

Facultad de Educación

Escuela de Educación en Inglés

## TRABAJO DE INVESTIGACIÓN-ACCIÓN

A study on pronunciation improvement of one vowel and five consonant phonemes in eleven students of ninth grade of a private school in Santiago

Seminario para optar al Grado de Licenciado en Educación y al título de Profesor de Educación Media en Inglés

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#### Abstract

This action research is focused on the importance of improving the English pronunciation in a group of eleven students of ninth grade from a private school located in Santiago. Since the English language has acquired great importance in today's world, it is not only necessary to know about vocabulary or grammar aspects of this language, but also to manage an effective and clear communication. Therefore, this research aims at enhancing the students' English pronunciation through phonetics lessons.


Keywords: pronunciation, improvement, errors, phonemes, mispronunciation.


#### Abstract

RESUMEN Esta investigación acción está enfocada en la importancia de mejorar la pronunciación del inglés en un grupo de once estudiantes de primero medio pertenecientes a una escuela privada ubicada en Santiago. Dado que el idioma inglés ha adquirido una gran importancia en el mundo actual, no solo es necesario conocerlos aspectos de vocabulario o gramática de este idioma, sino también gestionar una comunicación clara y efectiva. Por lo tanto, esta investigación tiene como objetivo mejorar la pronunciación en inglés de los estudiantes a través de clases de fonética.


Palabras clave: Pronunciación, mejoras, errores, fonemas, pronunciación errónea.

## INTRODUCTION

This action research is a pilot test which arose due to the difficulties to pronounce of students from a private school located in Santiago. Several errors were evidenced through a pretest that was taken to analyze the level of their pronunciation; according to that, it was necessary to identify the most difficult sounds for them to pronounce. According to that, the methodology used consists of teaching some phonemes to students in order to achieve an improvement in their pronunciation. On the other hand, the students participated voluntarily in the teaching of seven specific phonemes which were six consonants (/s/-/z/, / $\theta /-/ \delta /$,/v/-/f/) and one vowel (/ə/).

To support this investigation, Chapter I will cover the supporting idea of the study, which contains the importance of English as a foreign language on a universal level. Afterward, some terms directly related to English pronunciation will be defined. In addition, a connection will be made between the importance of developing speaking skills and pronunciation aspects of students who learn a new language will be presented. Moreover, the meaning of phonetics and phonology will be given.

On the other hand, it is also necessary to know some aspects that interfere with pronunciation learners. According to that, some factors are mentioned in order to take into account in the process of learning pronunciation. Also, some of the common errors made by Spanish speakers when they pronounce English words are mentioned. At the same time, it is mentioned the strategies that teachers can implement to facilitate and promote the students' pronunciation. Finally, the importance of articulating sounds correctly will be presented.

Chapter II gives information about the participants, the context in which the study took place, the sampling procedure as well as the materials and methods used during the investigation, also the research design, the procedure implemented, and finally the study section, in which the research question and the aim of the study is presented.

Chapter III will present the data analysis and results of the study in order to explain the results obtained; in this way, the results of the pre and post-test will be compared to show if there was a progress after the methodology used.

Finally, in Chapter IV the findings and conclusions will be exposed according to the results obtained in the previous chapter.

## CHAPTER I THEORETICAL FRAMEWORK

In the following chapter, the reader will find key information about the English language; the English in the Chilean context; factors that influence on students' pronunciation; English pronunciation problems for Spanish speakers. Additionally, the reader will find information about the pronunciation and its importance. Furthermore, various linguistics theories are presented in order to explain the pronunciation errors made by a group of eleven Chilean student of 9th grade in a school from Santiago city.

### 1.1 English as a foreign language and the Chilean context

Nowadays, people are more interested in learning a new language to expand their possibilities and knowledge. According to that, the number of people who speak English in the world has changed, and according to British Council (2013):
"English has come of age as a global language. It is spoken by a quarter of the world's population, enabling a true single market in knowledge and ideas. It now belongs to the world and increasingly to non-native speakers - who today far outnumber native speakers." (p. 3)

Considering the importance of the English language, schools around the world are teaching English principally, to give students a proper base to communicate with others, also, to
give them tools for their future and professional lives (business, diplomacy), and also for entertainment (Kitao, 1996).

In Chile, the purposes of teaching English in schools are very similar, "el aprendizaje del inglés como lengua extranjera tiene, por tanto, propósitos de formación y crecimiento personal, así como propósitos de orden instrumental para fines académicos, laborales y otros propios del mundo juvenil". ["Learning English as a foreign language is, therefore, the purpose of training and personal growth, as well as instrumental order purposes for academic, labor and other aims of the youth world"] (Currículum Nacional , n.d).

On the other hand, the concept of English as a Foreign language is defined as: "English as taught to people whose main language is not English and who live in a country where English is not the official or main language" (Cambridge Dictionary, 2018).

Learning English in schools has many benefits for students, and it is important to succeed in an international context or environment (Kitao, 1996). In connection with the importance of English in Chilean school system, it is important to mention that, many years ago, an educational reform was made in 1998 suggested that "knowledge of English should be considered an essential skill for facilitating international communication, accessing information, participating in information networks, and engaging in commercial exchanges" (Matear, 2008, as cited in British Council , 2015, p. 20). Furthermore, the most important curriculum change of the reform emphasized receptive skills (reading and listening) rather than productive skills (speaking and writing): "40 percent of the English curriculum was devoted to reading comprehension, 40 percent, to listening comprehension, and 20 per cent, to speaking and writing" (Mckay, 2003, as cited in British Council, 2015, p. 20). It can be inferred that the aim of teaching English was on planning lessons focused most of the time on reading and listening activities and, on the other
hand, the writing and oral production were not considered in the same way than receptive skills. However, nowadays the reality has no change at all, and according to the experience the researchers have had as trainee teachers in their professional practicum, they noticed that most English lessons they observed, were focused on performing activities related to reading, listening and writing, but there were few opportunities and instances to enhance the speaking ability and also the pronunciation of the students. According to this, it is proposed that "the great majority of Chileans would use English for technical purposes rather than for communicating or writing" (Mckay, 2003, as cited in Tabali, n.d, p. 9), and it happens because many Chilean schools only cover technical knowledge, which contemplates memorizing rules to pass exams, instead of developing communicative skills. Nevertheless, knowing and considering the reality of this problem, this investigation seeks to go against what is currently happening in many Chilean schools and wants to enhance the oral production and more specifically, delve into the improvement of student pronunciation.

To conclude this point, it should be considered that, the role of schools is the most important in second language development; the school is the entity that should ensure students an appropriate and adequate English teaching and learning (English Central, 2015).

### 1.2 The importance of teaching English pronunciation as a second Language

Considering that students who are learning English as a second language have certain difficulties with the language, Çakır establishes that:
"In foreign language learning learners usually find the target language pronunciation difficult because the new sounds do not always correspond to the ones in their mother tongue. As it is a hard issue to tackle with for many teachers and learners, some people claim that it needs to be presented explicitly. That is to say, intentional teaching of pronunciation would help learners overcome the anxiety in oral communication that mostly derives from the lack of correct pronunciation." (Çakır, 2014, p. 100)

According to this, this study look for the improvement of the pronunciation of English through the explicit teaching of the sounds of the language in order to avoid confusion between the sounds of the mother tongue and the second language. In addition to this, Harper (2004) states that "when a pronunciation feature impedes the intelligibility of a word, native listeners can use contextual cues to resolve ambiguity. Non-native listeners, on the other hand, who might rely more on the acoustic signal are prone to face communication breakdown" (p. 143). Moreover, as non-native speakers of English are more likely to break into L2, it is necessary for teachers to give more importance to the practice and explicit teaching of the language as was mentioned before, so that there is security in students between what they hear, what they understand and what they say. Due to that, Bakar (2015) states that:

[^0]However, training to improve one's pronunciation may be pointless if the learners do not see the importance of such needs." (Bakar, 2015, p. 144)

### 1.3 English pronunciation and students

"Pronunciation is the sound of the language or phonology; stress and rhythm; and intonation and includes the role of individual sounds and segmental and suprasegmental sounds" (Richard 2002, as cited in Billah, 2017). Additionally, it has been notified that "the aim of the pronunciation is not to achieve a perfect imitation of native accent, but simply to get the learner to pronounce accurately enough to be easily and comfortably comprehensible to other speaker" (Ur, 1996, as cited in Rasel, 2011, p. 277). She means that the focus of pronunciation is not to achieve a native accent but, the it is that students can be understood and they can communicate each other.

The importance of having good pronunciation is that students can communicate effectively and also, in their professional areas, they can cause a good impression while communicating. In accordance with Backley (2015) "no matter how accurate a learner's grammar, and no matter how rich and expressive his vocabulary, if his pronunciation is poor then this immediately gives a negative impression of his overall language level" (p. 126). That means if you have a good grammar or vocabulary, but you do not have a proper pronunciation, it is probably you will be misunderstood what you are saying which could affect the professional area.

### 1.4 Phonetics and phonology definitions

According to Cruttenden (2014) the definitions about phonetics and phonology are the followings: "The PHONETICS of a language concerns the concrete characteristics (articulatory, acoustic, and auditory) of the sounds used in languages while PHONOLOGY concerns how sounds function in a systemic way in a particular language" (p.3).On the other hand, the term "phonetics is, however, often used with reference to one language when the emphasis is on the pronunciation of this language" (Hickey, n.d, p. 1). But, to complement these definitions the authors Forel \& Puskás (2005) explain in a more simple way the meaning of those words.
"Phonetics is concerned with how sounds are produced; transmitted and perceived Phonology is concerned with how sounds function in relation to each other in a language. In other words, phonetics is about sounds of language, phonology about sound systems of language. Phonetics is a descriptive tool necessary to the study of the phonological aspects of a language" (p.3).

To sum up, it is important to mention that the implementation of teaching pronunciation in schools is crucial to achieve a correct pronunciation of the students and a good communication quality. However, many learners and Spanish speakers may present difficulties at the moment of pronouncing a word or phrase in English. Due to this, the main factor that interferes in Spanish speakers pronunciations will be evidenced in the next point.

### 1.5 Main factors that interfere with Spanish speakers who learn the pronunciation of English

There are different factors that interfere in the learning of English pronunciation as a second language for Spanish speakers; one of them is related to the interference of the mother tongue with the learning of L2. Those factors interfere because the characteristics of the mother tongue are exposed instead of the characteristics of the target language, which in this case is English; that is why it has been mentioned that "interference is the result of the use of the first language as an utterance initiator: first language competence may replace acquired second language competence in the performance model" (Newmark, 1996, as cited in Krashen, 1981, p. 7).

At the same time, another essential factor that interferes on Spanish speakers at the moment of pronouncing is the age. Because of this, Brown (1980) makes a relation with the learning of the second language and the culture of this one; due to that it is established that adults make more errors during the learning process because they already have a cultural vision of the second language, unlike children who pass through the process of acculturation faster and is the reason why they have facilities on learning. On the other hand, Krashen (1973) established that there is no an existing barrier in learning a second language for adults; children and adults have the same capacity of learning since the lateralization of the brain is complete before puberty, even this develops until five years old, which is where Children can learn the second language as well as the first one. According to the author, it can be inferred that the 9th grade students who were studied have the necessary skills to learn L2.

Moreover, there is another factor which could interferes with the learning process of students, due to this Krashen (1985) explains that "students seem to need the silent period to internalize the information properly. When this period is broken, students are likely to develop a negative attitude towards learning the new language" (p. 130). With this in mind, Krashen critiques that according to the evaluations that are given in schools there is a difficulty in the codification of the contributions that are presented in lessons respect to the learning of the language; that is why he thinks that the evaluations should be modified according to the students' needs; especially those who have long periods of silence. Given that, in this way they can codify all the new contributions of the lessons; and, at the same time how this factor is directly related with the people who participate in classes, the students who take longer to codify the content will have the ability to be volunteers to speak freely in lessons.

Certainly, another factor that interferes with the learning of ESL is directly related to oral production and pronunciation as a part of it. ETEA (2014) questions if students' pronunciation errors are corrected when they speak in lessons, or if they are given specific exercises directed to certain phonemes, pairs of words or verbal endings that are necessary to be corrected. For this reason, it has been indicated that it is necessary to dedicate a specific time for the teaching and correctness of pronunciation.

Then it is likely that students tend to fail more in pronunciation that is why fossilization is another factor. This term "refers to the process in which incorrect language becomes a habit and cannot easily be corrected" (British Council, 2007). Under those circumstances, the British Council (2007) states that:
"Errors in general take time to correct but a fossilized error may never be corrected unless the learner sees a reason to do so, e.g. if it is seriously hindering communication. Teachers can help learners notice their fossilized errors by for example recording them speaking, or by asking them to keep a record of written errors as part of a language portfolio."

Then, to fight fossilization, strict participation of the teacher is necessary, so that students can realize their errors and in that manner make this factor stop interfering.

Finally, it has been considered the motivation as one of the main factors that interfere on students' learning process, as Small (1997) states:
"That intrinsically motivated learners usually display intellectual curiosity, find learning fun and continue seeking knowledge even after the formal instruction (classes) and this is the major goal of education. The lack of intrinsic motivation among the learners not only frustrate them, but it also frustrates the teacher who are the cornerstone of the educational process" (p. 4).

According to that, it is necessary for the teacher to manage students' needs and certain pedagogical strategies that help her or him to motivate them in order to make students enjoy what they are learning, and also motivation can facilitate this process for both, the teacher and students.

### 1.6 Learning consonant sounds is easier than vowel sounds

English sound system states that teaching and learning consonant sounds in English is easier than vowels, due to that it has been explained as follows:
"Consonants contribute to make English understood more than vowels. They are produced by certain interference of the organs of speech with the breath and this makes their description and recognition easy. He states that the consonants form the bones, the skeleton of English words and give words basic shape. Most languages shared the same consonants and the same features with little differences". (O'Connor, 1980, as cited in English sound system, n.d, p. 4)

According to those few differences that there are between the English consonants and from the other languages, as O'Connor mentions, it is easier to articulate them since there are not so many differences; therefore the sounds can be articulated easily. On the other hand, is not only has been explained why vowels are more complicated to learn to pronounce, but also consonants are very important when students learn sounds and phonemes; according to that Radford (1999) states that pronunciation of vowels is a little more complex than consonants: First, by the explanation already given, that the consonants have an allophonic distribution similar to those of other languages, including Spanish; and second, because the dialect of the vowels in each language tends to differ much more, besides that there are more vowels in English than in Spanish.

