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LISTENING SKILLS THROUGH RHYMES AND MINIMAL PAIRS WITH CONSONANT SOUNDS

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Quito, Agosto 2022

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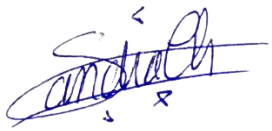

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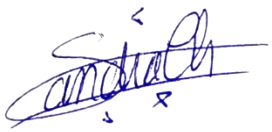

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LISTENING SKILLS THROUGH RHYMES AND MINIMAL PAIRS WITH CONSONANT SOUNDS

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September, 2022

ABSTRACT

This research presents a proposal based on Listening Skills through Rhymes and Minimal Pairs with Consonant Sounds aimed at students of four to five years old in a kindergarten at “San Francisco de Sales High School” located in Quito, during the 2021-2022 school year. The methodology used in the development of the proposal is of an experimental type, because the General Objective is to develop pre-listening skills through the use of minimal pairs with consonant sounds and rhymes. This tool will show the differences of learning through rhymes, as well as the use of minimal pairs and their identification through IPA symbols and sounds in children. To extract the information, the survey technique was applied to a population of 7 teachers and 7 kindergarten students. The application of the survey presents the knowledge about minimal pairs and phonological awareness that teachers in the institution have, as well as the necessities to focus on certain minimal pairs with consonant sounds that are difficult to distinguish in higher levels. Likewise, it allowed us to see the development of students´ listening skills and pronunciation.

Keywords: Listening Skills, Phonological Awareness, Minimal Pairs, IPA, Rhymes

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HABILIDADES DE ESCUCHA TEMPRANA A TRAVÉS DE RIMAS Y PARE MÍNIMOS CON SONIDOS CONSONÁNTICOS

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Septiembre, 2022

RESUMEN

Esta investigación presenta una propuesta basada en las habilidades de escucha activa a través de rimas y pares mínimos con sonidos consonánticos enfocados en estudiantes de cuatro a cinco años en el nivel del jardín de la "Unidad Educativa San Francisco de Sales" localizada en Quito, durante el año escolar 2021-2022. La metodología usada para desarrollar la propuesta es de tipo experimental, debido a que su objetivo general es el desarrollo de las habilidades de escucha temprana a través del uso de pares mínimo con sonidos consonánticos y rimas. Esta herramienta mostrará las diferencias de aprender a través de rimas, así como del uso de pares mínimos y su identificación en los símbolos de IPA y sonidos en niños. Para extraer la información, la técnica de encuesta fue aplicada a una población de 7 profesores y 7 estudiantes del jardín. La aplicación de la encuesta presenta el conocimiento de los pares mínimos y conciencia fonológica que los profesores de la institución tienen, así como las necesidades centradas en ciertos pares mínimos con sonidos consonánticos que son difíciles de distinguir en niveles altos. De igual manera, este nos permite ver el desarrollo de habilidades de escucha y pronunciación.

Palabras clave: Habilidades de escucha, Conciencia fonológica, Pares Mínimos, IPA, Rimas

INTRODUCTION:

The activities applied to pre-listening skills must provide students with a tool to practice and use the second language taking into account the different learners' abilities. The project will provide teachers with a methodology in which they can apply teaching listening through minimal pairs in kindergarten using a natural approach, and multisensory approach. The purpose of the project is to prove that children can identify four pairs of minimal pairs with consonant sounds and use them in their vocabulary. Reinhard, J. (2015) mentioned that teachers should take into consideration musical intelligence to develop auditory perception and linguistic discrimination.

Based on Vygotsky's theory (constructivism learning theory), learners possess previous knowledge allowing the addition of creativity in students meanwhile Gardner, H. (2013) mentioned that multiple intelligences are for curriculum development planning instructions, selection of courses (activities), and relation of the assessment strategies. If Vygotsky's theory is mixed with Gardner's, both would work perfectly to develop children's performance. In addition, according to McGilray (2005), minimal pairs are used to show two different sounds in contrast, so in this case, the teacher should consider the strengths and weaknesses of each student to choose the material to improve students´ communicative skills.

PROBLEM STATEMENT:

Listening is an unlimited resource for gaining information for children between 2 to 4 years old. Even if they cannot move around by themselves, children are very observant and pick up on everything happening around them. Children mix information due to the lack of pronunciation increasing misunderstanding in their communication. For that reason, it is essential to focus on Listening skills and pronunciation so that children develop their skills and get a better understanding and communicate easily. Listening should cover listening comprehension, comprehension and evaluation skills through education (Dondu and Perhan, 2020; Sever, 2000: 11).

Mendelsohn (1998) mentioned that minimal pairs are a useful technique to help children in the learning process of concepts of sounds and pronunciation. For that

reason, students should be taught through imperative activities like rhymes as commands included in games to develop metacognitive knowledge and raise learners' consciousness of listening processes to practice the pronunciation of more than two varieties which provide meaningful contexts to facilitate comprehension. Dondu & Perıhan (2020) mentioned that in several studies have been revealed that listening is a skill that can be developed instead of being naturally developing (Doğan, 2007; Yıldırım, 2007; Yılmaz, 2007; Aras, 2004, Kaplan, 2004; Koç, 2003; Brown, 1954).

Developing children's listening skills used to be easier; however, nowadays children are poor listeners. Firstly, they do not have an environment to engage themselves and practice the language. Secondly, teachers do not have enough time to practice listening skills in their classrooms. Thirdly, listening must be analyzed and developed before practicing writing and reading skills. According to Dondu & Perhan (2020) Robinshaw in 2007 mentioned that if children do not improve their listening skills, it becomes impossible for the teacher to find and create a good environment and support material to fully fill all children's necessities. It is necessary to know the children´s level.

It is important to consider the development of listening skills through minimal pairs because minimal sounds are easy to get confused with, during the learning process it is important to make students identify the sounds and use them to have effective communication and understanding in the future. The benefits to be achieved are identification between four minimal pairs; developing pronunciation and communication through the use of interactive videos with rhymes based on multiple intelligences (music), and increasing students' vocabulary. The ones to be used in the present project are four consonant minimal pairs used in interactive rhymes.

1.2 Research Objectives

1.2.1 General Objective

To create a set of language learning activities to develop early listening skills through rhymes and minimal pairs with consonant sounds.

1.2.2 Specific Objectives

- Diagnose student's pre-listening skills through a test
- Design a set of interactive activities to develop pre-listening skills
- Present the results of the applied activities.

1.3 **Research justification**

Pre-listening skills in general are seen as the principal skill to develop concentration and memory. Talking about early ages, pre-listening skills improves the vocabulary adding clarity to communication and thoughts. For that reason, the present project, based on pre-listening skills using minimal pairs with consonants, will be applied in kindergarten. The teacher uses short films, flashcards, and motor skills (fine and gross) activities based on four minimal pairs in a group of fifteen students of 4 and 5 years old. The results to be obtained are based on the development of listening skills as well as the identification of different sounds between the minimal pairs selected and the acquisition of language with clear communication.

The present project describes the mix of different approaches as natural with multisensory, and phonological awareness to show how the application of those provides positive development on students' second language acquisition by focusing on listening skills. In addition, music also takes place with rhythm. Listening is a receptive skill, the improvement of early literacy skills in young learners is necessary so that students avoid issues with their language, and feel bored and unfamiliar with sounds, words, and structure in general (Krashen & Terrell,1983). Krashen mentioned that people acquire something when they understand what people say or what they read as in Comprehensible input (CI) allowing the production of the second language.

THEORETICAL FRAMEWORK

2.1. **Introduction**

The English curriculum of Ecuador has changed over the last few years. It is applying new methodologies. During those years, English has taken an important role in education; although, at an early age, the acquisition of an L2 is not as important as in higher levels. Treating communication and language difficulties from an early age help

to prevent potential problems in a L2 influencing the L1. In early literacy, identifying the sound of letters and recognizing one from another have become a primary objective in pre-schools; however, to develop communicative skills it is important to practice letter sound fluency, and letter-sound knowledge using methodologies and strategies according to the age of students. This literature review examines the acquisition of a second language and phonological awareness, the pronunciation and listening, the International Phonetic Alphabet (IPA) and its sounds influencing communicative skills, ICT as a means of information and communication technology to support, and the website 2.0 to rich web use and application.

2.1.1. **Second Language Acquisition and Phonological Awareness**

The acquisition of a language bases its term on the development of language in children considering the vocabulary, pronunciation, and grammar of the first language; meanwhile, second language acquisition refers to the process of learning a foreign language. Krashen (1983) stablished his idea through the natural approach, in which any person could learn through the environment they interacted with. Subsequently, this process takes part in phonological awareness of nature. In 2020, Friedrichsen mentioned that the understanding of how second language acquisitions occur assist educators in helping students so that they both could success in the process of learning.

