primaria en un contexto bilingüe. *Re-UNIR, Repositorio Digital*.
<https://reunir.unir.net/handle/123456789/2593>
- Gass, S., & Varonis, E. M. (1984). The effect of familiarity on the comprehensibility of nonnative speech. *Language Learning*, 34(1), 65-89. <https://doi.org/10.1111/j.1467-1770.1984.tb00996.x>
- Ghaffarzadeh Hassankiadeh, M. A. (2012). Function-Based vs. Meaning-Based Beliefs in Teaching Vocabulary. *Bellaterra Journal of Teaching & Learning Language & Literature*, 5(4) 20-41. <https://doi.org/10.5565/rev/jtl3.483>
- Gil, J. (2007). *Fonética para profesores de español: de la teoría a la práctica*. Madrid: Arco/Libros.
- Gilakjani, A. P. (2012). A Study of Factors Affecting EFL Learners' English Pronunciation Learning and the Strategies for Instruction. *International Journal of Humanities and Social Science*, 2(3), 119-128. <https://doi.org/10.30845/ijhss>

- Gilakjani, A. P., & Sabouri, N. B. (2017). Teachers' Beliefs in English Language Teaching and Learning: A Review of the Literature. *English Language Teaching*, 10(4) 78-86.
<http://doi.org/10.5539/elt.v10n4p78>
- Gilbert, J. (2008). *Teaching Pronunciation Using the Prosody Pyramid*. New York: Cambridge University Press.
- Greene, J., Caracelli, V., & Graham, W. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3) 255-274.
<https://doi.org/10.2307/1163620>
- Jackson, S. (2011). *Research Methods and Statistics: A Critical Thinking Approach*. Wadsworth: Cengage Learning.
- Jahan, N. (2011). Teaching and Learning Pronunciation in ESL/EFL Classes of Bangladesh. *Journal of Education and Practice*, 2(3) 36-45.
- Johnson, B., & Onwuegbuzie, A. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14-26.
<https://doi.org/10.3102/0013189X033007014>
- Johnson, J., & Kozikowska, M. (December 14, 2009). *Why study Phonetics?* Retrieved from LLAS Centre for Languages, Linguistics and Area Studies.
<https://www.llas.ac.uk/resources/paper/3341.html>
- Johnson, R. B., & Christensen, L. (2014). *Educational Research: Quantitative, Qualitative and Mixed Approaches*. Thousand Oaks: Sage Publications Inc.
- Kagan, D. (1992). Implication of Research on Teacher Belief. *Educational Psychologist*, 27(1), 65-90. https://doi.org/10.1207/s15326985ep2701_6

- Kanoksilapatham, B. (2020). Local Culture Preservation through Southern Thainess-Based English Lessons. *KEMANUSIAAN*, 27(2), 179-199.
<https://doi.org/10.21315/kajh2020.27.2.10>
- Ladefoged, P. (2001). *A course in Phonetics. Fourth Edition*. Boston: Heinle & Heinle.
- Ladefoged, P. N. (August 21, 2014). *Phonetics*. Retrieved from Enciclopedia Britannica.
<https://www.britannica.com/science/phonetics>
- Ladefoged, P. & Johnson K. (2010). *A course in Phonetics*. Boston: Cengage Learning.
- Levis, J. (2005). Changing Contexts and Shifting Paradigms in Pronunciation Teaching. *TESOL Quarterly*, 39(3), 369-377. <https://doi.org/10.2307/3588485>
- Leatham, K. R. (2006). Viewing Mathematics Teachers' Beliefs as Sensible Systems. *Journal of Mathematics Teacher Education* (9), 91–102. <https://doi.org/10.1007/s10857-006-9006-8>
- Llisterri, J. (2003). La enseñanza de la pronunciación. *Revista del Instituto Cervantes en Italia*, 4(1) 91-114.
- Lodge, K. (2009). *A Critical Introduction to Phonetics*. London: Continuum.
- Lord, G. (2005). (How) Can We Teach Foreign Language Pronunciation? On the Effects of a Spanish Phonetics Course. *Hispania*, 88(3), 557-567. <https://doi.org/10.2307/20063159>
- Lord, G. (2010). The Combined Effects of Immersion and Instruction on Second Language Pronunciation. *Foreign Language Annals*, 43(3), 488-503.
<https://doi.org/10.1111/j.1944-9720.2010.01094.x>
- Lortie D., C. (2002). *Schoolteacher A Sociological Study, Second Edition*. Chicago, University Press of Chicago.
- Morse, J. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(2), 120-123. <https://doi.org/10.1097/00006199-199103000-00014>