### 1.7 Common English pronunciation errors made by Spanish speakers

There are different problems faced by Spanish speakers in the process of learning English pronunciation, which can be reflected in the phonological errors that they perform at the time of speaking the language. In this regard, errors are a necessary part of language learning process since they have been considered as an essential aspect of language learners so that they can improve in that process (Khansir, 2012).

Before knowing some of the most common English pronunciation errors made by Spanish speakers, it is relevant to take into account the reasons why they are produced in order to have a better understanding of how English learners can improve their pronunciation. According to Keshavarz (2012)among his linguistic classification of errors (Orthographic, lexico-semantic, phonological and morphological-syntactic) phonological errors are due to "lack of certain L2 phonemes in the learners L1, differences in syllable structures in L1 and L2, spelling pronunciation of words and the problem of silent letters" (p.5). In this connection, Tapia (2017b)states that native Spanish speakers usually have difficulty at the time of learning English pronunciation mainly because of the variations between the two languages, which not only contain a considerable number of differences in terms of phonetics and phonology (specifically their phonemes and how they are realized) but also new sounds which are not found on their phonetic alphabet (Spanish language contains twenty-two consonants and five vowels while English language contains twenty-four consonants and twelve vowels). It is also stated that English pronunciation problems can be related to the phenomenon of language transfer, in which the features from one language are applied to another language, specifically negative transfer, which occurs when there are differences between the first and the second language (Odlin,
2012), in this case Spanish and English, and because of the differences between them, the second language learner deletes, distorts or replaces sounds (Prath, n.d).

Some examples given by Prath are:

- Deletion: Don't becomes Don

Reason: No final /t/ and no final clusters in Spanish.

- Distortion: Spaghetti becomes Espaghetti

Reason: No initial /s/ cluster in Spanish.

There are some specific variations between Spanish and English languages which Spanish speakers often have difficulty with at the time of learning English pronunciation, which can be found mainly in vowels and consonants of both languages.

### 1.7.1 Vowel sounds

Concerning the problems related to English pronunciation of vowels, García (2011) states that they occur due to the fact that "Learners usually perceive (L2) vowels as instances of the closest (Ll) vowel, and produce them accordingly" (p. 16).In this regard, it is important to consider that the English is far more complex than Spanish as it has more vocalic variations.

One of the main differences between these two systems is that Spanish language contains only five vowels whereas English counts on twelve vowels. Of this, according to García (2011), a significant problem faced by Spanish speakers learning English pronunciation is the fact that their language, unlike English, does not have differences between long and short vowels. As a
result, they often fail to identify the meaning of words like ship/sheep, cart/cut/cat, etc. (Tapia, Teaching English pronunciation to Spanish speakers, 2017b).

According to García (2011) and Whitley (2002)among the hardest vowels for Spanish speakers to pronounce it is possible to find the following:
a) Vowels /i/ and /I/. It is difficult for Spanish speakers to make a distinction between these two vowels due to the fact that in Spanish only exists the vowel /i/. Consequently, they tend to reproduce them in the same manner.
b) Vowels /u: / and /v/. Spanish speakers tend to relate these vowels to their vowel /u/ since, as in the case of $/ \mathrm{i} /$ and $/ \mathrm{I} /$, in Spanish language there is not a distinction between them.
c) Vowel $/ æ /$ and $/ \Lambda /$. As in the previous cases, Spanish speakers usually have problems distinguishing between these sounds. As a result they usually pronounce them by /a/ because of confusion between sound and spelling.
d) Vowel schwa sound /o/. This is a very common error made by Spanish speakers. In the case of schwa, as this sound does not exist in Spanish and due to a confusion based on spelling, they usually replace this sound for another vowel (/p/, /a/, /e/).

### 1.7.2 Consonant sounds

In the case of consonant sounds, Whitley (2002) states that there are many of the same phonemes shared by English and Spanish, which also are spelled similarly. However, "the main problems center on shared phonemes with different articulations or allophones" (p. 20). And also
with those ones that are present in one system, but not in the other, which often causes difficulty at the time of pronouncing them.

In this regard, the hardest common errors mentioned by Whitley (2002), Allen (2011), You (2005), Tapia (2017a) and English pronunciation Madrid (n.d)are:
a) Consonants $/ \mathrm{t} / \& / \mathrm{d} /$. These phonemes, like others that involve contact with the alveolar ridge, give problems to Spanish speakers since there are distinctions in articulation between the two languages (Spanish and English). Although this does not cause a major change in the sound, it affects the production of either the preceding or succeeding sounds.
b) Consonants $/ \mathrm{j} / \& / \mathrm{d} /$. It is difficult for Spanish speakers to pronounce the sound $/ \mathrm{j} / \mathrm{as}$ they are not used to produce it in their language. Finally, when the learners try to perform them, it results in a consonant which sounds similar to $/ \mathrm{dz} /$ and sometimes $/ \mathrm{dj} /$.
c) Consonants $/ \theta / \& / \delta /$. These consonants are often difficult for Spanish speakers mainly because $/ \theta /$ does not exist in their language (Latin American Spanish language) and $/ \mathrm{d} /$ does not have a similar sound to be compared. In this regard, /ð/ is only produced as an allophone when the letter d is pronounced between vowels (todo, ido, etc.) and when it is final (libertad, lealtad, etc.). In addition, as $/ \theta /$ and $/ \delta /$ are spelled as "th", it is difficult for learners to know when to use one or the other.
d) Consonants /v/ \& /f/. In English /v/ and /f/ are articulated in the same way. However, $/ \mathrm{v} /$ is a voiced sound and /f/ is a voiceless sound. With regard to Spanish, /v/ does not exist. As a result, the speakers of this language usually de-voice $/ \mathrm{v} /=/ \mathrm{f} /$ at the end of syllables. Additionally, learners also have problems with/v/ due to spelling pronunciation.
f) Consonants $/ \mathrm{z} / \& / \mathrm{s} /$. As in the previous case, in English these phonemes are articulated in the same way. Nevertheless, $/ \mathrm{z} /$ is a voiced sound and $/ \mathrm{s} /$ is a voiceless sound. Concerning Spanish, speakers tend to de-voice $/ z /$ as this phoneme does not exist in their language system.

Taking into account the variation between English and Spanish, the different views and importance that errors have for Spanish speakers in the process of learning English, it is also important to consider, for procedural purposes of the investigation, the articulation of English consonants and vowels and its incidence of oral communication.

### 1.8 The articulation of English consonants and vowels

It is known that the human being uses words to communicate with others, but to be clearly understood it is necessary that words be articulated well. And to articulate them, it is needed to move some facial muscles, such as lips, tongue, palate, teeth, and jaws (Finch \& Ortíz, 1982).

According to Apps (2018)"Well-articulated consonants make an enormous difference to the clarity of a voice. This requires good use of the tongue, the lips, and the palate". This reference affirms what was mentioned before, about the importance of articulating correctly words and sounds to be clearly understood by others.

Now, talking about consonants sounds, they are classified into three categories they are: voicing (voiced or unvoiced), place of articulation and manner of articulation. Finch \&Ortíz (1982) declare "all normal English and Spanish consonants sounds are produced with an
outgoing stream of air coming from the lungs" (p.19).On the other hand, they also argue that the vowel sounds are produced most of the time without any kind of contact between the articulators. It means that in vowel sounds there is no obstruction of the airstream in their production.

According to the investigation, the vowel $/ \partial /$, was one of the selected phonemes to teach the students (due to the repeated errors of mispronunciation), "this vowel is considered as an unstressed, half-open, central and short vowel" (UCL, 2017).

Finch \& Ortíz (1982) established a table which contains the classification consonants sounds, in terms of voicing, place of articulation and manner of articulation. Then, considering the phonemes taught $/ \mathrm{v} /, / \mathrm{f} /, / \theta /, / \delta /, / \mathrm{z} /$, $/ \mathrm{s} /$ and the exception of $/ \mathrm{a} /$ sound (which was explained above), the table mentioned below was adapted to show the articulatory classification of those sounds.

| Manner of <br> Articulation | Place of <br> articulation | Labiodental | Dental | Alveolar |
| :---: | :---: | :---: | :---: | :---: |
| Fricative $\downarrow$ |  | $/ \mathrm{v} /$ /f/ | $/ \theta / / / \delta /$ | $/ \mathrm{z} /, / \mathrm{s} /$ |
| Voiced (+v) <br> Unvoiced (-v) | $\longrightarrow$ | $(+\mathrm{v}),(-\mathrm{v})$ | $(-\mathrm{v}),(+\mathrm{v})$ | $(+\mathrm{v}),(-\mathrm{v})$ |

Table 1: Articulatory classification of the English consonants sounds selected

For better understanding, the terms mentioned in the table will be defined as Cruttenden, (2014, pp. 29-30) did previously.

The consonants sounds are classified and described in articulatory terms, and considering the sounds obtained, these classifications are:

1) "Manner of articulation: Refers to the obstruction made by the organs may be total, intermittent, partial, or may merely constitute a narrowing sufficient to cause friction. The chief types of articulation, in decreasing degrees of closure.
a) Fricative: Two organs approximate to such an extent that the airstream passes between them with friction $[/ \mathrm{v} /-/ \mathrm{f} /-/ \mathrm{s} /-/ \mathrm{z} /-/ \theta /-/ \mathrm{\delta}]$.
2) Place of articulation: The chief points of articulation.
a) Labiodental: The lower lip articulates with the upper teeth [/v/-/f/].
b) Dental: The tongue tip and rims articulate with the upper teeth $[/ \theta / / \delta /]$.
c) Alveolar: Either the blade, or tip and blade, of the tongue articulates with the alveolar ridge $[/ \mathrm{z} /-/ \mathrm{s} /]$.
3) Voicing: At any place of articulation, a consonantal articulation may involve the vibration of the vocal folds, i.e May be voiceless or voiced".

### 1.9 Teaching English pronunciation methods and strategies

Consider the methods and the way how English pronunciation can be taught is essential when it comes to improving in the process of learning the language. In this connection, some methods and techniques are going to be presented below in order to know them and consider the effects they have on this process.

According to Yoshida (2016) and Tapia (2017b, p. 75) before starting to teach pronunciation, some of the aspects to do it effectively are the following:

1. To know how the pronunciation of the language works.
2. To know the problems and causes of them that students might have learning pronunciation.
3. To use different ways to teach pronunciation, adapting them to the students' needs.
4. Also, teachers should have a high degree of patience and understanding of students' mindsets at the moment of performing the lessons.

Once teachers have considered these aspects, some useful methods to teach pronunciation stated by Yoshida (2016) and Schaetzel (2009)are:
a) Students listen to recordings or to the teacher's voice and then, repeat them.
b) Yoshida (2016) suggests that teachers should also include other methods to complement those mentioned above. One of them, for instance, is that teachers encourage students to use their different senses, which is more effective than only one (hearing). In this regard, students can learn through sight, sound and movement so that they can understand and remember much better what they learn.
c) An essential part to obtain effective results is also that teachers keep lessons practical. Despite the fact that theory and technical explanations are important to know in some level, giving simple and accurate explanation followed by a lot of practice get better results.
d) It is also necessary that teachers perform activities that motivate them and that, during the process, they are constantly exposed to the language.
e) Finally, for the students to obtain effective results in this process they should be trained to be independent and autonomous learners, that is to say, they should practice by their own through different ways: listening, imitating, monitoring their own pronunciation, etc.

Since it will be needed to count with some methods to carry out the investigation and perform interventions to train students in pronunciation, these methods will be used as a basis for this process.

## CHAPTER II

## METHODOLOGICAL FRAMEWORK

This chapter will present information about the participants, the context in which the study took place, the sampling procedure as well as the materials used during the investigation, the research design, procedure, and the study; in which the question research and objective will be presented.

### 2.1 Context and participants:

Knowing about the context and the students who participated in this study is essential for this investigation since, according to the information noted below, it evidences that the school lays stress on the teaching of English and students are largely reinforced in this language. For that reason, it is necessary to improve English pronunciation of students through explicit phonetics lessons (because as it was noted before, it is an aspect of oral production which the school neglects) so that students enhance their speaking skill in this language supplementing their new learning with what they already know.

The study took place at a private co-educational institution located in Puente Alto, which has scientific- humanistic education, preschool, elementary and middle levels and a total of 1.108 students. Moreover, it has academic excellence and an educational project with a focus on religious values. Concerning the English lessons from this school, they are taught from Playgroup to 12th grade (Playgroup to Kinder: 7 English lessons per week, including Art and Science courses in English; from 1st to 8th grade, they have 6 lessons of English weekly and from 9th to 12th grade, they have 5 or 6 lessons of English weekly).

The participants of this study belong to a ninth grade of the private co-educational school located in Puente Alto noted above. They are 11 Chilean students ( 8 women and 3 men) between 14 and 16 years old, who have a pre-intermediate level of English and a medium socioeconomic status.

### 2.1.1 Sampling procedure:

Concerning the sample of the study, it is important to mention that the investigation was done with a small group due to the following reasons:

First, researchers decided to do it with a pilot group because the idea of improving pronunciation through phonetics lessons in schools has not been commonly studied. Therefore, it is a relatively new study, which also seeks to be investigated in the future to be applied in a class or a larger group.

Moreover, to make the study and the interventions, the students participated voluntarily in the study. In this regard, they had to come to an agreement with their English teacher to participate in the process. The situation was that when the sample was selected, the students were working on a project for their English course; the problem arose because the interventions and English lessons would take place at the same time (there were no other instances to do them), therefore it would be difficult for students to work on their projects and participate in the study simultaneously. Finally, they made a commitment, which was through a promise, in which they said that they were to be responsible and comply with both, their English projects and their participation in the study.

### 2.2 Materials:

Before explaining the methods used to carry out the investigation, it is relevant to mention that the researchers considered doing it based on pronunciation errors made in consonants. This decision was based on the posture of Khansir (2012) who states that errors are necessary to improve the learning process of a language. In addition, it was done focused on what was proposed by O'Connor (1980) who explained that learning and teaching consonants is easier than vowels. Moreover, it was considered due to the limited time the researchers had to implement the interventions.

With regard to the methods, a pre-test and a first recording were the first ones used to quantify the students' pronunciation errors and collect the data in order to have a diagnostic about their pronunciation performance. The pre-test consisted on a paragraph (see page 91), about a critique of a book retrieved from the FCE trials, which had a level of difficulty for preintermediate learners. Concerning the first recording, it was made with the purpose of recording students' voices while they were reading the text.