During the years, researchers had found and build different theories of how humans are able to acquire a second language. The theories can be different from each other as well as have similarities in their hypothesis. The objective of all theories is to support help to the educator in order to develop teaching strategies with students in a second language. In addition, those theories were developed in order to provide an explanation as to how the process of learning a second language takes place.

Gitsaki in 1998 mentioned that theories can be classified according to their criteria. In this article, she said that theories can be “deductive” and “inductive”. The theories with deductive approaches have concepts and the principal idea is assumed to be true without proof. On the other hand, the base of the inductive classification is empirical; empirical facts. In 1995, McBride- Chang mentioned that phonological

awareness was hypothesized to be composed by short-term memory, speech perception, and IQ. Furthermore, those three reveal that contribute variance to phonological awareness development. In addition, speech perception is fundamental or essential for the improvement of phonological awareness.

2.1.1. ***Constructivism and natural approach***

It is important to analyze Vygotsky and Krashen theories which have a social SLA viewpoint. The natural acquisition of a second language should be through experiences (Vygotsky, 1978). The social constructivism approach provides students with rich experiences as previous learning at an early age. The experiences and memories that children build according to what they see and hear most of the time are limited due to age and little mobility. Krashen (1983) in the natural approach mentions that the best place where students can learn through their environment and the activities they do daily is through a comprehensible Input (CI). A study made by Abukhattala (2013) based on the natural approach was favorable because students focus on acquiring everyday language, employing engaging activities, and enhancing the importance of input for language learning. Evidently, the natural approach and social constructivism could be enough. Alternatively, the multisensory approach is also reflected during learning at an early age.

2.1.2 ***Multiple Intelligences***

Gardner established multiple intelligences taking into consideration music as one of them. Gardener (2013) said that musical intelligence involves skills such as performing, compounding, and the appreciation of musical patterns. Music is a way to express yourself naturally. According to Gardner in 2013 "musical intelligence runs in an almost structural parallel to linguistic intelligence". To affirm this, Gardner takes into consideration the difficulties that teachers have at school. All seven multiple intelligences are very useful in class; however, music at an early age helps children with their communicative skills. Musical intelligence not just includes music, but also rhymes poems, intonation, and pronunciation. In addition, children grow up with the influence of their environment modifying the way they think and make decisions because of their curiosity and active involvement in their learning.

Neumann et al. (2012) mentioned in their research that visual, auditory, kinesthetic and tactile information can play an essential role in learning new skills in combination with musical intelligence. Two elements that can be used are tactile and kinesthetic by tracing, drawing, or manipulating letters with fingers, or any other type of material. Jill Teachworth (2009) conducted research in which can be seen that children who struggle to learn word decoding and encoding had a good development when associating the phonemes with alphabetic symbols, segmenting and blending phonemes in words, and manipulating them in different ways (seen also in ASHA, 2001).

Moreover, Roger (2004) mentioned in his book that defining music theory is impossible; in addition, he mentioned that many theories came from tacit or hidden assumptions instead of concepts. He disagreed with teachers that constantly hesitate to use assignments or include discussions that involved aesthetic issues. Barrett (2015) in her research proved that students can feel embarrassed when using music, however; music played an important role to develop students' communication skills through learning practice. Also, she said that both music and language require the use of complex cognitive and motor processes (Vaneechoutte & Skoyles 1998). In her research also can be mentioned that Mora (2000) said that a chorus or other part of a song is repeated in such a way that reinforces language based on memorization. As a clear example of Roger's idea of music definition and use, Adkins (2000) connected music with learning language to develop oral proficiency in her students, this way, they can acquire vocabulary and grammar concepts from them. She took advantage of children memorizing songs and fingerplays in nursery schools.

2.1.3 ***Phonological Awareness***

Furthermore, the nature of "L2 phonological awareness consists of mainly proceduralized, non-verbalizable knowledge, and manifests itself in different phonological domains (suprasegmental, phonotactic and segmental)" (Kivistö-de Souza, 2016). Hanna (2016) mentioned that L2 phonological awareness contains declarative and proceduralized knowledge. Both aspects can be seen in the production of the L2 in verbalization and provision of pronunciation rules, and L2 speech performance and its patterns. Nevertheless, L2 phonological awareness is mainly based on the second one, proceduralized knowledge. She proposed that the development of L2 phonological

awareness is based on the initial stage of the interface position and then consolidated by the memory representations. Not only Kivistö, but also Pullen & Justice (2003) agree that preschool years are critical to the development of early literacy skills. They mentioned that children become aware of oral phonological compositions. “Children gradually move from shallow to more heightened levels of awareness, with awareness of the phoneme representing the most sophisticated level of skill” (Pullen & Justice, 2003; Stanovich, 1992).

2.2.1. **Pronunciation and Listening Skills**

Pronunciation, as well as listening, sometimes is neglected in the process of language teaching. To teach pronunciation there are several teaching approaches to pronunciation which refers to the input that the teacher provides in a verbal way to children as instructions and demonstrations, animated the input like videos of articulatory motions. "Intonation is the melody or music of language. It refers to the way the voice rises and falls as we speak"(David Crystal, 2010). Suprasegmental features help to see the features as intonation, rhythm, phrasing, articulatory setting and voice quality, and also, the macro prosodic features influence the articulation of individual phonemes in context, as the effect of stress and coordination, and another phoneme variant (Derwing, Munro, & Wiebe, 1998).

2.3.1. **Minimal Pairs**

Burgess & Lonigan (1998) said that letter names and letter-sound knowledge predict subsequent literacy skills with phonological awareness and oral language. One of the linguistic approaches based on phonological awareness emphasizes minimal pairs. Minimal pairs emerge based on the number of new sounds, features, and types. "A minimal pair is a set of words that differ by single phoneme, whereby that difference is enough to signal a change in meaning" (Trubetzkoy, 1969). Based on early literacy, listening is one of the skills to be developed at an early age to read and write. In preschool and kindergarten, students with poor knowledge of letter names and sounds are more likely to struggle with learning (Gallagher, Fritch, & Snowling, 2000).

Furthermore, Barlow and Gierut (2002) mentioned that according to the place, manner and voice, there were labial, coronal, and dorsal ways to produce the sounds which are called nonmajor class. Those features can be classified in two groups: obstruent and sonorant. All phonemes can vary according to the contractive differences taking in consideration the features that make up them.

Figure 1 English Phonemes

		Labial			Coronal			Dorsal	
		Bilabial	**Labio dental**	**Inter dental**	**Alveolar**	**Palato alveolar**	**Palatal**	**Velar**	**Glotta**
Obstruent	Stop	p b			t d			k g	
	Fricative		f v	θð	s z	ʃ ʒ			
	Affricate					tʃ dʒ			
Sonorant	Nasal	m			n			ŋ	
	Liquid				l		r		
	Glide	w					j		h

Taken from MINIMAL PAIR APPROACHES Barlow and Gierut (2002)

2.4.1 **IPA**

International Phonetic Alphabet or IPA is an academic standard that uses a set of symbols to represent sounds in the human spoken language. There are 107 letters, 52 diacritics, and four prosodic marks. This review will focus on four pulmonic consonants (Phonetics, 2022.).

Figure 2 International PhoneticAlphabet.org 2020. IPA Chart with Sounds.

PULMONIC CONSONANTS

	BILABIAL		LABIO-DENTAL		DENTAL		ALVEOLAR		LABIO-DENTAL		DENTAL		ALVEOLAR		POST-ALVEOLAR	
PLOSIVE	p	b					t	d					t	d		
NASAL		m		ɱ				n		ɱ				n		
TRILL		ʙ						r						r		
TAP OR FLAP								ɾ						ɾ		
FRICATIVE	ɸ	β	f	v	θ	ð	s	z	f	v	θ	ð	s	z	ʃ	ʒ
LATERAL FRICATIVE							ɬ	ɮ					ɬ	ɮ		
APPROXIMANT				ʋ				ɹ		ʋ				ɹ		
LATERAL APPROXIMANT								l						l		

(Taken from International Phonetic Alphabet.org- Studying Language of the World)

Pulmonic consonants are the consonants produced when air is expelled from the lungs when articulated. Those consonants are classified according to the articulation, and manner. Fuchs & Birkholz (2019) explained the manner of articulation in pulmonic sound as stops, nasals, trills, taps and flaps, fricatives and approximants as in the IPA classification. The consideration of pulmonic consonants is essential for the research; for instance, the position of the tongue and the aspiration of air.