- Munro, M., Derwing, T., & Morton, S. (2006). The mutual intelligibility of L2 speech. *Studies in Second Language Acquisition*, 28(1), 111-131.
<https://doi.org/10.1017/S0272263106060049>
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*, 317 - 328. <https://doi.org/10.1080/0022027870190403>
- Ogden, R. (2009). *An Introduction to English Phonetics*. Edinburgh: Edinburgh University Press Ltd.
- Pajares, F. (1992). Teachers' Beliefs and Educational Research: Cleaning Up a Messy Construct. *Review of Educational Research*, 62(3), 307-332.
<https://doi.org/10.3102/00346543062003307>
- Part 1: Introduction to the IPA. (1995). *Journal of the International Phonetic Association*, 25 (1), 3-33. <https://doi.org/10.1017/S0025100300000177>
- Pehkonen, E., & Pietilä, A. (2003). On relationships between beliefs and knowledge in mathematics education. *European Research in Mathematics Education III*, 1-8.
- Ponce de León, J. (2015). *La importancia de la fonética en el aprendizaje del idioma inglés*. Retrieved from Educar Chile: <http://www.educarchile.cl/ech/pro/app/detalle?id=226559>
- Raymond, A. (1997). Inconsistency between a beginning elementary school teacher's mathematics beliefs and teaching practice. *Journal for Research in Mathematics Education*, 28(5), 550-576. <https://doi.org/10.2307/749691>
- Reetz, H. & Jongman, A. (2009). *Phonetics: Transcription, Production and Perception*. Chichester: John Wiley & Sons Ltd.
- Richards, J. (1998). *Beyond Training: Perspectives on Language Teacher Education*. Cambridge: Cambridge University Press.

- Richards, J., & Schmidt, R. (2010). Longman Dictionary of Language Teaching and Applied Linguistics. London: Routledge.
- Richards, J., Gallo, P. G., & Renandya W. (2001). *Exploring Teachers' Beliefs and the Processes of Change*. ResearchGate.
https://www.researchgate.net/publication/253158178_Exploring_Teachers%27_Beliefs_and_the_Processes_of_Change
- Richardson, V. (1996). The role of attitude and beliefs in learning to teach. In J. Sikula, *Handbook of research on Teacher Education* (pp. 102-119). New York: Macmillan.
- Sadeghi, M., & Mashhadi Heidar, D. (2016). The Effect of Using Phonetic Websites on Iranian EFL Learners' Word Level Pronunciation. *International Journal of Research in English Pronunciation*, 1(1), 31-37.
- Saito, K. (2007). The Influence of Explicit Phonetic Instruction on Pronunciation in EFL Settings: The Case of English Vowels and Japanese Learners of English. *The Linguistic Journal*, 3(1), 16-40.
- Saito, K. (2011). Examining the role of explicit phonetic instruction in native-like and comprehensible pronunciation development: An instructed SLA approach to L2 phonology. *Language Awareness*, 20(1), 45-59.
<https://doi.org/10.1080/09658416.2010.540326>
- Saito, K., & Lyster, R. (2012). Effects of Form-Focused Instruction and Corrective Feedback on L2 Pronunciation Development of /r{turned}/ by Japanese Learners of English. *Language Learning*, 62(2), 595-633. <https://doi.org/10.1111/j.1467-9922.2011.00639.x>
- Sajavaara, K. and Dufva, H. (2001). Finnish-English Phonetics and Phonology. *International Journal of English Studies*, 1(1), 241–256. <https://revistas.um.es/ijes/article/view/47781>