The second method considered was the criteria to evaluate the participants' pronunciation after the pre-test. It was about listening to the place where they articulated the sounds, the manner how the phonemes were articulated, the voicing of each sound (vibration) and spelling pronunciation.

After the results of the pre-test, the five sounds in which the participants had the most repeated pronunciation errors were obtained; those phonemes were $/ \mathrm{z} /$, $/ \theta /$, / $\delta /$, /v/ and $/ \partial /$. The vowel / $/$ / was included as an exception in the investigation after delimiting the focus of the study (pronunciation of consonant), because the most of the students made errors pronouncing that
phoneme. Additionally, this sound was included because according to Science (2016) the $/ \mathrm{y} /$ sound is the most common vowel in English language.

After analyzing the results, it was evidenced that most of the sounds obtained did not exist in Chilean Spanish language (/z/, $/ \theta /, / \mathrm{v} /, / \partial /$ ), except for the $/ \varnothing /$ sound which is produced as an allophone of the consonant " $d$ " in intervocalic position (i.e.todo, comido, leído) and at the end of a word (i.e. libertad, lealtad).

Due to the aspects in which students failed pronouncing (spelling pronunciation, place of articulation, the manner of articulation and voicing), the interventions were planned considering the improvement of those aspects. In this connection, it is important to evidence how errors were made in detail. In the case of $/ \mathrm{z} /$,the participants usually de-voiced this sound producing the $/ \mathrm{s} /$. With regard to $/ \mathrm{v} /$, they also de-voiced it pronouncing the $/ \mathrm{f} /$ instead of the $/ \mathrm{v} /$. Furthermore, the students tended to mispronounce the $/ \theta /$ and $/ \partial /$ due to confusion with the spelling of "th" in the text. As a result, it was difficult for them to know when to pronounce one or the other. Sometimes, since it was difficult for the participants to pronounce $/ \delta /$ between consonants, they pronounced $/ \delta /$ as "d". Because of this, the lessons were focused on teaching the sounds as consonant pairs, comparing them according to the places of articulation, the manner of articulation and voicing. That is why it was decided to teach also the $/ \mathrm{s} /$ and $/ \mathrm{f} /$ to compare them with $/ \mathrm{z} /$ and $/ \mathrm{v} /$. In consequence, the phonemes were teaching in the following manner: /z/-/s/, /v/-/f/ and / $\theta /-/ \delta /$ and as an exception the vowel $/ \partial /$ by the reasons mentioned before.

Concerning the lessons, the researcher who performed them was trained in phonetics teaching, specifically in the consonants and vowel sounds, which was also possible for the help of specialist teachers in the area of phonetics, who also helped on the design of the lessons performed.

Finally, a post-test and a second recording were used in order to evidence the improvement of the eleven participants in the sounds taught. The post-test (which contained the phonemes taught in the lessons) was similar to the pretest, it was also a critique of a book retrieved from the FCE trials (see page 93), which had the same level of difficulty as the pre-test. The second recording was made, with the purpose of recording students' voices while they were reading the text.

### 2.3 Research design:

This research is a quasi-experimental design and with a quantitative approach.
During the investigation the researchers use an experimental group, in which they apply a pre-test, a treatment (explicit phonetics lessons) and a post-test in order to test the established hypotheses and objective. In this connection, the researchers have control of the independent variable (explicit phonetics lessons) which will be manipulated to achieve the objective. In addition, they wanted to test the effectiveness of the independent variable and the impacts on the dependent variable (students' pronunciation of difficult phonemes for them to pronounce). The researchers focused on a cause-effect relationship between the variables mentioned before.

Moreover, the technique implemented to do this investigation is to teach explicit phonetics lessons, which seeks to improve the pronunciation of each student before and after the interventions.

In addition, the study is carried out through an inductive method. First, the researchers collect theory related to the topic of the investigation (pronunciation, its importance, etc.). Second, a hypothesis is set. Then, the researchers collect and analyze data through the use of instruments. Finally, they confirm the objective and hypotheses.

On the other hand, the study has a quantitative method because its scope is predetermined and defined. It contains numerical as well as statistical data, which is obtained through the use of audio recordings to obtain the results and achieve the established objective. Additionally, it was considered because the research was planned ahead of time considering details to carry it out effectively.

### 2.4 Procedure:

To carry out this investigation, first, the students were asked to participate by making an agreement with the English teacher. This was because at the same time that the investigation was going to be done, the students had to present a written task in which the teacher was not going to give more time to deliver it. Therefore, eleven students decided to participate with us; the teacher handed three blocks of 45 minutes per week over to work with the participants.

After that, a pre-test was applied on October 1st as a first instrument. It consisted on a text that they had to read it aloud in order to record their voice. Then, the recorded audios were used to have a diagnostic to recognize the most repeated pronunciation errors made by each student. After that, the researchers identified the sounds in which individuals made more errors as a group (/z/, $/ \theta /, / \delta /, / \mathrm{v} /$ and $/ \partial /$; according to that, the phonemes $/ \mathrm{s} /-/ \mathrm{z} /, / \theta / / / \delta /, / \mathrm{v} /-/ \mathrm{f} /$ and $/ \partial /$ were taught.

After the data collection of the pre-test, and based on what was mentioned by Yoshida, Tapia and Schaetzel (who state that students might have learning pronunciation by different ways, adapting them to their needs; performing practical lessons, making students listen to recordings or to the teacher's voice and then, repeat them; and, also considering learn through different senses such as sight, sound and movements so that they can understand and remember much better what
they learn), seven lessons were planned by the researcher in charge of the classes. As mentioned previously, each class lasted 45 minutes considering the engage, study, activate and the closure of the lessons; and as a methodology in each class, a video was used to explain the production and articulation of each phoneme; in addition, students were very active since they had to repeat the sounds aloud after the researcher. Also they had to read complete sentences making the difference between sounds. This is due to that were presented two phonemes per class.

Specifically, in the first session that was on October 3rd the researcher made an introduction to students about how important it is to learn and to pronounce properly and to communicate in English, and how it can help them in the future. Then, she presented the twelve English vowels through images in order to make an introduction of phonetics; she explained that in English there are more vowels than in Spanish and then, she pronounced each of them. After that was the turn of the students to pronounce all the vowels after the researcher. Then, some rules about the use of the vowels in a context were explained to give a better notion about phonetics; for this, the participants saw transcribed words with some of the vowels already seen; the researcher had to pronounce them and then, they had to say which phoneme was the correct one in each word. To put into practice those phonemes, some words were projected on the board, the students had to write the corresponding vowel in each word, and then they had to pronounce them. Finally, the students had to draw a chart in their notebooks and write what were the easiest and most difficult things in the class in order to consider what it should be given more emphasis in the next session.

In the second lesson that was also on October 3rd the English consonants were presented to students in order to introduce the seven phonemes that would be taught along the classes. The structure of this class and all the classes was the same as before but with different phonemes.

Recently, in the third class which was on October 8th, were taught the first sounds extracted from the data collection of the pre-test; this sounds were the $/ \mathrm{s} /-\mathrm{z} /$ to make a difference between them because they are considered as consonant pairs. The /s/sound was taught because the students pronounced it instead of the $/ \mathrm{z} /$ sound, which generated several errors in its pronunciation; to practice, some exercises were done with both phonemes so that the students could make a difference between them at the time of pronounce them. On October 10th the fourth class, the phonemes $/ \theta /-/ \delta /$ were taught, in order to teach the "th" that appeared in the pre-test. The fifth class was also on October 10th in which the phonemes /v/-/f/ were taught, it was because of the same reason as the phonemes $/ \mathrm{s} /-/ \mathrm{z} /$; the students had some significant errors in the pronunciation of the $/ \mathrm{v} /$ because they pronounced the /f/ instead of $/ \mathrm{v} /$, mostly in the word "of". On October 25th the researcher taught the only vowel which was the $/ \partial /$. The class had the same structure than the other classes, but the difference was that it was not contrasted with other phoneme; it was only taught in different words. Finally, the last class was also on October 25th, but the 45 minutes were used to make a review and practice the seven phonemes seen in all the lessons. Besides, the students read the text that was used for the post-test which contained the same sounds seen in different words from the pre-test; but this text contained a transcribed version of it, so that students could practice it in both ways. The text was read aloud together with students and then they recorded the researcher's voice to practice in their home. The post-test was taken on October 29th following the same procedure as in the pre-test. After having the audios, these were analysed and the researchers collected the results. To do that, the researchers listened to the audios and transformed the results of the students in percentages of progress. In this manner, the improvement of the group and each student was evidenced.

### 2.5 The study:

As was mentioned earlier, the school in which this investigation was done is a private school, located in Santiago. The English level of the students is a pre- intermediate level; it means they have a good base in knowledge of this language. However, despite this, one of the researchers, who was doing her professional practicum in a ninth-grade noticed that most of the students managed this language, but they did not have a proper pronunciation for the level of English they had, and it was precisely this reason that motivated this study. Because of this, the researchers focused the study on the improvement of students' pronunciation in specific sounds, through phonetics lessons. On the other hand, it is important to mention that pronunciation is one of the aspects of the speaking ability, thus, to have a proper pronunciation will help the students to communicate effectively and clearly without being misunderstood. Besides, it is relevant that the students learn how to pronounce correctly because it can help them in their professional and personal lives (in case they want to work abroad) and also in future opportunities. The question which came up with the problem evidenced (incorrect pronunciation of students) is: Does the teaching of explicit phonetics lessons improve the eleven student's pronunciation in difficult sounds for them to pronounce?

The main purpose of this study is to improve students' pronunciation in the most difficult phonemes for them to pronounce $(/ \mathrm{z} /, / \theta /-/ \mathrm{\delta} /$, /v/ and the vowel $/ \mathrm{\partial} /$ ).

After proposing the research question of the study, it is important to mention the participants have different levels of pronunciation, some of them have poor pronunciation, others basic pronunciation and others a more elaborated pronunciation. This means that this group of eleven students is varied in terms of oral performance. This leads researchers to establish the following general objective:

- To improve English pronunciation of the most difficult sounds to pronounce (/z/, /日/$/ \mathrm{J} /, / \mathrm{v} /$ and $/ \partial /$ ) for the eleven students of $9^{\text {th }}$ grade from a private school through explicit phonetics lessons.

Having stipulated the main objective, the secondary objectives are also stipulated. So that, the specific objectives are the following:

- To apply a pre-test to have a diagnostic about the students' pronunciation.
- To apply a post-test to verify the general and individual pronunciation progress of the students.
- To plan seven explicit phonetics lessons as a treatment to improve the pronunciation of the participants in the most difficult sounds to pronounce for them.


## CHAPTER III <br> DATA ANALYSIS (RESULTS)

This chapter shows the analysis of the data collected in the study of the students' pronunciation of specific sounds (the five phonemes in which they had the most repeated pronunciation errors) after the application of the pretest, the lessons performed to train students in the pronunciation of those sounds and the application of the posttest. In this connection, it shows the progress (through tables and charts) of each student and the total of students in those terms, achieved from the pre-test to the post-test.

The data is presented in the following way:
Firstly, individual results of the pre-test are presented through tables and charts, showing percentages about mispronunciation of phonemes. Then, the five sounds in which all the students had the most repeated pronunciation errors are obtained. After that, individual results of the posttest are presented, evidencing the progress that each student had in the pronunciation of the specific sounds in which they were taught.

Secondly, the results of the total of students obtained in the pre-test are presented, which reveals a pronunciation diagnostic of the group about the five sounds previously obtained. Then, the results of the total of students after the post-test are shown evidencing the progress that the total of students achieved in pronouncing the phonemes taught.

Finally, the main findings of the study are mentioned and final remarks are provided in the last section by drawing conclusions and implications for further investigations.

### 3.1 Individual results

### 3.1.1 First recording (pre-test)

The first recording functioned as an indicator of the initial conditions of the students' pronunciation (diagnostic). In this regard, as it was noted above, researchers focused on how the participants produced the sounds to evaluate them considering articulation, voicing of each sound and spelling pronunciation. In this way, the phonemes in which they made errors were quantified and the results of each student were transformed into tables evidencing a percentage of mispronunciation in each phoneme. In addition, the highest errors made by each participant were presented in a chart.

According to that, the purpose was to identify the most frequent pronunciation errors made by each student, and finally to identify the most common mispronounced sounds made by all the participants in order to teach them later through phonetics lessons.

Abbreviations:<br>> Phonemes: Phonemes.<br>$>$ Total number of each phoneme in the text: T. N. P. T.<br>$>$ Total number of errors made in each phoneme: T. N. E. P.<br>> Percentage wrong pronunciation: \% W.P

## Student 1:

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | \|z/ | / $/ 1$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /l/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 49 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 6 | 3 | 19 | 3 | 24 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 |
| \% W.P. | 94 | 0 | 10 | 0 | 0 | 7 | 0 | 0 | 50 | 60 | 83 | 8 | 92 | 20 | 43 | 0 | 0 | 13 | 0 | 0 | 0 | 9 | 0 |

Table 2: Recording 1, student 1


Figure 1: "Higher percentages of incorrect pronunciation of sounds, student 1"

The student in total mispronounced twelve phonemes although the five most mispronounced ones were: / $\partial /$, /z/, / $\mathrm{J} /$, / $\theta /$, /v/

In order of the frequency of each error:
The phoneme $/ 2 /$ showed a $94 \%$ incorrect pronunciation, it means that the majority of "schwa" sounds included in the text were not pronounced correctly. The participant only got a $6 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{z} /$ evidenced a $92 \%$ incorrect pronunciation; it means the participant got an $8 \%$ correct pronunciation in this sound.

The phoneme /ð/ showed an $83 \%$ incorrect pronunciation, which means the participant got a $17 \%$ correct pronunciation in this phoneme.

The phoneme $/ \theta /$ showed a $60 \%$ incorrect pronunciation, it means that the student got a $40 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ evidenced a $50 \%$ incorrect pronunciation, which means that the student got a $50 \%$ correct pronunciation in this sound.