Figure 3 Stops and Top: Tongue-Palatal

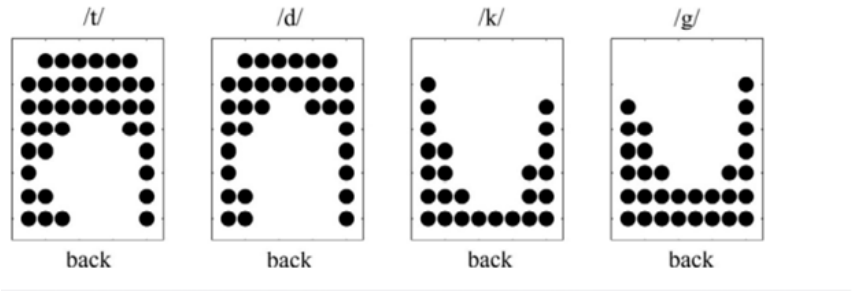


Figure taken from Fuchs & Birkholz (2019) Phonetics of Consonants

Figure 4 Nasal - From left to right

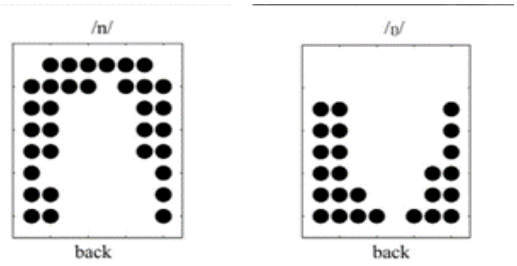


Figure taken from Fuchs & Birkholz (2019) Phonetics of Consonants

Figure 5Alveolar trill /r/

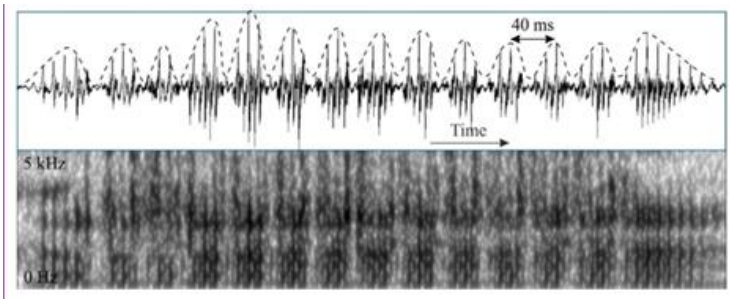


Figure taken from Fuchs & Birkholz (2019) Phonetics of Consonants

Figure 6 Voiceless Fricatives /f, s, ʃ, ç/

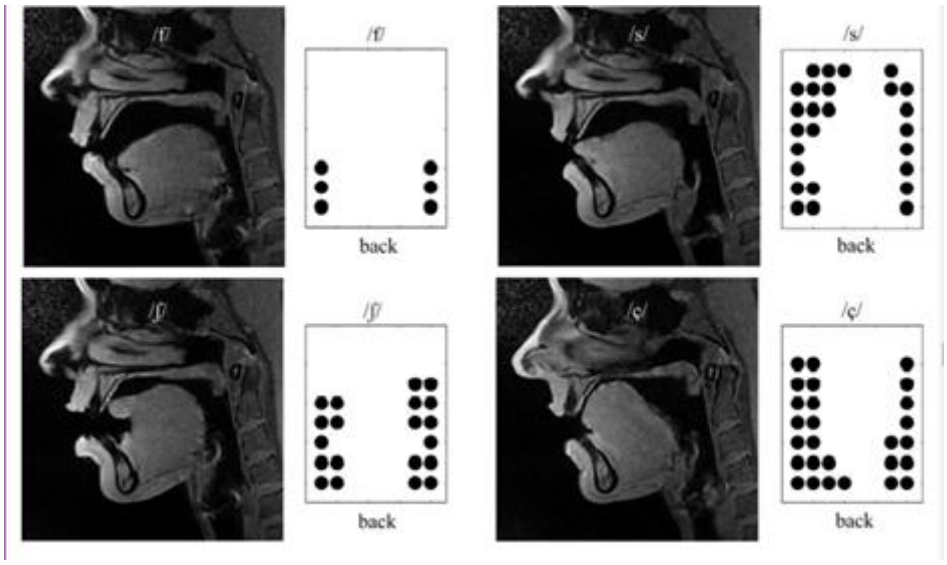


Figure taken from Fuchs & Birkholz (2019) Phonetics of Consonants

Figure 7 Frequent central and lateral Approximant

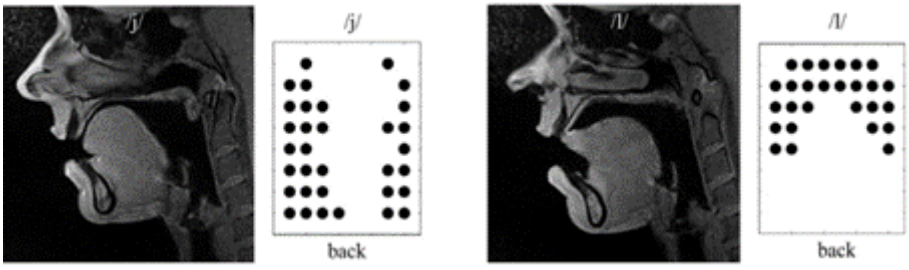


Figure taken from Fuchs & Birkholz (2019) Phonetics of Consonants

2.5.1. **ICT in education**

As well as a natural approach and multiple intelligences, ICT in education has become a tool to improve teaching and learning. ICT stands for "information and communication technology" and is considered a catalyst for change in teaching methods, learning approaches, communication, and so on. Tinto (2002) mentioned that several technologies are used in combination. For instance, a radio internet can use a radio broadcast and internet technologies. In addition, she mentioned that based on technology education has been changing. Therefore, e-learning, blended learning, and learning-centered are new ways to learn thanks to technology.

At the moment, Tinto (2002) said that it engages students in the learning process through motivation. Linways Team (2017) added the idea of getting better teaching methods and keeping pace with the latest developments. ICT allows teachers and students' access to information like videos, music, pictures, and so on. Early ages feel very engaged with technology that at the moment teachers need technology to share songs and pronunciation. Children need to push teachers to continue learning and applying and sharing their knowledge through technology. Based on the above, well-designed teacher training programs are essential to know what the necessities for students and teachers are, and take advantage of this tool to develop the acquisition of L2.

2.5.1.1 ***Filmora (music sounds, pictures, animation)***

One of the applications that is used to create videos and edit is Filmora. The program is an application developed by Wondershare. It includes products to be used by beginners and intermediates. This useful application allows people to add pictures, animation, sounds, and record the music or sounds in a real timeline. It also allows editing the content or imported videos. It is a free application; however, it is necessary to subscribe and pay to use special animations.

2.5.1.2 ***PRAAT:***

PRAAT is a free program that analyzes and reconstructs the acoustic speech signals or analyzes the speech in Phonetics. It was created by Paul Boersma and David Weenink in Phonetic Sciences at the University of Amsterdam. They called PRAAT: doing phonetics by computer. It allows the manipulation of speech and creation of high-quality pictures of the articles and thesis. PRAAT was designed to solve different needs with an easy interface (Goldman, 2004:1; EdUHK, 2022).

PRAAT contains a view to select the contents of the window as spectrogram, intensity, pitch, and so on. The editor window allows you to process and measure the sound files. It is important to have knowledge about the different acoustic information, as well as to make the research more detailed.

2.5.1.2.1. Acoustic information:

- Pitch: Extract information, the pitch is shown in a bright blue solid line, and the value at the cursor position is indicated on the right hand outside of the panel in a dark blue font (Styler, 2012:6; Adapted from EdUHK 2022).
- Intensity: It is shown in a yellow solid line and the value at the cursor position is indicated on the right-hand side of the panel in a bright green font (Styler, 2012:6; Adapted from EdUHK 2022).
- Formant: The formants are shown in red dotted lines (Styler, 2012:6; Adapted from EdUHK 2022).
- Pulses: Those are indicated in the top panel with vertical blue solid lines. (Styler, 2012:6; Adapted from EdUHK 2022)

*2.5.1.3****. FLIP***

FLIP is an application that can be downloaded on the cellphone or used on the computer. It helps to record videos. The app has several tools for teachers. For instance, teachers can build a classroom or study groups where students can express their ideas and learn from others. Teachers can provide feedback. The app is familiar and engages students because it has stickers, backgrounds, frames, and avatars.

RESEARCH DESIGN AND METHODS

3.1. Type of Research

This is experimental research which contains a Mix methodology with qualitative and quantitative data. There are several techniques used to collect information. There are several techniques which can be weak and need the complementation of others, for that reason, it was decided to use at least four techniques as survey, pre-test and post-test, PRAAT program, and observation worksheet. In addition, the experimental research represents a sample that represents part of the whole universe.