- Seidlhofer, B. (2001). Pronunciation. In R. Carter, & D. Nunan, *The Cambridge Guide to Teaching English to Speakers of Other Languages* (pp. 56-65). Cambridge: Cambridge University Press.
- Seidlhofer, B. (2011). *Understanding English as a Lingua Franca*. Oxford University Press
- Setter, J., & Jenkins, J. (2005). State-of-the-art Review article: pronunciation. *Language Teaching*, 38(1), 1-17. <https://doi.org/10.1017/S026144480500251X>
- Shaughnessy, J., Zechmeister, E., & Zechmeister, J. (2012). *Research Methods in Psychology*. New York: McGraw Hill.
- Singh, S. & Singh, K. S. (2006). *Phonetics. Principles and practices (3a Ed.)*. San Diego: PluralPublishing.
- Stern, H. H. (1983). *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.
- Suaza Mena, M. I. (2014). Propuesta de enseñanza basada en el modelo speaking: desarrollo de la producción oral. *Amazonía Investiga*, 3(4), 145-165.
<https://amazoniainvestiga.info/index.php/amazonia/article/view/665>
- Tashakkori, A., & Creswell, J. (2007). Editorial: The New Era of Mixed Methods. *Journal of Mixed Methods Research*, 1(1), 3-7. <https://doi.org/10.1177/2345678906293042>
- Tashakkori, A., & Teddlie, C. (1998). *Mixed Methodology. Combining Qualitative and Quantitative Approaches*. Thousand Oaks: Sage Publications.
- The International Phonetic Association. (1999). *Handbook of the International Phonetic Association. A guide to the use of the International Phonetic Alphabet*. New York: Cambridge University Press.

- Tlazalo Tejeda, A. C., & Basurto Santos, N. (2014). Pronunciation Instruction and Students' Practice to Develop Their Confidence in EFL Oral Skills. *Issues in Teachers' Professional Development*, 16(2), 151-170. <https://doi.org/10.15446/profile.v16n2.46146>
- Tominaga, Y. (2009). An analysis of successful pronunciation learners: In search of effective factors in pronunciation teaching. *Pan-Pacific Association of Applied Linguistics*, 13(1), 127-140.
- Trofimovich, P. (2012). Interactive alignment: Implications for the teaching and learning of second language pronunciation. In J. L. LeVelle, *Proceedings of the 4th Pronunciation in Second Language Learning and Teaching Conference* (pp. 1 - 9). Ames: IA: Iowa State University.
- Vecaldo, R. (2017). Epistemological Beliefs, Academic Performance and Teaching Competence of Pre-Service Teachers. *Asia Pacific Journal of Multidisciplinary Research*, 5(2), 114-124.
- Venkatesh, V., Brown, S., & Bala, H. (2003). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly: Management Information Systems*, 37(1), 21-54. <https://doi.org/10.25300/MISQ/2013/37.1.02>
- Venkatesh, V., Brown, S., & Sullivan, Y. (2016). Guidelines for Conducting Mixed-methods Research: An Extension and Illustration. *Journal of the Association for Information Systems*, 17(7), 435-495. <https://doi.org/10.17705/1jais.00433>
- Vera Diettes, K. J. (2014). Fenómenos de reducción vocálica por hablantes colombianos de inglés como L2: un estudio acústico. *Forma y Función*, 27(1), 11-43. <https://doi.org/10.15446>

Xu, L. (2012). The Role of Teachers' Beliefs in the Language Teaching-learning Process.

Theory and Practice in Language Studies, 2(7), 1397-1402.

<https://doi.org/10.4304/tpls.2.7.1397-140>

Yates, L. (October 2002). Fact sheet – What is pronunciation? *AMEP Research Centre*, 1-8.

Retrieved from http://www.ameprc.mq.edu.au/docs/fact_sheets/01Pronunciation.pdf

Zheng, H. (2009). A Review of Research on EFL Pre-Service Teachers' Beliefs and Practices.

Journal of Cambridge Studies, 4(1), 73-81. <https://doi.org/10.17863/CAM.1579>