## Student 2

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / 8 / | /ð/ | /s/ | \|z/ | / $/ 1$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 46 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 45 | 6 | 7 | 28 | 6 | 9 | 2 | 1 | 8 | 4 | 18 | 6 | 22 | 4 | 5 | 0 | 0 | 3 | 4 | 9 | 3 | 6 | 1 |
| \% W.P. | 87 | 55 | 33 | 44 | 25 | 32 | 40 | 14 | 67 | 80 | 78 | 17 | 85 | 80 | 71 | 0 | 0 | 38 | 24 | 35 | 60 | 17 | 25 |

Table 3: Recording 1, student 2


Figure 2: "Higher percentages of incorrect pronunciation of sounds, student 2"

The student in total mispronounced twenty-one phonemes although the five most mispronounced ones were: / $\partial /$, /z/, / $\theta /$, / $/$ /, / $\mathrm{\delta} /$

In order of the frequency of each error:
The phoneme $/ \partial /$, showed an $87 \%$ incorrect pronunciation, which means that the majority of "schwa" sounds included in the text were not pronounced correctly. The participant only got a $13 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{z} /$ evidenced an $85 \%$ incorrect pronunciation; it means the participant got a $15 \%$ correct pronunciation in this sound.

The phoneme $/ \theta /$, showed an $80 \%$ incorrect pronunciation, which means the participant, got a $20 \%$ correct pronunciation in this phoneme.

The phoneme $/ \mathrm{J} /$ showed an $80 \%$ incorrect pronunciation, it means that the student got a $20 \%$ correct pronunciation in this sound.

The phoneme /ð/ evidenced a $78 \%$ incorrect pronunciation, which means that the student got a $22 \%$ correct pronunciation in this sound.

## Student 3

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | \|z/ | / $/$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /l/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 43 | 0 | 15 | 14 | 0 | 5 | 0 | 0 | 6 | 4 | 8 | 11 | 17 | 4 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 15 | 2 |
| \% W.P. | 83 | 0 | 71 | 22 | 0 | 18 | 0 | 0 | 50 | 80 | 35 | 31 | 65 | 80 | 29 | 0 | 0 | 75 | 0 | 0 | 0 | 43 | 50 |

Table 4: Recording 1, student 3


Figure 3: "Higher percentages of incorrect pronunciation of sounds, student 3"

The student in total mispronounced fourteen phonemes although the five most mispronounced ones were: /ə/, / $\theta /$ / /z /, /v/, /ठ/

In order of the frequency of each error:
The phoneme $/ 2 /$ showed an $83 \%$ incorrect pronunciation, it means that the majority of "schwa" sounds included in the text were not pronounced correctly. The participant only got a $17 \%$ correct pronunciation in this sound.

The phoneme $/ \theta /$ evidenced an $80 \%$ incorrect pronunciation; it means the participant got a $20 \%$ correct pronunciation in this sound.

The phoneme /z/, showed a $65 \%$ incorrect pronunciation, which means the participant got a $35 \%$ correct pronunciation in this phoneme.

The phoneme $/ \mathrm{v} /$, showed a $50 \%$ incorrect pronunciation, it means that the student got a $50 \%$ correct pronunciation in this sound.

The phoneme / $\delta /$ evidenced a $35 \%$ incorrect pronunciation, which means that the student got a $65 \%$ correct pronunciation in this sound.

## Student 4

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | \|z/ | / $5 /$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 17 | 5 | 7 | 9 | 6 | 6 | 1 | 3 | 4 | 2 | 8 | 16 | 14 | 3 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 14 | 1 |
| \% W.P. | 33 | 45 | 33 | 14 | 25 | 21 | 20 | 43 | 33 | 40 | 35 | 44 | 54 | 60 | 71 | 0 | 0 | 75 | 0 | 0 | 0 | 40 | 25 |

Table 5: Recording 1, student 4


Figure 4: "Higher percentages of incorrect pronunciation of sounds, student 4"

The student in total mispronounced eighteen phonemes, although the five most mispronounced ones were: / $\mathrm{y} /$, /d $3 /, / \mathrm{f} /$, /z/, /p/

In order of the frequency of each error:
The phoneme $/ \mathrm{y} /$, showed a $75 \%$ incorrect pronunciation, it means that the majority of " y " included in the text were not pronounced correctly. The participant only got a $25 \%$ correct pronunciation in this sound.

The phoneme /d3/ evidenced a $71 \%$ incorrect pronunciation; it means the participant obtained a $29 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{J} /$, showed a $60 \%$ incorrect pronunciation, which means the participant obtained a $40 \%$ correct pronunciation in this phoneme.

The phoneme $/ \mathrm{z} /$ showed a $54 \%$ incorrect pronunciation, it means that the student obtained a $46 \%$ correct pronunciation in this sound.

The phoneme /p/ evidenced a $45 \%$ of incorrect pronunciation, which means that the student got a $55 \%$ correct pronunciation in this sound.

## Student 5

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | \|z/ | / $/$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /l/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 46 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 24 | 1 | 2 | 4 | 5 | 2 | 1 | 0 | 9 | 3 | 13 | 1 | 22 | 2 | 1 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 0 |
| \% W.P. | 46 | 9 | 10 | 6 | 21 | 7 | 20 | 0 | 75 | 60 | 57 | 3 | 85 | 40 | 14 | 0 | 2 | 25 | 6 | 4 | 40 | 3 | 0 |

Table 6: Recording 1, student 5


Figure 5: "Higher percentages of incorrect pronunciation of sounds, student 5"

The student in total mispronounced twenty phonemes, although the five most mispronounced ones were: $/ \mathrm{z} /, / \mathrm{v} /, / \theta /, / \mathrm{\delta} /$, / $/$

In order of the frequency of each error:
The phoneme $/ \mathrm{z} /$ showed an $85 \%$ incorrect pronunciation, it means that the majority of " $z$ " sounds included in the text were not pronounced correctly. The participant only got a $15 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ evidenced a $75 \%$ incorrect pronunciation; it means the participant obtained a $25 \%$ correct pronunciation in this sound.

The phoneme $/ \theta$ / showed a $60 \%$ incorrect pronunciation, which means the participant, obtained a $40 \%$ correct pronunciation in this phoneme.

The phoneme / $\delta /$ showed a $57 \%$ incorrect pronunciation, it means that the student obtained a 43\% correct pronunciation in this sound.

The phoneme / $/ 2$ evidenced a $46 \%$ of incorrect pronunciation, which means that the student got a $64 \%$ correct pronunciation in this sound.

## Student 6:

| Phonemes | $12 /$ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta /$ | /ð/ | /s/ | \|z/ | / $/ 1$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 46 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 27 | 3 | 4 | 7 | 4 | 7 | 1 | 0 | 8 | 2 | 11 | 3 | 21 | 1 | 3 | 0 | 0 | 3 | 2 | 4 | 1 | 0 | 1 |
| \% W.P. | 52 | 27 | 19 | 11 | 17 | 25 | 20 | 0 | 67 | 40 | 48 | 8 | 81 | 20 | 43 | 0 | 0 | 38 | 12 | 15 | 20 | 0 | 25 |



Figure 6: "Higher percentages of incorrect pronunciation of sounds, student 6"

The student in total mispronounced nineteen phonemes, although the five most mispronounced ones were: /z/, /v/, /ə/,/ठ/, /d3/

In order of the frequency of each error:
The phoneme $/ \mathrm{z} /$ showed an $81 \%$ incorrect pronunciation, it means that the majority of " $z$ " included in the text were not pronounced correctly. The participant only got a $19 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ evidenced a $67 \%$ incorrect pronunciation; it means the participant obtained a 33\% correct pronunciation in this sound.

The phoneme $/ \partial /$, showed a $52 \%$ incorrect pronunciation, which means the participant obtained a $48 \%$ correct pronunciation in this phoneme.

The phoneme / $\delta$ / showed a $48 \%$ incorrect pronunciation, it means that the student obtained a $52 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{d} 3 /$ evidenced a $43 \%$ of incorrect pronunciation, which means that the student got a $57 \%$ correct pronunciation in this sound.

## Student 7:

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | /z/ | / $/ 1$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 48 | 0 | 2 | 3 | 2 | 3 | 0 | 0 | 5 | 3 | 17 | 3 | 21 | 3 | 6 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 1 |
| \% W.P. | 92 | 0 | 10 | 5 | 8 | 11 | 0 | 0 | 42 | 60 | 74 | 8 | 81 | 60 | 86 | 0 | 0 | 63 | 0 | 0 | 40 | 0 | 25 |

Table 8: Recording 1, student 7


Figure 7: "Higher percentages of incorrect pronunciation of sounds, student 7"

The student in total mispronounced fifteen phonemes, although the five most mispronounced ones were: /ə/, /dз/, /z/, / $\mathrm{f} / \mathrm{/} / \mathrm{y} /$

In order of the frequency of each error:
The phoneme $/ 2 /$ showed a $92 \%$ incorrect pronunciation, it means that the majority of "schwas" included in the text were not pronounced correctly. The participant only got an $8 \%$ correct pronunciation in this sound.

The phoneme /d3/evidenced an $86 \%$ incorrect pronunciation; it means the participant obtained a $14 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{z} /$, showed an $81 \%$ incorrect pronunciation, which means the participant obtained a $19 \%$ correct pronunciation in this phoneme.

The phoneme / $\delta /$ showed a $74 \%$ incorrect pronunciation, it means that the student obtained a $26 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{y} /$ evidenced a $63 \%$ of incorrect pronunciation, which means that the student got a $37 \%$ correct pronunciation in this sound.

## Student 8:

| Phonemes | $12 /$ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta /$ | /ठ/ | /s/ | /z/ | / $/ 1$ | /d3/ | /m/ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 36 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 41 | 4 | 3 | 10 | 0 | 3 | 0 | 0 | 2 | 4 | 11 | 0 | 22 | 4 | 6 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 2 |
| \% W.P. | 79 | 36 | 14 | 16 | 0 | 11 | 0 | 0 | 17 | 80 | 31 | 0 | 85 | 80 | 86 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 50 |

Table 9: Recording 1, student 8


Figure 8: "Higher percentages of incorrect pronunciation of sounds, student 8"

The student in total mispronounced fifteen phonemes, although the five most mispronounced ones were: / $\mathrm{d} 3 /$ / /z/, / $\theta /$ / / $/ \mathrm{J} /$, /ə/

In order of the frequency of each error:
The phoneme /d3/ showed an $86 \%$ of incorrect pronunciation, which means the participant, only got a $14 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{z} /$, evidenced an $85 \%$ incorrect pronunciation; it means the participant got a $15 \%$ correct pronunciation in this sound.

The phoneme $/ \theta /$ showed an $80 \%$ incorrect pronunciation, which means the participant, got a $20 \%$ correct pronunciation in this phoneme.

The phoneme $/ \mathrm{J} /$ showed an $80 \%$ incorrect pronunciation, it means that the student obtained a $20 \%$ of correct pronunciation in this sound.

The phoneme $/ 2 /$ evidenced a $79 \%$ of incorrect pronunciation, which means that the student got a $21 \%$ correct pronunciation in this sound.

## Student 9:

| Phonemes | $12 /$ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta$ / | /ð/ | /s/ | /z/ | / $\mathrm{J} /$ | /d3/ | $/ \mathrm{m} /$ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 35 | 7 | 10 | 20 | 9 | 8 | 0 | 2 | 6 | 3 | 10 | 18 | 20 | 3 | 5 | 0 | 0 | 6 | 0 | 5 | 3 | 8 | 1 |
| \% W.P. | 67 | 64 | 48 | 31 | 38 | 29 | 0 | 29 | 50 | 60 | 43 | 50 | 77 | 60 | 71 | 0 | 0 | 75 | 0 | 19 | 60 | 23 | 25 |

Table 10: Recording 1, student 9


Figure 9: "Higher percentages of incorrect pronunciation of sounds, student 9"

The student in total mispronounced nineteen phonemes although the five most mispronounced ones were: $/ \mathrm{z} /$ / $/ \mathrm{y} /$, /d3/, /ə/, $/ \mathrm{p} /$

In order of the frequency of each error:
The phoneme /z/ showed a $77 \%$ incorrect pronunciation, it means that the majority of " $z$ " included in the text were not pronounced correctly. The participant only got a $23 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{y} /$ evidenced a $75 \%$ incorrect pronunciation; it means the participant got a $25 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{d} 3 /$, showed a $71 \%$ incorrect pronunciation, which means the participant got a $29 \%$ correct pronunciation in this phoneme.

The phoneme $/ 2 /$ showed a $67 \%$ incorrect pronunciation, it means that the student got a $33 \%$ correct pronunciation in this sound.

The phoneme /p/ evidenced a $64 \%$ incorrect pronunciation, which means that the student got a $36 \%$ correct pronunciation in this sound.

## Student 10:

| Phonemes | /2/ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / $\theta /$ | /ð/ | /s/ | /z/ | / $/ 1$ | /d3/ | $/ \mathrm{m} /$ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 46 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 25 | 2 | 3 | 2 | 5 | 1 | 1 | 0 | 9 | 3 | 9 | 0 | 25 | 2 | 3 | 0 | 0 | 2 | 0 | 1 | 3 | 0 | 1 |
| \% W.P. | 48 | 18 | 14 | 3 | 21 | 4 | 20 | 0 | 75 | 60 | 39 | 0 | 96 | 40 | 43 | 0 | 0 | 25 | 0 | 4 | 60 | 0 | 25 |

Table 11: Recording 1, student 10


Figure 10: "Higher percentages of incorrect pronunciation of sounds, student 10"

The student in total mispronounced seventeen phonemes although the five most mispronounced ones were: $/ \mathrm{z} /, / \mathrm{v} /, / \theta /, / \mathrm{j} /$, /ə/

In order of the frequency of each error:
The phoneme /z/ showed a $96 \%$ incorrect pronunciation, it means that the majority of " $z$ " sounds included in the text were not pronounced correctly. The participant only got a $4 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ evidenced a $75 \%$ incorrect pronunciation; it means the participant got a $25 \%$ correct pronunciation in this sound.

The phoneme $/ \theta /$, showed a $60 \%$ incorrect pronunciation, which means the participant got a $40 \%$ correct pronunciation in this phoneme.

The phoneme $/ \mathrm{j} /$ showed a $60 \%$ incorrect pronunciation, it means that the student got a $40 \%$ correct pronunciation in this sound.

The phoneme $/ 2 /$ evidenced a $48 \%$ incorrect pronunciation, which means that the student got a $52 \%$ correct pronunciation in this sound.