3.2. Design of the research

The methodology used to carry out the following research is a mixed approach. There will be using qualitative and quantitative methods to collect data. The qualitative material is an observation sheet, while the quantitative material will be a survey. The quantitative data will be represented through percentages or numbers on graphs according to the results. The Qualitative data will help to explain through words the findings and observations done during the class. This is experimental research contains quantitative and qualitative samples tested on a real classroom of participants from 4 to 5 years old. All samples were prepared, tested, and collected by the researcher.

3.3. Unit Analysis

The participants were a group of 7 students of 4 to 5 years old. There were 5 students who are 5 years old already and 2 students who are 4 years old. Spanish is their native language. There were 6 Ecuadorian students and 1 student whose parents are Cuban. Three of those students were shy so that do not like to talk a lot or use a high tone of voice. Their behavior and interaction depend on with whom they were threat, and the activities they like to do.

Despite their age, they had certain difficulties pronouncing some sounds or saying the whole word. There was a student who did not like to talk and most of the time spoke with a low tone. There was another student who did not feel confident sharing what she used to think. A student did not pronounce the /d/ sound and

confused it /t/. Another student had difficulties pronouncing /d/ sound. The other students do not have any pronunciation problems; however, all students involved in this project did not use English at home and their level of English is A1.1.

The researcher used cover names to students. Each of them chose a card with a number and a looney-tunes cartoon: Bugs-bunny, Lola, Piolin, Silvester, Corre Caminos, Wolf, and Duck.

3.3.1 ***Unit of Analysis***

Early literacy skills recognition of words through pictures

3.3. 2 ***Unit of observation***

Repetition of the rhymes individually

3.4. Techniques and Instruments of Collecting Data

3.4.1. ***Instruments***

Survey: The survey is conducted to determine the teachers' perception about the topic and four groups of minimal pairs to create rhymes. This is applied to a group of eleven teachers who are part of the Language Department of the Institution. This was done virtually through the application called Google forms. It will take from 5 to 8 minutes to fill out the survey. See Annex 1.

Observation sheet: This was a checklist with statements related to the material used in class, and students. The checklist contained 10 statements divided into two parts. The first part was based on the materials used in class, and the second part was based on students' pronunciation and interaction with the new material. The checklist was filled by the researcher after checking the classes recorded. The observation sheet was done in a normal classroom. In addition, students were given a number and cartoon character to conduct the observation. The length of the observation was 40 minutes, a class hour. The observation was done five times in a week. The second section of the observation sheet was referred to the students´ performance and development during the last day of the week in order to evaluate their changes. At the end of the research, the results were compared and presented through statistical graphs.

PRAAT: This software offers a wide range of standard and non-standard procedures as spectrographic analysis, articulatory synthesis, and neutral network. In this research, the software will measure the pronunciation of the students before and after the application of the research. As well as the pre-test and post-test, the audio of students saying the words will be recorded. The audio will be around one to two minutes in length per student. The student's responses will be analyzed through the use of PRAAT as part of an acoustic evaluation of speech and voice samples to compare and see the differences between pre-test and post-test.

Pre-test and Post-test: The test is done to diagnose students' pre-listening skills. The test contained pictures related to the minimal pairs selected. There are eight questions, two questions for each minimal pair. The test makes reference to sounds and check if students can identify those sounds through pictures. The length of the test is estimated between ten to fifteen minutes. At the end of the research, the results of the pre-test and post-test is compared and represented by a graph. Check Annex 3.

3.4.2. ***Material***

Rhymes: There was one rhyme for each minimal pair selected from the teachers' survey. In total there were three rhymes of minimal pairs. The rhymes had an instrumental rhythm. The rhymes were played in class. Students used the rhymes to practice their pronunciation. The length of the videos were about 40 seconds to 1 minute. This was done in a regular classroom.

Videos: The videos are designed to create an interactive environment in class. The videos were used to develop activities based on pre-listening skills. The videos were made based on the results of the teachers' survey about minimal pairs. There were three videos, one video of each minimal pair selected. The length of the videos were about 40 seconds to 1 minute.

Games: The games designed to apply the research are based on jumping rope, puzzles, dance-movements, and cards. The first rhyme has a puzzle with the sounds and

pictures. The second rhyme contains a sequence of movements. Students look at the picture and clap their hands indistinctly. The third rhyme has cards of each word and sound. Children have to identify the sound and classify the pictures. Each game has a different length; however, it can be applied from 5 to 10 minutes.

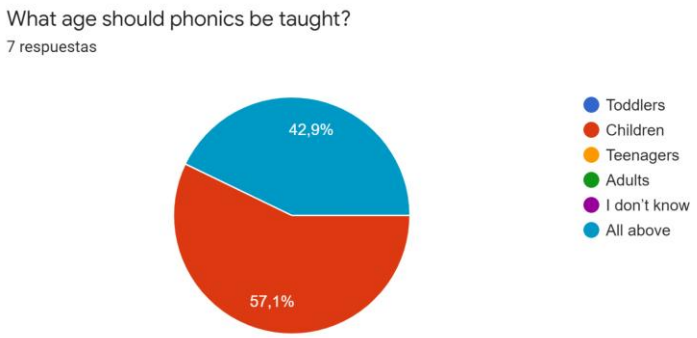
PRESENTATION AND DATA ANALYSIS

The following data was made based on parents´ consent. The researcher planned a meeting with the participants´ parents in order to get the consent signed. Due to the participants being underage, their parents had to be informed about the research. There were seven parents who signed the consent, so that the research was applied to the seven participants about 4 and 5 years old.

4.1. Survey applied to the Language Department of "San Francisco de Sales High School"

The research started on April 20th, 2022. It began with the survey which was conducted by the researcher on a group of eleven teachers from the Language Department. The survey has thirteen questions that were answered in a period of five to eight minutes. After conducting the survey, there were seven teachers who participated. The results showed that in the first part of Phonological Awareness based on teachers´ knowledge, 57,1% said that phonics should be taught to children, the other 42,9% said all of the above.

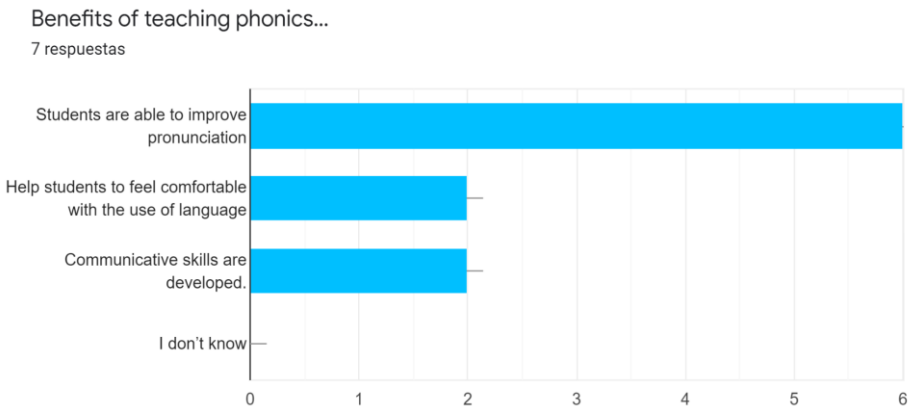
Figure 8 Age considered should phonics be taught



Done by Chulde (2022)

The second question refers to the benefits of teaching phonics. 85,7% said that teaching phonics helps students to improve pronunciation. 28,6 % think that phonics helps students to feel comfortable with the use of language. And the other 28,6 % say that communication skills are developed.

Figure 9 Benefits of teaching phonics



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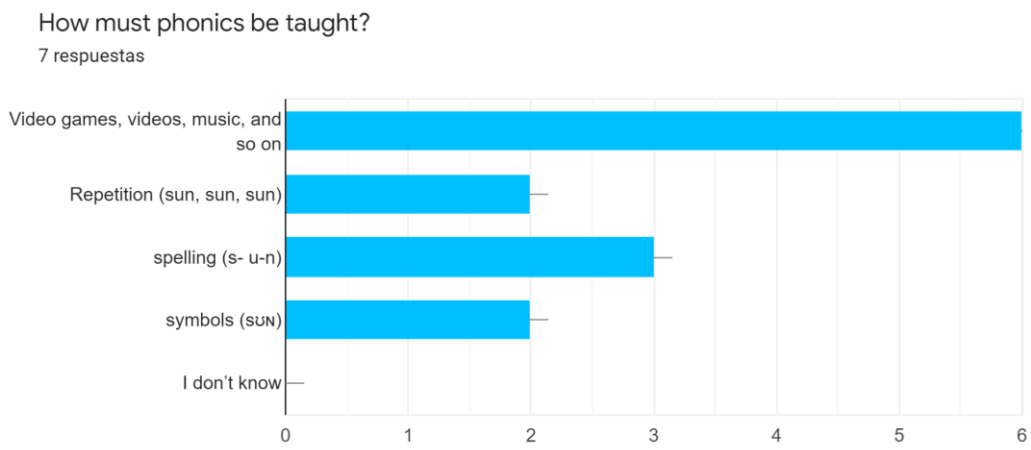
The third question makes references to the methodology used to teach phonics. 85,7 % , six teachers, selected the first option which says that video games, videos, music, and so on are good to teach phonics. 28,6 %, two teachers, selected repetition. 42,9 %, three teachers, chose spelling. And finally, 28,6 % chose teaching phonics through IPA symbols.