## Student 11:

| Phonemes | $12 /$ | /p/ | /b/ | /t/ | /d/ | /k/ | /g/ | /f/ | /v/ | / 8 / | /ð/ | /s/ | /z/ | / $5 /$ | /d3/ | $/ \mathrm{m} /$ | /n/ | /n/ | /w/ | /r/ | /j/ | /1/ | /h/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T. N. P. T. | 52 | 11 | 21 | 64 | 24 | 28 | 5 | 7 | 12 | 5 | 23 | 36 | 26 | 5 | 7 | 16 | 10 | 8 | 17 | 26 | 5 | 35 | 4 |
| T. N. E. P. | 17 | 4 | 5 | 10 | 4 | 5 | 0 | 0 | 4 | 2 | 7 | 6 | 17 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 6 | 0 |
| \% W.P. | 33 | 36 | 24 | 16 | 17 | 18 | 0 | 0 | 33 | 40 | 30 | 17 | 65 | 20 | 29 | 0 | 0 | 25 | 0 | 0 | 0 | 17 | 0 |

Table 12: Recording 1, student 11


Figure 11: "Higher percentages of incorrect pronunciation of sounds, student 11"

The student in total mispronounced fifteen phonemes, although the five most mispronounced ones were: /z/, / $\theta /$, /p/, /ə/, /v/

In order of the frequency of each error:
The phoneme $/ \mathrm{z} /$ showed a $65 \%$ of incorrect pronunciation, which means the participant, got a $35 \%$ correct pronunciation in this sound.

The phoneme $/ \theta /$ evidenced a $40 \%$ incorrect pronunciation; it means the participant got a $60 \%$ correct pronunciation in this sound.

The phoneme /p/ showed a $36 \%$ incorrect pronunciation, which means the participant, got a $64 \%$ correct pronunciation in this phoneme.

The phoneme/ə/, showed a $33 \%$ incorrect pronunciation, it means that the student obtained a $67 \%$ of correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ evidenced a $33 \%$ of incorrect pronunciation, which means that the student got a $67 \%$ correct pronunciation in this sound.

### 3.2 The most common mispronounced sounds made by students

As the time to perform the study is limited, the five most mispronounced phonemes were considered to be taught in order to enhance students' pronunciation. To identify them, it was necessary to calculate the mode in this set of sounds obtained from the chart of each student.

In this connection and according to the data presented previously, it is evidenced the number of the most mispronounced phonemes made by students during the application of the pre-test:
$/ \mathrm{z} /$ : eleven repetitions, $/ \partial /$ : ten repetitions, $/ \theta /$ : seven repetitions, $/ \delta /:$ six repetitions, $/ \mathrm{v} /$ : six repetitions, $/ \mathrm{d} 3 /$ : five repetitions, $/ \mathrm{J} /$ : three repetitions, $/ \mathrm{y} /$ : three repetitions, $/ \mathrm{p} /$ : three repetitions.

Before doing this calculation, researchers identified that the five highest sounds in wrong pronunciation were: $/ \mathrm{z} /$, $/ \mathrm{\rho} / / \theta /$, / $\mathrm{\delta} /$, and $/ \mathrm{v} /$.

According to this data, phonetics lessons were planned to teach the correct pronunciation of those phonemes so that students learnt how to pronounce them correctly.

### 3.2.1 Second recording (post-test)

The second recording functioned as an indicator of the students' pronunciation and improvement progress in the selected sounds $/ \mathrm{z} /, / \theta /, / \delta /, / \mathrm{v} /$ and the vowel $/ \partial /$.

In addition, the researchers applied the same criteria as in previous assessment to obtain the results. Then, the results of each student were transformed into tables (which contain the phonemes which were taught to students during the interventions) and the overall findings were presented in a chart demonstrating percentages rate of correct and wrong pronunciation of those sounds.

The purpose of the researchers was to identify whether students improved the pronunciation of those sounds, after the implementation of phonetics lessons.

## Student 1

| Phmes. | $/ v /$ | $/ \theta /$ | $/ \delta /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 1 | 0 | 2 | 4 | 11 |
| Ptge.w.p | $14 \%$ | $0 \%$ | $11 \%$ | $27 \%$ | $39 \%$ |
| Ptge. c.p | $86 \%$ | $100 \%$ | $89 \%$ | $73 \%$ | $61 \%$ |

Table 13: Recording 2, student 1


Figure 12: Percentages of correct and incorrect pronunciation of sounds, student 1

The student in total mispronounced four phonemes of the five sounds selected, they were: /ठ/ /v/, /z/, /ə/

In order of percentages of correct pronunciation in each sound:
The phoneme /ð/ showed an $89 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $11 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $72 \%$.

The /v/ evidenced an $86 \%$ correct pronunciation; it means the participant got a $14 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $36 \%$.

The /z/ showed a 73 \% correct pronunciation, which means the participant, got a $27 \%$ wrong pronunciation in this phoneme. According to the pre and post-test data, the participant improved the pronunciation of this sound by $65 \%$.

The $/ 2 /$ showed a $61 \%$ correct pronunciation, it means that the student got a $39 \%$ wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this sound by $55 \%$.

The $/ \theta$ / evidenced a $100 \%$ correct pronunciation, which means that the student got a $0 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $100 \%$.

## Student 2

| Phmes. | $/ v /$ | $/ \theta /$ | $/ ঠ /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 10 | 5 | 21 | 16 | 31 |
| T.N.E.P | 4 | 4 | 16 | 12 | 16 |
| Ptge.w.p | $40 \%$ | $80 \%$ | $76 \%$ | $75 \%$ | $52 \%$ |
| Ptge. c.p | $60 \%$ | $20 \%$ | $24 \%$ | $25 \%$ | $48 \%$ |

Table 14: Recording 2, student 2


Figure 13: Percentages of correct and incorrect pronunciation of sounds, student 2

The student in total mispronounced the five sounds selected, they were:
/v/, /ə/, /z/, /ठ/, / $\theta /$
In order of percentages of correct pronunciation in each sound:
The phoneme/v/ showed a $60 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $40 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $27 \%$.

The /ə/evidenced a $48 \%$ correct pronunciation; it means the participant got a $52 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $35 \%$.

The $/ \mathrm{z} /$ evidenced a $25 \%$ correct pronunciation, which means that the student got a $75 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $10 \%$.

The /ठ/ showed a $24 \%$ correct pronunciation, which means the participant, got a $76 \%$ wrong pronunciation in this phoneme. According to the pre and post-test data, the participant improved the pronunciation of this sound by $2 \%$.

The $/ \theta$ / showed a $20 \%$ correct pronunciation, which means the participant, got a $80 \%$ wrong pronunciation in this phoneme. According to the pre and post-test data, the participant improved the pronunciation of this sound by $0 \%$.

## Student 3

| Phmes. | $/ \mathrm{v} /$ | $/ \theta /$ | $/ ঠ /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 3 | 4 | 8 | 7 | 10 |
| Ptge.w.p | $43 \%$ | $80 \%$ | $42 \%$ | $47 \%$ | $36 \%$ |
| Ptge. c.p | $57 \%$ | $20 \%$ | $58 \%$ | $53 \%$ | $64 \%$ |

Table 15: Recording 2, student 3


Figure 14: Percentages of correct and incorrect pronunciation of sounds, student 3

The student in total mispronounced the five sounds selected, they were:
/a/, /ठ/,/v/, /z/, / $\theta /$
In order of percentages of correct pronunciation in each sound:
The $/ \partial /$ evidenced a $64 \%$ correct pronunciation, which means that the student got a $36 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $47 \%$.

The /ð/ showed a $58 \%$ correct pronunciation, which means the participant, got a $42 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the student improved the pronunciation of this sound by $0 \%$.

The phoneme $/ \mathrm{v} /$ showed a $57 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $43 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $7 \%$.

The $/ \mathrm{z} /$ showed a $53 \%$ correct pronunciation, it means that the student got a $47 \%$ wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this sound by $18 \%$.

The $/ \theta /$ evidenced a $20 \%$ correct pronunciation; it means the participant got an $80 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $0 \%$.

## Student 4

| Phmes. | $/ \mathrm{v} /$ | $/ \theta /$ | $/ ð /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 2 | 1 | 5 | 4 | 9 |
| Ptge.w.p | $29 \%$ | $20 \%$ | $26 \%$ | $27 \%$ | $32 \%$ |
| Ptge. c.p | $71 \%$ | $80 \%$ | $74 \%$ | $73 \%$ | $68 \%$ |

Table 16: Recording 2, student 4


Figure 15: Percentages of correct and incorrect pronunciation of sounds, student 4

The student in total mispronounced the five phonemes previously selected, they were:
/日/, /ठ/, /z/, /v/, /ə/
In order of percentages of correct pronunciation in each sound:
The $/ \theta /$ evidenced an $80 \%$ correct pronunciation; it means the participant got a $20 \%$ wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this sound by $20 \%$.

The /ð/ showed a $74 \%$ of correct pronunciation, which means the participant, got a $26 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the participant improved the pronunciation of this sound by $9 \%$.

The $/ \mathrm{z} /$ showed a $73 \%$ correct pronunciation, it means that the student got a $27 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $27 \%$.

The phoneme $/ \mathrm{v} /$ showed a $71 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $29 \%$. According to the pre and post test data, the participant improved the pronunciation of this sound by $4 \%$.

The $/ 2 /$ evidenced a $68 \%$ correct pronunciation, which means that the student got a $32 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $1 \%$.

## Student 5

| Phmes. | $/ v /$ | $/ \theta /$ | $/$ / | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 10 | 5 | 21 | 16 | 31 |
| T.N.E.P | 3 | 1 | 11 | 9 | 3 |
| Ptge.w.p | $30 \%$ | $20 \%$ | $52 \%$ | $56 \%$ | $10 \%$ |
| Ptge. c.p | $70 \%$ | $80 \%$ | $48 \%$ | $44 \%$ | $90 \%$ |

Table 17: Recording 2, student 5


Figure 16: Percentages of correct and incorrect pronunciation of sounds, student 5

The student in total mispronounced the five sounds selected, they were:
/ə/, /日/, /v/, /ठ/, /z/

In order of percentages of correct pronunciation in each sound:
The phoneme $/ \mathrm{a} /$ showed a $90 \%$ correct pronunciation, it means that the student got a $10 \%$
wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this sound by $36 \%$.

The $/ \theta /$ evidenced an $80 \%$ correct pronunciation, which means that the student got a $20 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $40 \%$.

The /v/ evidenced a $70 \%$ correct pronunciation; it means the participant got a $30 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $45 \%$.

The /ð/ showed a $48 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $52 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $5 \%$.

The $/ \mathrm{z} /$ showed a $44 \%$ correct pronunciation, which means the participant, got a $56 \%$ wrong pronunciation in this phoneme. According to the pre and post-test data, the participant improved the pronunciation of this sound by $29 \%$.

## Student 6

| Phmes. | $/ \mathrm{v} /$ | $/ \theta /$ | $/ ঠ /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 10 | 5 | 21 | 21 | 31 |
| T.N.E.P | 3 | 1 | 5 | 5 | 2 |
| Ptge.w.p | $30 \%$ | $20 \%$ | $24 \%$ | $24 \%$ | $6 \%$ |
| Ptge. c.p | $70 \%$ | $80 \%$ | $76 \%$ | $76 \%$ | $94 \%$ |

Table 18: Recording 2, student 6


Figure 17: Percentages of correct and incorrect pronunciation of sounds, student 6

The student in total mispronounced the five phonemes obtained, they were:
/ə/, /v/, / $\theta /, / \partial /, / \mathrm{z} /$
In order of percentages of correct pronunciation in each sound:
The phoneme $/ 2 /$ showed a $94 \%$ correct pronunciation, it means that the student got a $6 \%$ wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this sound by $46 \%$.

The phoneme $/ \theta$ / evidenced an $80 \%$ correct pronunciation, which means that the student got a $20 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $20 \%$.

The /ð/ showed a $76 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $24 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $24 \%$.

The $/ \mathrm{v} /$ evidenced a $70 \%$ correct pronunciation; it means the participant got a $30 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $37 \%$.

The $/ \mathrm{z} /$ showed a $56 \%$ correct pronunciation, which means the participant, got a $44 \%$ wrong pronunciation in this phoneme. According to the pre and post-test data, the participant improved the pronunciation of this sound by $37 \%$.

## Student 7

| Phmes. | $/ \mathrm{v} /$ | $/ \theta /$ | $/ ঠ /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 2 | 1 | 2 | 11 | 19 |
| Ptge.w.p | $29 \%$ | $20 \%$ | $11 \%$ | $73 \%$ | $68 \%$ |
| Ptge. c.p | $71 \%$ | $80 \%$ | $89 \%$ | $27 \%$ | $32 \%$ |

Table 19: Recording 2, student 7


Figure 18: Percentages of correct and incorrect pronunciation of sounds, student 7

The student in total mispronounced the five phonemes previously selected, they were: / $\delta /$, $/ \theta /, / \mathrm{v} / \mathrm{L} / \mathrm{\partial} /$ and $/ \mathrm{z} /$.

In order of percentages of correct pronunciation in each phoneme:
The phoneme /ð/ showed an $89 \%$ correct pronunciation, which means the participant made few mistakes at the moment of pronouncing this sound. The incorrect pronunciation percentage rate was $11 \%$. According to the pre and post test data, the participant improved the pronunciation of this sound by $63 \%$.

The $/ \theta$ / evidenced an $80 \%$ correct pronunciation; it means the participant got a $20 \%$ wrong pronunciation in this sound. According to the pre and post -test data, the participant improved the pronunciation of this sound by $40 \%$.

The /v/ showed a $71 \%$ of correct pronunciation, which means the participant, got a $29 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the participant improved the pronunciation of this sound by $13 \%$.

The $/ 2 /$ showed a $32 \%$ correct pronunciation, it means that the student got a $68 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $24 \%$.

The $/ \mathrm{z} /$ evidenced a $27 \%$ correct pronunciation, which means that the student got a $73 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $18 \%$.

## Student 8

| Phmes. | $/ v /$ | $/ \theta /$ | $/ ঠ /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 0 | 1 | 7 | 11 | 18 |
| Ptge.w.p | $0 \%$ | $20 \%$ | $37 \%$ | $73 \%$ | $64 \%$ |
| Ptge. c.p | $100 \%$ | $80 \%$ | $63 \%$ | $27 \%$ | $36 \%$ |

Table 20: Recording 2, student 8


Figure 19: Percentages of correct and incorrect pronunciation of sounds, student 8

The student in total mispronounced four phonemes of the five sounds selected, they were: $/ \theta /, / \partial /, / \partial /$ and $/ \mathrm{z} /$

In order of percentages of correct pronunciation in each sound:
The $/ \theta$ / showed an $80 \%$ correct pronunciation, which means the participant made few mistakes at the moment of pronouncing this phoneme. The incorrect pronunciation percentage rate was $20 \%$. According to the pre and post test data, the participant improved the pronunciation of this sound by $60 \%$.

The /ð/ evidenced a $63 \%$ correct pronunciation; it means the participant got a $37 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $11 \%$.

The $/ 2 /$ showed a $36 \%$ correct pronunciation, which means the participant, got a $64 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the participant improved the pronunciation of this sound by $11 \%$.

The $/ \mathrm{z} /$ showed a $27 \%$ correct pronunciation, it means that the student got a $73 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $12 \%$.

The/v/ evidenced a $100 \%$ correct pronunciation, which means that the student got a $0 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $100 \%$.

## Student 9

| Phmes. | $/ \mathrm{v} /$ | $/ \theta /$ | $/ ð /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 0 | 3 | 7 | 5 | 8 |
| Ptge.w.p | $0 \%$ | $60 \%$ | $37 \%$ | $33 \%$ | $29 \%$ |
| Ptge. c.p | $100 \%$ | $40 \%$ | $63 \%$ | $67 \%$ | $71 \%$ |

Table 21: Recording 2, student 9


Figure 20: Percentages of correct and incorrect pronunciation of sounds, student 9

The student in total mispronounced the five phonemes previously selected, they were: $/ \mathrm{v} /, / \theta /, / \partial /, / \mathrm{z} /$ and $/ \partial /$.

In order of percentages of correct pronunciation in each sound:
The phoneme $/ \mathrm{v} /$ evidenced a $100 \%$ correct pronunciation, which means that the student got a $0 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this phoneme by $50 \%$.

The $/ \partial /$ evidenced a $71 \%$ correct pronunciation, which means that the student got a $29 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $38 \%$.

The $/ \mathrm{z} /$ showed a $67 \%$ correct pronunciation, it means that the student got a $33 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $44 \%$.

The / $\delta /$ showed a $63 \%$ of correct pronunciation, which means the participant, got a $37 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the participant improved the pronunciation of this sound by $6 \%$.

The $/ \theta /$ evidenced a $40 \%$ correct pronunciation; it means the participant got a $60 \%$ wrong pronunciation in this sound. According to the pre and post -test data, the participant improved the pronunciation of this sound by $0 \%$.

## Student 10

| Phmes. | $/ v /$ | $/ \theta /$ | $/$ / | $/ \mathrm{z} /$ | $/ ə /$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 10 | 5 | 21 | 16 | 31 |
| T.N.E.P | 5 | 1 | 15 | 10 | 8 |
| Ptge.w.p | $50 \%$ | $20 \%$ | $71 \%$ | $63 \%$ | $26 \%$ |
| Ptge. c.p | $50 \%$ | $80 \%$ | $29 \%$ | $37 \%$ | $74 \%$ |

Table 22: Recording 2, student 10


Figure 21: Percentages of correct and incorrect pronunciation of sounds, student 10

The student in total mispronounced four phonemes of the five sounds selected, they were: $/ \partial /, / v /, / \theta /, / \delta /$ and $/ \mathrm{z} /$

In order of percentages of correct pronunciation in each sound:
The phoneme $/ \theta /$ evidenced an $80 \%$ correct pronunciation; it means the participant got a $20 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $40 \%$.

The $/ \partial /$ evidenced a $74 \%$ correct pronunciation, which means that the student got a $26 \%$ wrong pronunciation in this sound. According to the pre and post- test data, the participant improved the pronunciation of this sound by $22 \%$.

The $/ \mathrm{v} /$ showed a $50 \%$ correct pronunciation. The incorrect pronunciation percentage rate was $50 \%$. According to the pre and post-test data, the participant improved the pronunciation of this sound by $25 \%$.

The $/ \mathrm{z} /$ showed a $37 \%$ correct pronunciation, it means that the student got a $63 \%$ wrong pronunciation in this sound. According to the pre and post-test data, the participant improved the pronunciation of this phoneme by $33 \%$.

The / $\delta /$ showed a $29 \%$ correct pronunciation, which means the participant, got a $71 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the student improved the pronunciation of this sound by $0 \%$.

## Student 11

| Phmes. | $/ v /$ | $/ \theta /$ | $/ ð /$ | $/ z /$ | $/ \partial /$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| T.N.P.T | 7 | 5 | 19 | 15 | 28 |
| T.N.E.P | 0 | 1 | 0 | 5 | 7 |
| Ptge.w.p | $0 \%$ | $20 \%$ | $0 \%$ | $33 \%$ | $25 \%$ |
| Ptge. c.p | $100 \%$ | $80 \%$ | $100 \%$ | $67 \%$ | $75 \%$ |

Table 23: Recording 2, student 11


Figure 22: Percentages of correct and incorrect pronunciation of sounds, student 11

The student in total mispronounced four phonemes of the five sounds selected, they were:
$/ \mathrm{v} /$, / $\theta /$, / $\mathrm{\delta} /$, / $\mathrm{z} /$ and $/ \mathrm{\rho} /$.
In order of percentages of correct pronunciation in each sound:
The phoneme $/ \mathrm{v} /$ evidenced a $100 \%$ correct pronunciation, which means that the student got a $0 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this phoneme by $33 \%$.

The phoneme $/ \delta /$ showed a $100 \%$ correct pronunciation, which means the participant, got a $0 \%$ wrong pronunciation in this phoneme. According to the pre and post test data, the participant improved the pronunciation of this sound by $30 \%$.

The phoneme $/ \theta /$ evidenced an $80 \%$ correct pronunciation; it means the participant got a $20 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this sound by $20 \%$.

The $/ \partial /$ evidenced a $75 \%$ correct pronunciation, which means that the student got a $25 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this phoneme by $7 \%$.

The /z / showed a $67 \%$ correct pronunciation, it means that the student got a $33 \%$ wrong pronunciation in this sound. According to the pre and post test data, the participant improved the pronunciation of this phoneme by $32 \%$.

### 3.3 Results of the total of students

### 3.3.1 First recording (pre-test)

The results collected from each student in the pre-test were useful for researchers since it allowed them to obtain a general diagnostic of the group of students' pronunciation performance. In addition, the results provide researchers a general idea, which allows them to draw better conclusions about the investigation.

Regarding the results, they were presented through a table and a chart. The table reveals percentages of the five most mispronounced phonemes made for each student, which were summed and averaged to obtain the general diagnostic of the group. The chart presents the percentages of both wrong and correct pronunciation of these phonemes.

Abbreviations:
$>$ Student: St.
$>$ Total wrong pronunciation percentage: T. W. P. \%
$>$ Total correct pronunciation percentage: T. C. P. \%

### 3.4 Results of the total of students in pre-test

|  | St.1 | St. 2 | St. 3 | St. 4 | St. 5 | St. 6 | St. 7 | St. 8 | St. 9 | St. 10 | St. 11 | T. W. P <br> $\%$ | T. C. P. <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /ə/ | $94 \%$ | $87 \%$ | $83 \%$ | $33 \%$ | $46 \%$ | $52 \%$ | $92 \%$ | $79 \%$ | $67 \%$ | $48 \%$ | $33 \%$ | $65 \%$ | $35 \%$ |
| /v/ | $50 \%$ | $67 \%$ | $50 \%$ | $33 \%$ | $75 \%$ | $67 \%$ | $42 \%$ | $17 \%$ | $50 \%$ | $75 \%$ | $33 \%$ | $51 \%$ | $49 \%$ |
| /日/ | $60 \%$ | $80 \%$ | $80 \%$ | $40 \%$ | $60 \%$ | $40 \%$ | $60 \%$ | $80 \%$ | $60 \%$ | $60 \%$ | $40 \%$ | $60 \%$ | $40 \%$ |
| /ס/ | $83 \%$ | $78 \%$ | $35 \%$ | $35 \%$ | $57 \%$ | $48 \%$ | $74 \%$ | $31 \%$ | $43 \%$ | $39 \%$ | $30 \%$ | $50 \%$ | $50 \%$ |
| /z/ | $92 \%$ | $85 \%$ | $65 \%$ | $54 \%$ | $85 \%$ | $81 \%$ | $81 \%$ | $85 \%$ | $77 \%$ | $96 \%$ | $65 \%$ | $79 \%$ | $21 \%$ |

Table 24: Results of the total of students in pre-test
Total $\%=\underline{61 \% ~ 39 \%}$


Figure 23: Percentage of mispronunciation of each phoneme made by the total of students

The phoneme $/ \mathrm{z} /$ showed a $79 \%$ wrong pronunciation, it means that the total of students obtained a $21 \%$ correct pronunciation in this sound.

The phoneme $/ \partial /$ showed a $65 \%$ wrong pronunciation, it means that the total of students obtained a 35\% correct pronunciation in this sound.

The phoneme $/ \theta /$ showed a $60 \%$ wrong pronunciation, it means that the total of students obtained a $40 \%$ correct pronunciation in this sound.

The phoneme /ð/ showed a $50 \%$ wrong pronunciation, it means that the total of students obtained a $50 \%$ correct pronunciation in this sound.

The phoneme $/ \mathrm{v} /$ showed a $51 \%$ wrong pronunciation, it means that the total of students obtained a 49\% correct pronunciation in this sound.

### 3.4.1 Second recording (post-test)

Regarding the results of the total of students obtained from the post-test, they were also collected from the individual data of the students. These results provide knowledge about the general progress achieved by the group of students in the sounds taught, which allows to confirm the importance of teaching phonetics lessons in their school.

These results were presented through a table as well as a chart. In the table, percentages of the five most mispronounced phonemes made for each student were presented. As in the previous table, they were summed and averaged to obtain general results of the progress of students. Then, those percentages are presented in the chart.

### 3.5 Results of the total of students post-test

|  | St.1 | St. 2 | St. 3 | St. 4 | St. <br> 5 | St. 6 | St. 7 | St. 8 | St. 9 | St. 10 | St. 11 | T. W. P \% | T. C. P. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /ə/ | $39 \%$ | $52 \%$ | $36 \%$ | $32 \%$ | $10 \%$ | $6 \%$ | $68 \%$ | $64 \%$ | $29 \%$ | $26 \%$ | $25 \%$ | $35 \%$ | $65 \%$ |
| /v/ | $14 \%$ | $40 \%$ | $43 \%$ | $29 \%$ | $30 \%$ | $30 \%$ | $29 \%$ | $0 \%$ | $0 \%$ | $50 \%$ | $0 \%$ | $24 \%$ | $76 \%$ |
| / $\theta /$ | $0 \%$ | $80 \%$ | $80 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | $60 \%$ | $20 \%$ | $20 \%$ | $33 \%$ | $67 \%$ |
| /ठ/ | $11 \%$ | $76 \%$ | $42 \%$ | $26 \%$ | $52 \%$ | $24 \%$ | $11 \%$ | $37 \%$ | $37 \%$ | $71 \%$ | $0 \%$ | $35 \%$ | $65 \%$ |
| /z/ | $27 \%$ | $75 \%$ | $47 \%$ | $27 \%$ | $56 \%$ | $44 \%$ | $73 \%$ | $73 \%$ | $33 \%$ | $63 \%$ | $33 \%$ | $50 \%$ | $50 \%$ |

Table 25: Results of the total of students in post-test
Total $\%=\underline{35 \% 65 \%}$


Figure 24: Percentage of mispronunciation of each phoneme made by the total of students

The phoneme $/ \mathrm{z} /$ showed a $50 \%$ wrong pronunciation, it means that the total of students obtained a $50 \%$ correct pronunciation in this sound. According to the pre and post test data, the total of students improved the pronunciation of this sound by $29 \%$.

The phoneme $/ ə /$ showed a $35 \%$ wrong pronunciation, it means that the total of students obtained a $65 \%$ correct pronunciation in this sound. According to the pre and post test data, the total of students improved the pronunciation of this sound by $30 \%$.

The phoneme /ð/ showed a $35 \%$ wrong pronunciation, it means that the total of students obtained a $65 \%$ correct pronunciation in this sound. According to the pre and post test data, the total of students improved the pronunciation of this sound by $15 \%$.

The phoneme $/ \theta /$ showed a $33 \%$ wrong pronunciation, it means that the total of students obtained a $67 \%$ correct pronunciation in this sound. According to the pre and post test data, the total of students improved the pronunciation of this sound by $27 \%$.

The phoneme $/ \mathrm{v} /$ showed a $24 \%$ wrong pronunciation, it means that the total of students obtained a $76 \%$ correct pronunciation in this sound. According to the pre and post test data, the total of students improved the pronunciation of this sound by $27 \%$.

## CHAPTER IV DISCUSSION

Connecting with the methodological framework section of the investigation, this investigation is a quasi-experimental study; this means that the study has a hypothesis and also a research question which were tested. The hypothesis of this research was: "The teaching of explicit phonetics lessons will improve the students' pronunciation of difficult phonemes for them to pronounce" and, on the other hand, the research question was. Does the teaching of explicit phonetics lessons improve the eleven students' pronunciation in difficult sounds for them to pronounce? (González, Pavez \& Vásquez, 2018). And, according to the analysis and the results obtained after the post-test, it can be stated that the hypothesis and the research question were validated and fulfilled. In addition, the objective of the study was to improve students' pronunciation in the most difficult phonemes for them to pronounce $(/ \mathrm{z} /, / \theta /-/ \delta /, / \mathrm{v} /$ and the vowel/ə/) (González, Pavez \& Vásquez, 2018). And, as the same than the research question and the hypothesis statement, it was confirmed too. That happened because most of the students improved the pronunciation of the phonemes with the lessons implemented, but, considering what made this possible, it is relevant to mention that the explicit phonetics lesson played an important role in the effectiveness of the study, since students could be familiar with phonemes symbols, they could understand and be aware of how to articulate them. Adding to this idea, the methods and activities implemented in the interventions helped them notoriously to improve their pronunciation. For example, the activities about looking at the teacher while pronouncing and articulating the sounds, worked very well in the process of students training. In addition, the activities related to identify the sounds and match the sounds with the corresponding word were effective in achieving the objective. On the other hand, about the methods used by the teacher in the lessons, it is relevant to mention that the lessons focused on more practice than theory, it got
better results for the students. Additionally, the lessons were planned thinking on activities which students' could feel motivated, that is why the researcher tried to show them interactive and didactic videos and pictures.