Figure 10 How much phonics be taught?



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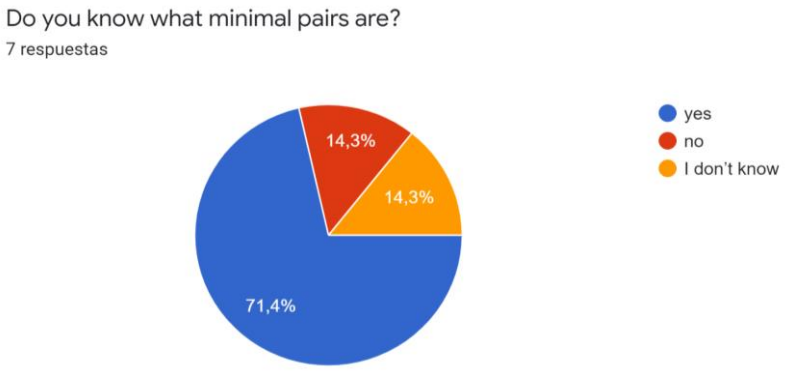
4.2. **Analysis and Interpretation of survey to teachers**

The second section of the survey was referred to Phonological Awareness and Minimal Pairs. The first question makes references to the teachers´ perception on knowledge of minimal pairs. As can be seen in the figure 71, 4% says “yes”, the 14, 3% mentioned that “no”, and the last 14, 3% says “I don't know”

Figure 11 Do you know what minimal pairs are?



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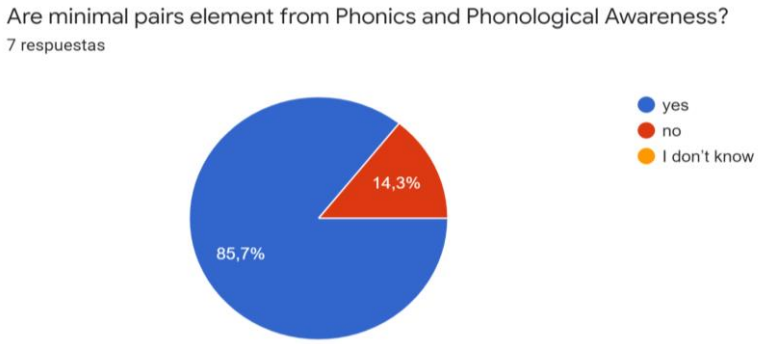
The second question refers to minimal pairs as elements of phonological awareness. 85, 7% selected “yes” as the biggest part of the digraph. However, 14, 3% say “no”. Due to the answer obtained, it can be seen that teachers in the institution have an idea of phonics and its elements. On the other hand, there are at least two teachers who need to be trained about phonics.

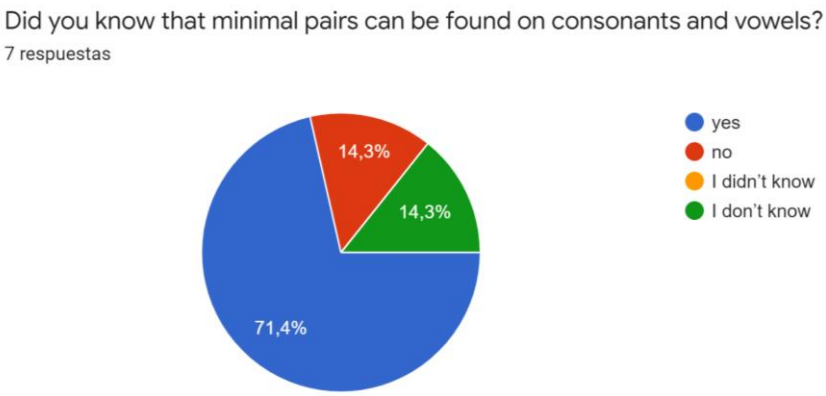
Figure 12 Results about minimal pairs as elements of Phonics and Phonological Awareness



Done by Chulde (2022)

Next question refers to classification of minimal pairs. It is important to consider that minimal pairs are divided in consonants and vowels; in addition, consonant sounds have three more derivations which refers to initial and final sound. At the Institution, 71, 4 % selected “yes” as representation of their knowledge about vowels and consonants in minimal pairs. 14, 3% definitely selected “no” as a negative answer, and the other 14, 3% sys “I don´t know”.

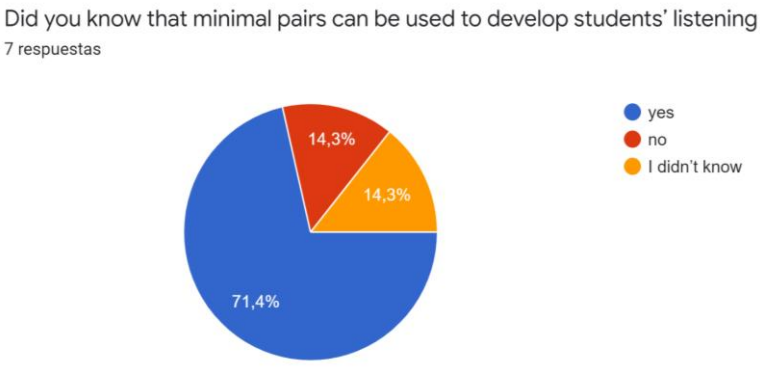
Figure 13 Results of minimal pairs with consonant sounds and vowels



Done by Chulde (2022)

The following questions refers to Listening skills and minimal pairs of consonant sounds. In this question 71, 4 % selected “yes” which provides the idea that teachers have knowledge about listening skills and its relation with minimal pairs to develop this essential skill. However, 14, 3% said “no”, and 14, 3 % said “I don´t know”. The 28, 6% represented 2 people.

Figure 14 Results of minimal pairs to develop student´s listening skills

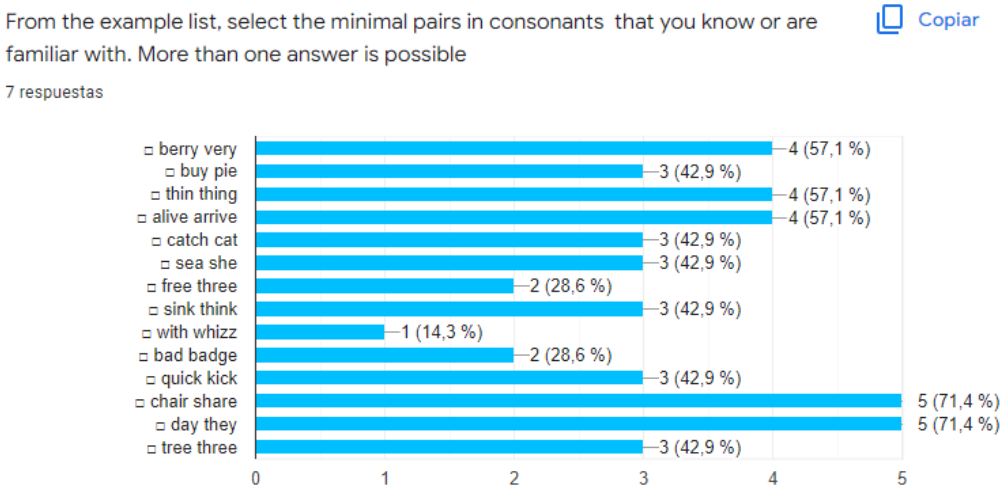


Done by Chulde (2022)

The next question provides the teachers with several examples of minimal pairs of consonant sounds. Teachers had to select the ones that they were familiar with. The representation by percentage can be seen in the figure 18 where 71,4% represents 5 people, 57,1% is four people, 42,9% is 3, 28,6% is two, and 14,3% is one. Those results

are based on 100% of each example. 71, 4% chose *chair-share* and the other 71, 4% selected *day-they*. 57, 1% selected *berry-very*, other 57, 1% chose *thin-thing*, and the other 57, 1% selected *alive- arrive.* 42,9% selected *buy-pie*, other 42,9% selected *catch-cat*, other 42,9% selected *see-she*, another selected *sink- think*, and the other selected *quick-kick.* The 28, 6% selected *free-three*, and *bad- badge* representing another 28, 6%. Finally, one person representing 14, 3% selected *with-whizz*

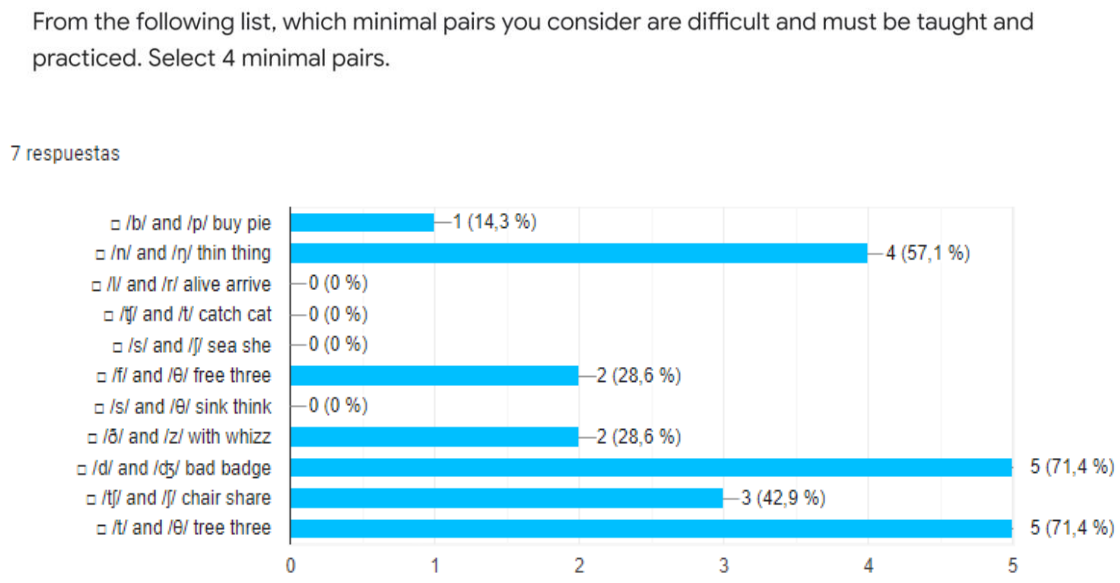
Figure 15 Results of selection of minimal pairs known



Done by Chulde (2022)

After selecting the minimal pairs, they are familiar with, teachers had a list form which they had to select 4 minimal pairs that they consider are difficult and must be taught. As can be seen in Figure 19, there are 11 minimal pairs, four of them were not selected and represented 0% the lowest value. /b/ & /p/ represents 14, 3%, /f/ & /θ/ represents 28, 6%, and the other 28, 6% represents /ð/ & /z/. /tʃ/ & /ʃ/ with 42, 9%. On the other hand, two minimal pairs with 71, 4% represent the highest percentage */d/ & /ʤ/* and */t/ & /θ/*. Followed by one minimal pair with 57, 1% */n/ & /ŋ/.*

Figure 16 Results of minimal pairs to be selected to apply the research



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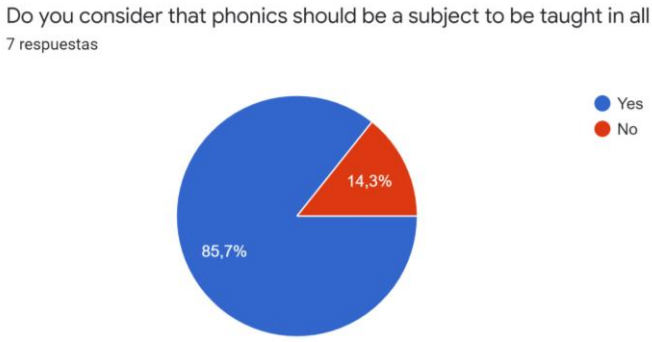
The last section of the survey is related to teachers´ opinion about teaching phonics at all levels and they had to justify their answer. A teacher with 14, 3% chose "*no*" justifying that "Because by speaking and listening a language can be learned. However, it depends on the student's process or learning level." On the other hand, 85, 7% say "*yes*" justifying that:

- Familiarize students with the right way to pronounce sounds in English.
- It's important since everyone might know the correct pronunciation.
- Pronunciation is essential not only as a kid, but also as an adult.
- Phonics is part of the study of any language, specifically in English because it allows the student to recognize the different sounds that vowels and consonants have in the language.
- This will make the language understandable and easy to learn. Because of the correct pronunciation of sounds and not to misunderstand messages.
- Because by means of its communications skills will be improved.

Figure 17 Results of teachers' opinion about teaching phonics in other levels



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4.2.1 Minimal pairs selected to apply the research

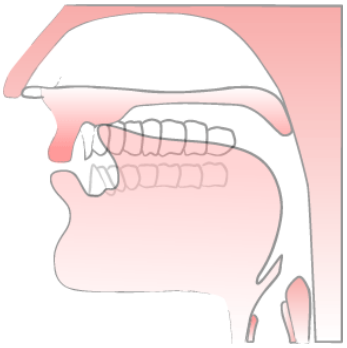
To select the minimal pairs to be used in this research, question number 6 of the second section of the survey. Based on the results, the minimal pairs with the highest percentage were selected to be applied in the research as */d/ & /ʤ/, /t/ & /θ/,* and */n/ & /ŋ/.*

a. /d/ & /ʤ/:

The /d/ sound is spelled with <d>, <de> or <dd>. The / ʤ / sound is usually spelled with <ge>, <dge> or <j>. It can be seen in ed- inflection or -age derivations.

- /d/ is pronounced by the tip of the tongue pressed against the tooth while the sides of the tongue press against the upper side teeth; then, release it (*Seattle Learning Academy 2016).*

Figure 18 Articulation of /d/ phoneme



(Figure taken from English Club- American English Pronunciation, 2022)

- ʤ is a voiced phoneme and occasionally as an allophone. To produce the sound, the vocal cord has to vibrate, so that the tongue is placed behind the ridge at the front of the top of the mouth. Then, it pushes air forward out of your mouth (English Phonetics, 2022)

Figure 19 The articulation of /ʤ/ phonemes

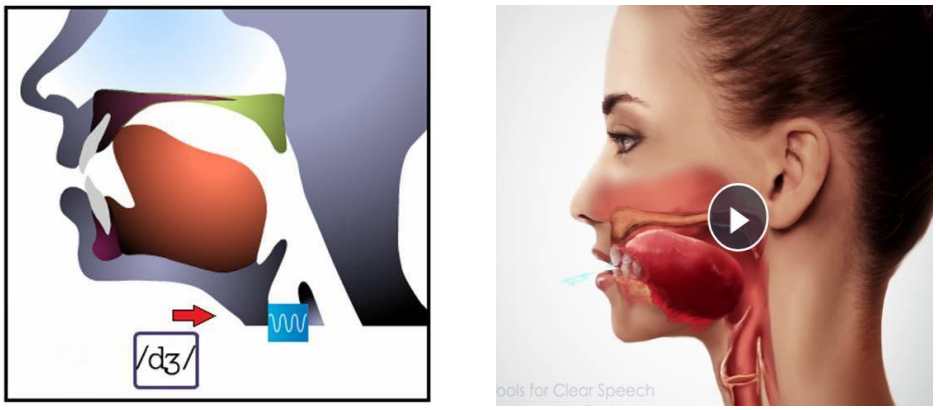


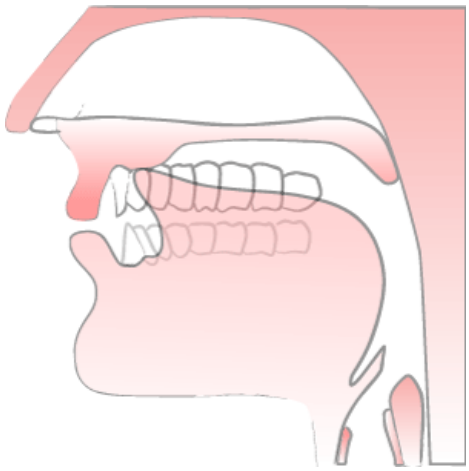
Figure taken from Tools for Clear Speech, 2022

b. /t/ & /θ/:

- /θ/ is a dental consonant and fricative while /t/ is an alveolar consonant and a stop consonant.

- /t/ is pronounced by clicking the tongue behind the top teeth. It has more air released.