Following the idea mentioned above, the hypothesis and research question were validated also due to the results shown on the post-test analysis, in which there was a noticeable progress of the whole group in the improvement of the pronunciation of each sounds motioned before.

Through this investigation, new aspects arose, and those aspects are related to new findings found at the end of the study.

1. One important aspect that arose at the end of the study was that, due to the explicit phonetics lessons the students became aware of the sounds that they learned, their correct articulation and therefore, the differences between them and the Spanish phonemes. According to that and based on the comparison of the results between the pre-test and the post-test, it is thought that greatly helped students to obtain a progress in the pronunciation of those sounds.

In this connection, it is believed that it was because of the way and methods that the teacher used to perform the lessons (students listened to the teacher's voice, video recordings and repeated the sounds, the teacher keep the lessons practical so that students could practice as much as they could) which allowed students to be aware and notice the differences between how they pronounced the sounds and how those sounds are really well-articulated and from that, practicing as much as they could to improve their pronunciation.

According to that, the author Hamzah (2014) emphasizes on the relevance that explicit phonetics lessons have in the language pronunciation learning as he states they could potentially improve learners' pronunciation of the target language. In addition, the authors Venkatagiri and Levis (2007 as cited in Hamzah, 2014) maintained that "explicit instruction could help learners develop phonological awareness, which might play a key role in L2 speech intelligibility", which would be the reason why the students became awareness of what they learned and got a progress pronouncing the phonemes.

In this connection, it is thought that the poor implicit teaching ("learning without awareness of what is being learned") (Doughty, 2003) of pronunciation that students previously received in English lessons did not achieve such as significant results as students were not conscious about what they learnt and therefore, they were not conscious of the differences between English and Spanish. As a result, they did not realize about how they should to pronounce correctly.

Another aspect that arose was that students were aware of the sounds that they learned due to the explicit phonetics lessons; the students got progress in the pronunciation of the five phonemes in a short period of time (seven lessons of forty-five minutes each of them). According to that, it is thought that it was possible due to the methods mentioned before, which allowed students to assimilate what they learned and have more time to practice the sounds.

In this connection, it is thought that the little time that students had to learn pronunciation in the previous lessons of English (which not only was in an implicit way,
but also students almost had no time to practice it) caused that they were not able to develop it enough.
2. Another aspect that was found at the end of the study was that, despite the fact that the most of the students improved the pronunciation of the five phonemes most difficult for them to pronounce $((/ \mathrm{z} /, / \mathrm{v} /, / \theta /, / \delta /, / ə /)$, all of them continued making errors to voice $/ \mathrm{v} /$, $/ \mathrm{z} /$, and $/ \delta /$. According to that, it is inferred that occurred because of the reason mentioned before, which is interlanguage, specifically negative transfer (Odlin, 2012). In consequence, as those sounds do not exist in Spanish, students tended to produce them as the closets phonemes for them in their language. In addition, the researchers inferred that those sounds continued causing difficulties to students because, as it was stated by Gorman and Stubbe (n.d, p. 10), /z/, /v/ and /ð/ are considered some of the later developing sounds for English speakers and for that reason, it would not be uncommon that a person who is learning English has difficulties producing those sounds. Therefore, it is thought that, despite of the fact that the most of the students improved the pronunciation of those sounds (due to the explicit phonetics lessons, in which students were able to be conscious about them, repeat and practice them considerably) it would be necessary that students had more time to continue practicing them so that they can improve much more in their pronunciation.
3. The motivation that students showed throughout the lessons was also an important aspect considered as a finding at the end of the study. According to Gardner (1985, as cited in Mohammdi, 2012) motivation is "the extent to which an individual works or strives to
learn the languages because of desire to do so and the satisfaction experienced in the activity". In addition, to Bomiaet (1997, as cited in Mohammdi, 2012) learning motivation refers to "the students' willingness, need, desire and compulsion to participation, and be successful in, and learning process." In this connection, the researcher, who performed the lessons, noticed that the students were greatly motivated throughout the lessons as they participated actively during the activities, showed interest to learn through the questions related to content that they asked to her and also, students even practiced what the researcher taught them after the lessons. It is believed by the researcher who performed the lessons that students were motivated mainly because what they learned was something new to them, which made sense for students at the time of practicing the sounds taught. This researcher also inferred that students were motivated because of the methods used to perform the lessons as they had to listen to the correct articulation of the sounds and know the differences between English and Spanish phonemes. Additionally, it is believed that it occurred because of the students' school context, since this school lays emphasis on English teaching, so students had a previous knowledge that helped them to understand better the phonetics lessons.

According to the pedagogical implications related to that, it is necessary to know that they are directly related to the students' significant learning, that is why some strategies and methods were used to help with the motivation and learning of the participants in this research. These strategies and methods used in the lessons were supported by Yoshida (2016) and Tapia (2017), who said that it is necessary to know how the language works; according to that, the idea of teaching phonemes as an explicit way was born; besides wanting to solve the problem of
students' wrong pronunciation. Also, they said that the use of different ways to teach pronunciation have to be in accordance with the students' needs. Due to that, the doubts that students' arose were solved individually, either by showing them again the articulation of the phonemes or by making them repeat after the teacher. Additionally, another a strategy that a teacher should have is high degree of patience and understanding of students' mindsets at the moment of performing the lessons. That is why, although it was an explicit teaching of pronunciation, the activities were planned in accordance to the level of English that students handled. This authors also mentioned that as a method students listen to recordings or to the teacher's voice and then, repeat after it, she or he; due to that, students listened and watched videos showing the articulation of the sounds taught, and also was used the method "repeat after me" in order to practice and correct the pronunciation of the sounds. Besides, an essential part to obtain effective results is also that teachers keep lessons practical. Despite the fact that theory and technical explanations are important to know in some level, giving simple and accurate explanation followed by a lot of practice get better results; so it was proven by the short time that there was to teach and what the students achieved in the improvement of their pronunciation. Also, it is necessary that teachers perform activities that motivate them and that, during the process, they are constantly exposed to the language; connected to what was mentioned before, a lot of practice and the different activities used were very useful for the progress in the participants' pronunciation. Finally, for the students, to obtain effective results in this process they should be trained to be independent and autonomous learners, that is to say, they should practice by their own through different ways: listening, imitating, monitoring their own pronunciation, etc. According to that, the researcher was cared that students could study and
practice on their own; for this students recorded the researcher's voice and then they listened to the recording and repeated after her several times.

On the one hand, all of this was significant for the researcher in charge of the lessons because of the progress in students' pronunciation despite of the short time to teach and practice the sounds; also because providing confidence and security to their teaching methods in the classroom is essential to encourage the teacher, and in this way encourage the students too.

On the other hand, it is important for students to understand the why of the things in general that is why the explicit teaching of pronunciation helped them to facilitate their learning; and also helped to have faster learning, something that was concluded due to the time and progress that were obtained from this research.

As a conclusion of this work, the first thing that is relevant to affirm is that the purpose and the objective of the investigation was accomplished, it was due to most of the eleven students improved the pronunciation of each sounds, there was a noticeable improvement comparing the results of pre and post-test, the students as a group they improved the pronunciation of the sounds in $26 \%$ comparing to the pre-test implemented. That means that the treatment used for the researchers had a great impact on students learning and also in their pronunciation performance. The teaching of explicit phonetics gave the students the opportunity first to be aware about the importance of learning pronunciation and also the importance it has in their lives and oral communication. In addition, the teaching of explicit phonetics was used as a treatment for the problem evidenced in this group of students because it sought to evidence the importance of pronunciation in the communication development and also the oral production skill.

Moreover, it was evidenced that the methods, activities and strategies used in the lessons showed effectiveness in students' progress. It occurred because, thanks to this, they could work more deeply in the articulation, pronunciation and also the recognition of each phoneme taught. The lessons design contemplated that the teacher considered at the moment of planning and performing the lessons the following aspects; the necessities showed by the students were a tool to adequate the lessons according what students needed to reinforce. In addition, the motivation of students was an important aspect that the teacher always tried to cover, because of that she performed and design activities that were interesting and didactics for them. Also, the teacher showed a lot of patience when students did not understand and also she solved their doubts personally. The idea of doing this gave the students the possibility to learn without feel ashamed for not understanding how to pronounce some sounds. Adding to this topic, the students could solve any doubt about how to articulate the sounds with the teacher who constantly was monitoring the practice of them. And finally the idea of doing more practical than theoretical lessons was one of the methods that most helped students could improve because in each lessons they had the instance to practice their pronunciation, it was with the help of the teacher and also they had enough time to practice autonomous, one of the focus of the lessons was that students could practice a lot how to pronounce, it was done through imitation, listening and repetition activities. Regarding to this, it can be inferred that through this teaching methodology the students would not have noticed that they were making mistakes when pronouncing. They became aware about their mistakes. The students managed to improve thanks to the explicit teaching of phonetics.

Otherwise, the researchers conclude that the teaching of pronunciation aroused great interest in the students, the students looked motivated while they are learning for example, how
to articulate with the face muscle, how to voiced some consonants, it was something new for them and they and they did not look bored while learning. It can be inferred that the teaching of phonetics was not something bored for them that they did not want to learn, on the contrary, it was even fun for them. Because of that, it could be an opportunity for other researchers and teachers to try this but in full lessons. Additionally, the researcher concluded that the time estimated to do the treatment, (only seven lessons) showed effectiveness in the students' improvement. That means if during the scholar year in English lessons implemented phonetics were teaching, the possibilities of achieving an improvement in students' pronunciation could be higher.

As a final reflection of this work, we hoped this investigation could be a help or guide for English teachers who seek ways to enhance their students in pronunciation. Also, we hoped this investigation could help other researchers to delve and investigate more and about how to improve students' pronunciation, this was one of the main proposes of this pilot investigation. And now, evidencing the importance of this investigation for us as future English teachers, it is important to mention that, this investigation was relevant for us because we learned more about pronunciation, also it helped us to complement the previous knowledge we had about this topic. This study is important for us because, it will help us for the future when we teach in our classroom, we can implement this knowledge for our future students, in that manner, and it will help them to develop their speaking skill and also to communicate effective.

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## APPENDIX

## RESOURCES: PRE-TEST

Objective: Identify common pronunciation mistakes in English as second language learners through a reading activity.

## I.- Read the following text in silence twice. Then, read it aloud.

Sundance by Teresa Wilson
Kerry:
I really don't know why this book is so popular. I mean, I suppose it is going to appeal to young girls who want danger and romance, but I found this book really tedious. For a start, the characters were really unconvincing. The author went out of her way to add lots of details about the characters, but I found these details really pointless. I thought that some of the facts she presented about the main characters would become significant in some way later in the novel, but they didn't. They were just worthless bits of information. I also was disappointed that, although this book is meant to be about kids at high school, the writer seems to have no recollection at all about what it's like to be 17. The main character thought and acted like a 32 -year old. It just wasn't believable. I'm not saying Teresa Wilson is a bad writer. She can obviously string words together and come up with a story that is appealing to a large number of people, but she lacks anything original. There is no flair. It just uses the same sort of language as you can see in many other mediocre novels.

## TRANSCRIPTION RESOURCE I：

／Sundance baita＇reiza＇wilsən
＇keri：
 wont＇deınḑərændrəv＇mæns，bstarfaundðısbuk＇rıəli＇ti：diəs．fo：r ə sta：t，ðə＇kærıktəzw3：＇rıəli ，＾nkən＇vinsıŋ．ði＇o：Өəwentautpvh3：weitu：ædlptspv＇di：terlzə＇bautðə＇kærıktəz，bıtarfaundði：z ＇di：teılz＇rıəli＇ppntlis．aı日o：tðætsımpvðəfæktsfi：prı＇zentıdə＇bautðəmeın ＇kærıktəzwudbı＇kımsıg＇nıfıkəntınsımwei＇leıtərınðə＇nvval，bıtðeıdıdnt．ðeıwз：ḑıst ＇w3：Өlısbıtspv ，infə＇merfən．aı＇o：lsəuwnz ，dısə＇ponntıdðæt，o：l＇ðə๐ðısbukızmenttu：bi： ə＇bautkıdzætharsku：l，ðə＇raıtəsi：mztu：hævnəu ，rekə＇lckJənæt૭：lə＇bautwntıtslarktu：bi： 17.
 ＇wılsənız ə bæd＇raitə．fi：kæn＇pbvıəslistrıŋwз：dztə＇gとðərændk＾m＾pwıð ə＇stə：riðætızə pi：lintu：
 ＇læygwid弓æzju：kænsi：in＇meni＇＾ðə＇mi：dıəəkə＇nvvəlz／
https：／／www．examenglish．com／FCE／fce＿reading3．htm

## RESOURCE II: POST-TEST

Objective: Identify common pronunciation mistakes in English as second language learners through a reading activity.

## I.- Read the following text in silence twice. Then, read it aloud.

High Hills by Mary Holland
Hannah:
I read this book for a literature class. I know it's a classic, and I did try to like it, but I just didn't get into it. I kept persevering, hoping that I'd start to enjoy it, but no such luck. The famous scene out on the moors was definitely the best bit of the book, but even that I found ridiculous when it is clearly supposed to be passionate. As I approached the end of the book, I figured there must be some kind of moral to the story, something that I would learn from the experience of trudging through seven hundred long pages, but there was nothing worthwhile. I don't know why the literary world sees this book as such a masterpiece. The characters are portrayed as being intelligent, but they do such stupid things! And as for it being a love story - marrying someone you don't love and then being abused by them - that doesn't spell love to me.