Figure 20 Articulation of /t/ phoneme



Taken from Pronuncian, 2016

- /θ/ is pronounced by placing the tongue between the teeth and a smooth release of air without moving the tongue (English Club, 2022)

Figure 21 Articulation and mouth position to pronounce the /θ/ phoneme

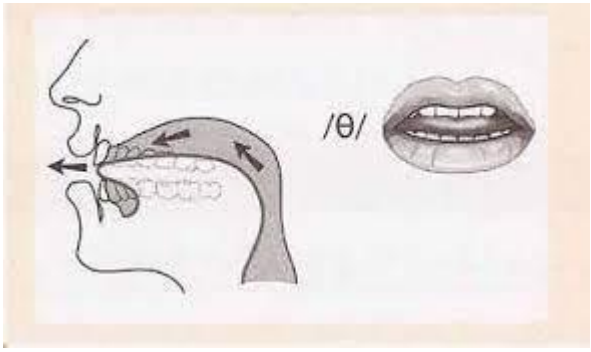


Figure taken from KARAKAġ & SÖNMEZ, 2011; *and adapted from Baker and Goldstein, 2008*

c. /n/ & /ŋ/:

/n/ is a alveolar nasal and is defined by the position of the tongue, it is voiced due to the use of vocal chords. */ŋ/* is called velar nasal and made through the nose rather than the mouth. It is voiced due to the used of vocal cords

- */n/* is produced by placing the tongue against the ridge behind the top teeth and air comes out of the nose. (English Language Club, 2021)

Figure 22 Articulation of /n/ phoneme

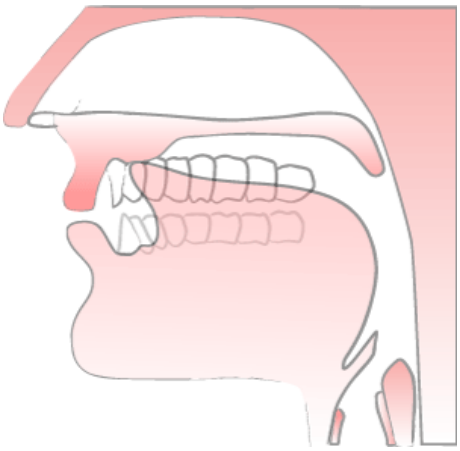


Figure taken from Pronuncian - Seattle Learning Academy, 2016

- */ŋ/* is produced by the back of the tongue which must be curl up against the back of the mouth. It blocks the throat and voice out through the nose. (Jodell, Jade , 2021)

Figure 23 Articulation of /ŋ/ phoneme

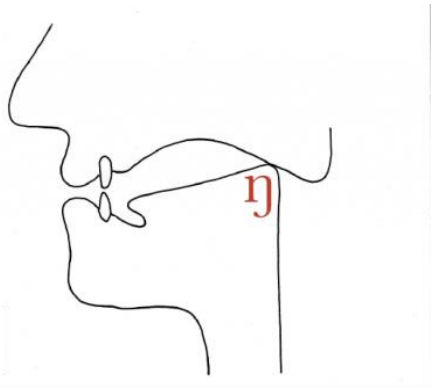


Figure taken and adapted from Pronunciation Studio Ltd. 2008-2022

4.3 Analysis of PRE-TEST

The Pre-test was conducted in a normal classroom. The teacher explained to the participants the objective of the research and its reason. Children understood and collaborated with the activities. The participants needed to know the objective and reasons at that age. It is important to mention that the pre-test and post-test was the same and both contained illustrations because of students' age and abilities to be tested. Upon finishing the pre-test, the researcher analyzed and used a chart to represent the results based on the test.

The objective of the pretest was to diagnose students´ pre-listening skills through a test. The pretest was divided into three parts. The researcher began with pre-activities: the date, and how they feel. Then, the researcher introduced herself and asked students to select one of the cards on the table. The cards contained a cartoon picture in order to name students as those cartoons instead of using their names. The researcher indicated the objective and instructions. Firstly, participants look at the pictures while the teacher says the rhyme. Then, they have to listen carefully and point to the correct picture. Finally, they pronounce the word out loud. These instructions were given to the participants through examples. See Annex 1.

4.3.1. Results of pre-test

Participants were in a classroom with a projector and computer. The materials used were pencil, colors, pictures, videos, and pre-test. The following tables contain the results of the first part of the pre- test. The chart contains the number of participants and the phonemes. The phonemes were divided into “yes” and “no” according to the participants´ performance during the pre-test.

In table 2, the 57% do not identify the /t/ phoneme while 43% do recognize the phoneme through pictures. It is important to mention that 43% is the highest result in knowledge about phonemes in the pre-test. The following results mentions that the participants do not relate any phonemes with picture-words as in / θ/ Phoneme. 29% in /n/, / θ/, and /d/ phonemes recognize the phoneme. On the other hand, 71% do not recognize the phoneme nor the picture. In addition, the /ʤ/ Phoneme is represented in

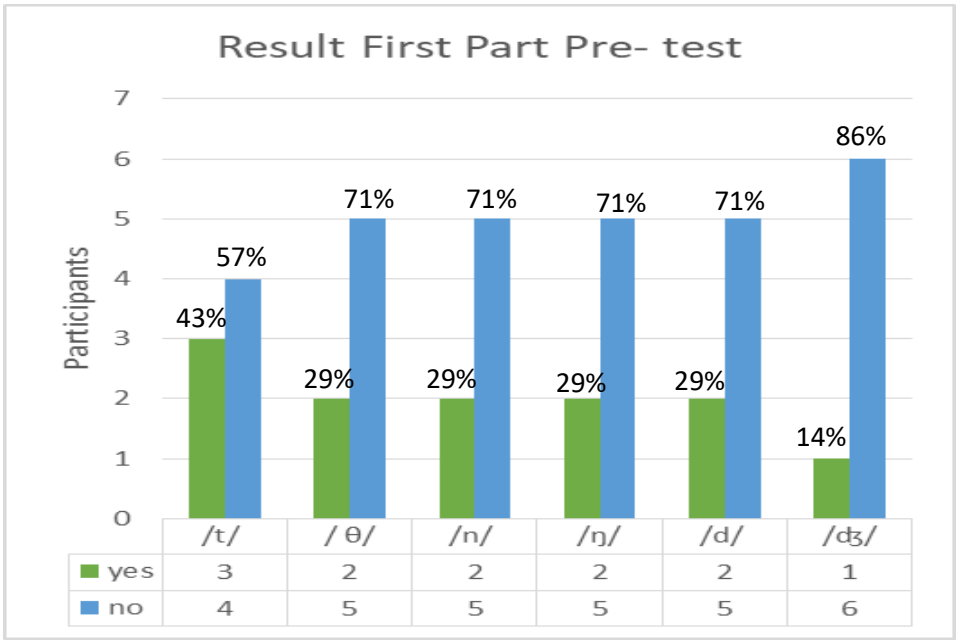
14% as being recognized while the 86% of the participants do not recognize the phoneme. Seen on figures 26 to 32.

Table 1Results of Pre- Test

Instructions:	Look at the pictures. The teacher will say a rhyme, listen carefully and point to the correct picture.											
Sounds	/t/		/ θ/		/n/		/ŋ/		/d/		/ʤ/	
Participant	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**
1	1			1		1		1		1	1	
2		1		1		1		1	1			1
3	1			1	1			1		1		1
4		1	1		1			1		1		1
5	1			1		1	1			1		1
6		1		1		1	1			1		1
7		1	1			1		1	1			1
Total:	3	4	2	5	2	5	2	5	2	5	1	6

Sandra Valentina Chulde Cabrera- May, 2022

Table 2 Results of First Part of Pre-Test



Done by Chulde (2022)

The second part of the pretest was related to the pronunciation of words that contain the phonemes. The seven participants were exposed to words with */d/ & /ʤ/, /t/ & /θ/*, and */n/ & /ŋ/*. In the tables 3 and 4, there were represented how many students were able to pronounce the phonemes. The 71% was able to pronounce the /t/ phoneme

while the 29% did not produce the sounds. On the other hand, the 0% of participants did not produce the /θ/ phoneme. It was difficult for them. /n/ phoneme is a daily phoneme in their L1 for that reason the 100% was able to pronounce the words correctly. However, the /ŋ/ phoneme is one that they are not used to listen to and the 29% achieved the sound successfully. Finally, /d/ phoneme as the other phonemes was easy for some of the participants 71% while the 0% did not pronounce the /ʤ / phoneme correctly.