## TRANSCRIPTION RESOURCE II:

/haihilzbaı 'meəri 'hplənd 'hænə:

 'feıməssi:nautbnðəmणəzwnz 'defintliðəbestbıtDvðəbuk, bıt 'i:vənðætaıfaundri'dikjøləswenitiz 'klıəlisə'pəuzdtu: bi: 'pæృənıt. æzaə' prəutftðiendpvðəbuk, aı 'fıgədðeəmıst bi: sımkaındpv

 'ma:stəpi:s. ðә 'kærıktəz a: po: 'treıdæz 'bi:ıŋın'tعlıd弓ənt, bıtðeı du: sıtf 'stju:pıd日ızz! ændæzforırt 'bi:ıy ə lıv 'sto:ri - 'mæriŋy 'sımwлnju: dəəntlıvændðen 'bi:ıəə'bju:zdbaıðعm ðætd^zntspદllıvtu: mi:/
https://www.examenglish.com/FCE/fce_reading3.htm

## LESSON PLANS

| Class: 9th grade | Date | Time: 45 minutes | Sequence: Class 1/7 |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. Main Objective: Students will be able to identify, recognize and practice the British English vowel phonemes. |  |  |  |  |
| 2. Subsidiary aims: Students will be able to differentiate and work with specific words that contain the English vowel phonemes. |  |  |  |  |
| 3. Key Activities: To differentiate the English vowel phonemes through words that contain that sounds. |  |  |  |  |
| Contents: The teaching of English vowel phonemes. |  |  |  |  |
| 4. Skills/procedures: Reading, writing, listening and speaking. |  | 5. Grammar: Verb tenses. | 6. Function: To practice the English vowel phonemes. |  |
| 7. Assumptions: Understand the difference between the sounds of the English vowels. |  |  |  |  |
| Stages | Interaction | 8. Evaluation |  | IT- MaterialsTiming |
| $\begin{aligned} & \text { 10. Engage/ } \\ & \text { Warm-up } \end{aligned}$ | The researcher asks students to pronounce some words that are written on the board. Then, she presents the twelve English vowels phonemes through images in order to make an introduction of phonetics. | To obtain a diagnostic of the students' previous knowledge about the sounds of the words. |  | Data projector <br> PowerPoint <br> Board <br> Marker |
| 11. Study/ Presentation | The researcher pronounced all the vowel phonemes. After that was the turn of the students to pronounce all the sounds after the researcher. | The researcher evaluates students' pronunciation when they repeat the words after her in order to make corrections if it is necessary. | - Data projector <br> - PowerPoint <br> - Board |  |
| 12. Practice | The researcher showed transcribed words with some of the vowels already seen; she had to pronounce them and then, students had to say which phoneme was the correct one in each word. | The researcher evaluates students' pronunciation to evidence the difference of between vowel sounds. | - Data projector <br> - PowerPoint <br> - Board |  |
| 13. Activate/ 15. Production | To put into practice this phonemes, some words were projected on the board and the students had to write the corresponding vowel in each word and then they had to pronounce them aloud. | Through observation, the researcher will correct the students' vowel pronunciation. | - Data projector <br> - PowerPoint |  |
| 16. Close up/ Wrapup | The students had to draw a chart in their notebooks and write what were the easiest and most difficult things of the class. | According answers th will con should be emphasis session. |  | Board <br> Marker |


| Class: 9th grade | Date: October 3rd | Time: 45 minutes | Sequence: Class $2 / 7$ |
| :--- | :--- | :--- | :--- |


| 14. Main Objective: Students will be able to identify, recognize and practice the British English consonant phonemes. |  |  |  |
| :---: | :---: | :---: | :---: |
| 15. Subsidiary aims: Students will be able to differentiate and work with specific words that contain the English consonant phonemes. |  |  |  |
| 16. Key Activities: To differentiate the English consonant phonemes through words that contain that sounds. |  |  |  |
| Contents: The teaching of English consonant phonemes. |  |  |  |
| 17. Skills/procedures: Reading, writing, listening and speaking. | res: 18. Grammar: V | tenses. 19. Func <br> cons | o practice the English phonemes. |
| 20. Assumptions: Understand the difference between the sounds of the English consonants. |  |  |  |
| Stages | Interaction | 21. Evaluation | 22. IT- MaterialsTiming |
| 23. Engage/ Warm-up | The researcher asks students to pronounce some words that are written on the board. Then, she presents the twenty four English vowels phonemes through images in order to make an introduction of phonetics. | To obtain a diagnostic of the students' previous knowledge about the sounds of the words. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 24. Study / Presentation | The researcher pronounced all the consonant phonemes. After that was the turn of the students to pronounce all the consonant after the researcher. | The researcher evaluates students' pronunciation when they repeat the words after her. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 25. Practice | The researcher showed transcribed words with some of the consonant already seen; she had to pronounce them and then, students had to say which phoneme was the correct one in each word. | The researcher evaluates students' pronunciation to evidence the difference of between consonant sounds. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 26. Activate/ 15. Production | To put into practice this phonemes, some words were projected on the board and the students had to write the corresponding consonant in each word and then they had to pronounce them aloud. | Through observation, the researcher will correct the students' consonant pronunciation. | - Data projector <br> - PowerPoint |
| 17. Close up/ Wrapup | The researcher present the seven sounds that are going to be teach in the next sessions, which are $/ \mathrm{s} /-/ \mathrm{z} /$, $/ \theta /-/ \delta /, / \mathrm{v} /$ - /f/ phonemes; then, the students had to say aloud what were the easiest and most difficult things of the class. | According to students' answers the researcher will consider what should be given more emphasis in the next session. | - Board <br> - Marker |


| Class: 9th grade | Date: October 8th | Time: 45 minutes | Sequence: Class $3 / 7$ |
| :--- | :--- | :--- | :--- |


| 27. Main Objective: Students will be able to recognize, differentiate and apply the /s/ and /z/. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 28. Subsidiary aims: Students will be able to practice the $/ \mathrm{s} / \mathrm{and} / \mathrm{z} /$. |  |  |  |  |
| 29. Key Activities: To differentiate and practice the $/ \mathrm{s} /$ and $/ \mathrm{z} /$ through words that contain that sounds. |  |  |  |  |
| Contents: The teaching of the differences between $/ \mathrm{s} /$ and $/ \mathrm{z} /$. |  |  |  |  |
| 30. Skills/procedures: Reading, writing, listening and speaking. |  | 31. Grammar: Verb te |  | ow the difference /z/ sounds. |
| 33. Assumptions: Understand the difference between the /s/ and /z/ sounds. |  |  |  |  |
| Stages |  | Interaction | 34. Evaluation | 35. IT- <br> Materials- <br> Timing |
| 36. Engage/ Warm-up | The researcher shows some words to students that contain the /s/ and /z/ phonemes; and asks students to pronounce them. Then, she presents the $/ \mathrm{s} /$ and $/ \mathrm{z} /$ and she correct the students' pronunciation. |  | The researcher makes a diagnostic about the previous knowledge that students have when she asks them to pronounce the sounds. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 37. Study / Presentation | The researcher shows to the students a video that explains the differences in articulation between both sounds. After the video she asks them some questions about how to articulate both sounds. Then, two columns of words are projected on the board which contains the /s/ and /z/. |  | The researcher evaluates if the students understood the difference between the two soundsthrough the answers that they share. | - Data projector <br> - PowerPoint <br> - Board |
| 38. Practice | Some words that contain both sounds are projected, so that students have to join the word with the corresponding sound after of pronouncing the word. |  | The teacher pay attention to the students' pronunciation and makes corrections if it is necessary. | - Data projector <br> - PowerPoint <br> - Board |
| 39. Activate/ 15. Production | Some phrases are projected on the board; each one contains both sounds and the students have to pronounce them aloud, being very careful with the pronunciation. |  | The researcher pays attention to the pronunciation of each student and checks if they learned the difference between the two sounds. | - Data projector <br> - PowerPoint <br> - Board |
| 18. Close up/ Wrap-up | The students had to draw a chart in their notebooks and write what were the easiest and most difficult things of the class. |  | According to students' answers the researcher will consider what should be given more emphasis in the next session. | - Board <br> - Marker |


| Class: 9th grade | Date: October 10th | Time: 45 minutes | Sequence: Class $4 / 7$ |
| :--- | :--- | :--- | :--- |


| 40. Main Objective: Students will be able to recognize, differentiate and apply the / $\theta / \mathrm{and} / \mathrm{\delta} /$. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 41. Subsidiary aims: Students will be able to practice the $/ \mathrm{s} / \mathrm{and} / \mathrm{z} /$. |  |  |  |  |
| 42. Key Activities: To differentiate and practice the $/ \theta /$ and/ $/$ /through words that contain that ssounds. |  |  |  |  |
| Contents: Theteaching of the differences between / $/$ /and/ $/$ / . |  |  |  |  |
| 43. Skills/procedures: Reading, writing, listening and speaking. |  | 44. Grammar: Verb ten | 45. Functi betwee | now the difference d/ð/ |
| 46. Assumptions: Understand the difference between the / $\theta / \mathrm{and} / \mathrm{\delta} /$. |  |  |  |  |
| Stages |  | Interaction | 47. Evaluation | 48. IT- MaterialsTiming |
| 49. Engage/ Warm-up | The researcher shows some words to students that contain the $/ \theta /$ and $/ \delta /$; and asks students to pronounce them. Then, she presents the $/ \theta /$ and $/ \delta /$ corrects students' pronunciation. |  | The researcher makes a diagnostic about the previous knowledge that students have when she asks them to pronounce the sounds. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 50. Study/ Presentation | The researcher shows to the students a video that explains the differences in articulation between both sounds. After the video she asks them some questions about how to articulate both sounds. Then, two columns of words are projected on the board which contains the $/ \theta /$ and $/ \mathrm{J} /$ /. |  | The researcher evaluates if the students understood the difference between the two sounds through the answers that they share. | - Data projector <br> - PowerPoint <br> - Board |
| 51. Practice | Some words that contain both sounds are projected, so that students have to join the word with the corresponding sound after of pronouncing the word. |  | The teacher pay attention to the students' pronunciation and makes corrections if it is necessary. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 52. Activate/ 15. Production | Some ph each one students being ver | re projected on the board; ains both sounds and the o pronounce them aloud, ful with the pronunciation. | The researcher pays attention to the pronunciation of each student and checks if they learned the difference between the two sounds. | - Data projector <br> - PowerPoint <br> - Board |
| 19. Close up/ Wrap-up | The stud notebook and most | d to draw a chart in their write what were the easiest ult things of the class. | According to students' answers the researcher will consider what should be given more emphasis in the next session. | - Board <br> - Marker |


| Class: 9th grade | Date: October 10th | Time: 45 minutes | Sequence: Class 5/7 |
| :--- | :--- | :--- | :--- |


| 53. Main Objective: Students will be able to recognize, differentiate and apply the /v/ and/f/ sounds. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 54. Subsidiary aims: Students will be able to practice the/v/ and/f/. |  |  |  |  |
| 55. Key Activities: To differentiate and practice the /v/ and/f/through words that contain that sounds. |  |  |  |  |
| Contents: Theteaching of the differences between/v/ and/f/. |  |  |  |  |
| 56. Skills/procedures: Reading, writing, listening and speaking. |  | 57. Grammar: Verb tens | 58. Functi betwee | now the difference d/f/ sounds. |
| 59. Assumptions: Understand the difference between the /v/ and/f/f. |  |  |  |  |
| Stages |  | Interaction | 60. Evaluation | 61. IT- MaterialsTiming |
| 62. Engage/ Warm-up | The researcher shows some words to students that contain the $/ \mathrm{v} /$ and /f/; and asks students to pronounce them. Then, she presents the /v/ and /f/ corrects students' pronunciation. |  | The researcher makes a diagnostic about the previous knowledge that students have when she asks them to pronounce the sound. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 63. Study / Presentation | The researcher shows to the students a video that explains the differences in articulation between both sounds. After the video she asks them some questions about how to articulate both sounds. Then, two columns of words are projected on the board which contains the sound $/ \mathrm{v} / \mathrm{and} / \mathrm{f} /$. |  | The researcher evaluates if the students understood the difference between the two sounds through the answers that they share. | - Data projector <br> - PowerPoint <br> - Board |
| 64. Practice | Some words that contain both sounds are projected, so that students have to join the word with the corresponding sound after of pronouncing the word. |  | The teacher pay attention to the students' pronunciation and makes corrections if it is necessary. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 65. Activate/ 15. Production | Some ph each one students being ver | re projected on the board; ains both sounds and the o pronounce them aloud, ful with the pronunciation. | The researcher pays attention to the pronunciation of each student and checks if they learned the difference between the two sounds. | - Data projector <br> - PowerPoint <br> - Board |
| 20. Close up/ Wrap-up | The stud notebook and most | d to draw a chart in their write what were the easiest ult things of the class. | According to students' answers the researcher will consider what should be given more emphasis in the next session. | - Board <br> - Marker |


| Class: 9th grade | Date: October 25th | Time: 45 minutes | Sequence: Class 6/7 |
| :--- | :--- | :--- | :--- |



| Class: 9th grade | Date: October 25th | Time: 45 minutes | Sequence: Class 7/7 |
| :--- | :--- | :--- | :--- |


| 79. Main Objective: Students will be able to read a whole text with the phonemes already seen. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 80. Subsidiary aims: Students will be able to review and practice the seven phonemes already seen. |  |  |  |  |
| 81. Key Activities: To practice the seven phonemesthrough words and a text that contain those sounds. |  |  |  |  |
| Contents: Review the seven phonemes. |  |  |  |  |
| 82. Skills/procedures: Reading, writing, listening and speaking. |  | 83. Grammar: Verb tense | 84. Function: To know how to articulate the seven phonemes. |  |
| 85. Assumptions: Students handle the pronunciation of each sound. |  |  |  |  |
| Stages | Interaction |  | 86. Evaluation | 87. IT- MaterialsTiming |
| 88. Engage/ Warm-up | The researcher projects on the board the seven sounds seen and asks to the students to say a word for each phoneme. |  | The researcher makes a diagnostic about the previous knowledge that students have about the seven sounds. | - Data projector <br> - PowerPoint <br> - Board <br> - Marker |
| 89. Study / Presentation | On one side of the board the researcher projects all the sounds already seen, on the other side there are words that contains those sounds. According to that, the researcher makes a review joining the sounds with the words at the time that students give the answers. |  | The researcher evaluates if the students remember and apply the contents according to the answers that they give. | - Data projector <br> - PowerPoint <br> - Board |
| 90. Practice | The researcher shows to students the text that will be used in the post-test; then they read it line by line with the researcher. |  | The researcher listens to the students' pronunciation and corrects it with them. | - Board <br> - Marker |
| 91. Activate/ 15 . Production | Students record the researcher's voice by reading the text and it is given time to listen to the recording and practice pronunciation; then they have to read the full text to the researcher. |  | The researcher listens to the pronunciation of each student correcting the last details. | - Board <br> - Marker |
| 22. Close up/ Wrap-up | Students have time to clarify their doubts. |  | According to the doubts that the students have, the researcher evaluates how prepared the students feel. | - Board <br> - Marker |


[^0]:    "Teaching of pronunciation is vital for L2 learners in the context of interactions between both non-native speakers and also with native speakers in general.