Table 3 Results of pre-test pronunciation

Instructions:	Then, pronounce the words out loud											
Sounds	/t/		/ θ/		/n/		/ŋ/		/d/		/ʤ/	
Participant	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**	**yes**	**no**
1	1			1	1			1		1		1
2		1		1	1		1			1		1
3	1			1	1			1	1			1
4		1		1	1		1			1		1
5		1		1	1			1	1			1
6		1		1	1			1		1		1
7		1		1	1			1		1		1
Total:	2	5	0	7	7	0	2	5	2	5	0	7

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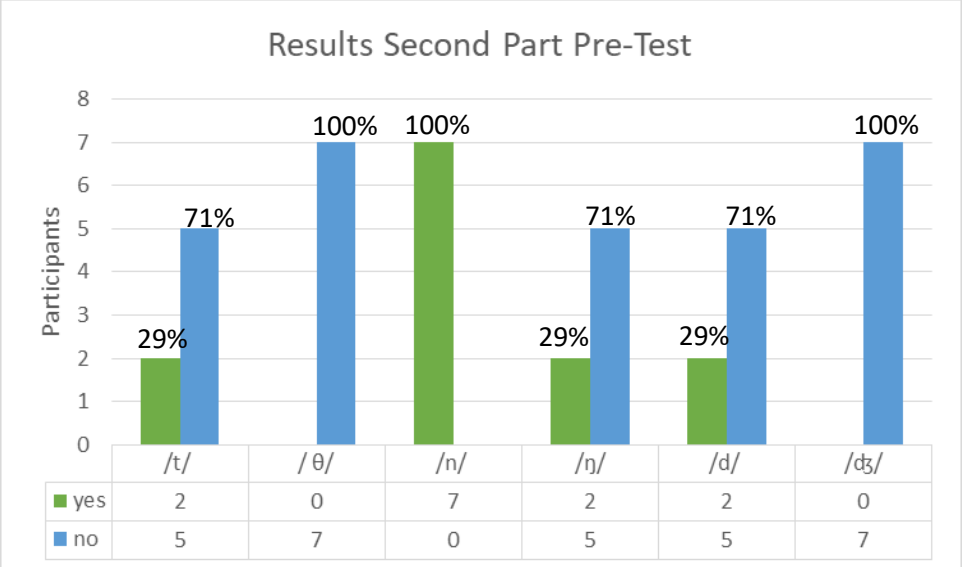
Table 4 Results of Second part of the Post Test



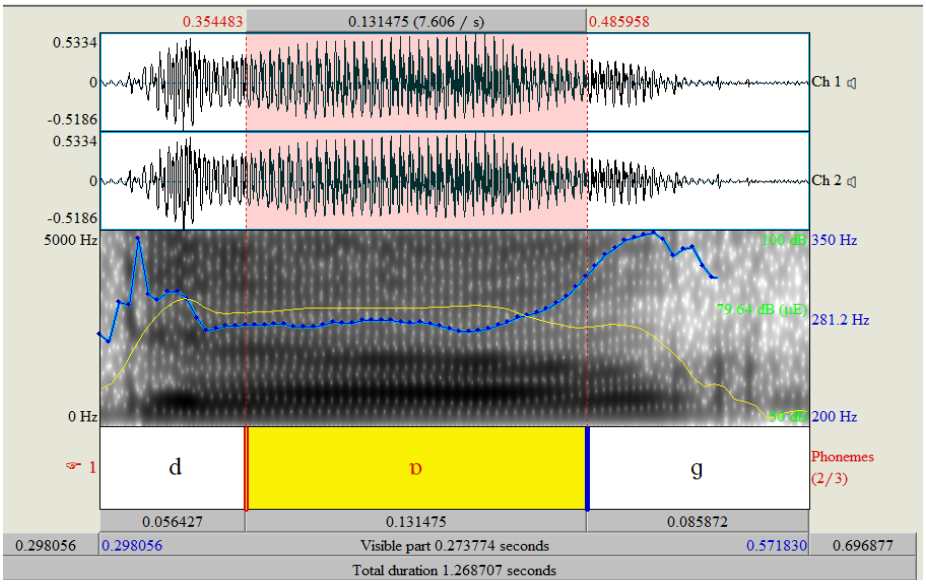
Don by Chulde (2022)

4.3.2. PRAAT Analysis during pre-test

To proceed, the researcher collected audios recorder by all participants. The participants had to listen to the word pronunciation and repeat after it. The words used in the analysis were: dog /dɒg/, jug /ʤʌg/, boat /bəʊt/, fourth /fɔːrθ/, gone /gɑːn/, gong /gɑːŋ/. The figures shown below contain the spectrum, length of sounds or phonemes, pitch from 200 to 350, intensity 0 to 5000 Hz, and script analysis of the pronunciation of the words mentioned before. It is important to mention that the analysis presented was based on the participant audios and one of each participant was presented.

In *figure 24. Analysis of /d / phoneme on the dog word*. It could be seen the intensity, and pitch. This graphic contains three phonemes /d/, /ɒ/, and /g/ the length of the pronunciation went from 0.298056 to 0.696877 seconds. The length of /d/ phoneme 0.055597. /ɒ/ phoneme has 0.131475 seconds, and /g/ phoneme contains 0.085872. Intensity is identified in yellow. There highest point is 3064 Hz in /d/ phoneme, and going down from 3044 to 2610Hz ending the /ɒ/ phoneme. Even though the pronunciation of /g/ phoneme had a low intensity of 2562 Hz to 1116 Hz, it goes down. On the other hand, talking about pitch, it was high at the beginning with 337.2Hz /d/ phoneme. During /ɒ/ phoneme pronunciation, it maintained a pitch of 277.4Hz during 0.076739 (13.031/s) and low to 272.6 Hz. In addition, the pitch goes up to 347-7 Hz in 0511484 second. The spectrum there makes reference to the vibration of the phoneme.

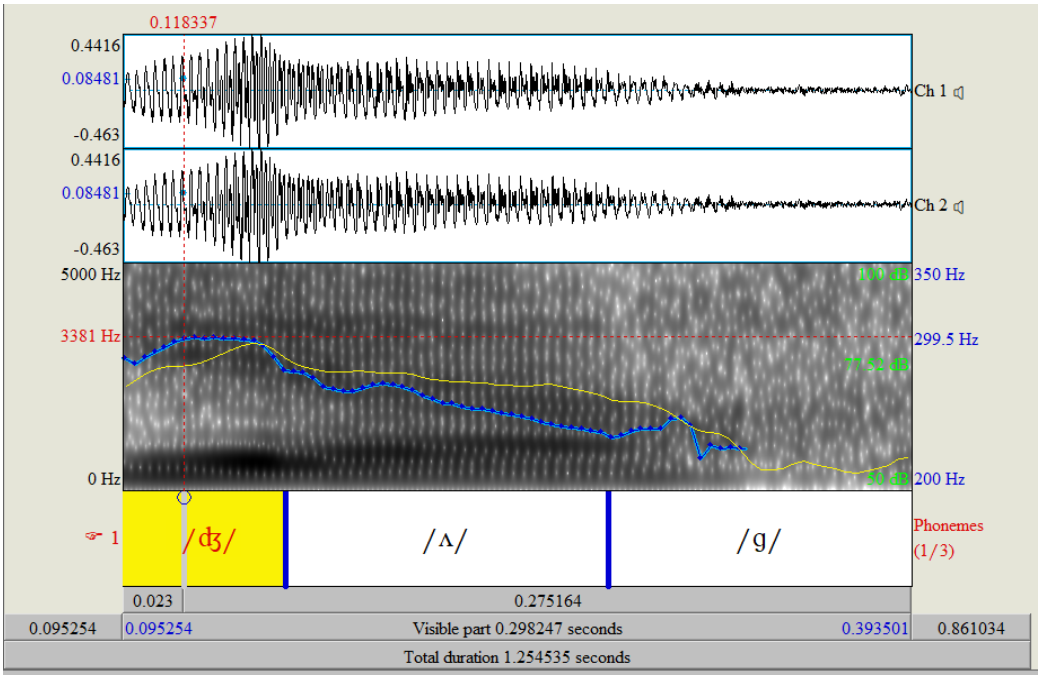
Figure 24 Analysis of /d/ phoneme on dog



Chulde (2022)

In the *figure 25 Analysis of* /ʤ / phoneme on the *jug* word, the /ʤ / phoneme has a 0.061451 seconds length, /ʌ/ 0.122165 seconds length, and /g/ 0.114631 seconds length. The highest level of pitch is 299 Hz during /ʤ / phoneme until 0.146914 seconds, after that, the pitch goes down. /ʌ/ phoneme began with 279 Hz to 237.4 Hz. During this length the pitch goes down until the beginning of /g/ phoneme which has four pitches. The first is low 234.9 Hz, then goes up to 247.9 Hz, and finally goes down 221.9 Hz. In addition, the intensity was similar to the pitch. It had 82.19dB as the highest point in /ʤ / pronunciation. The 77.14 dB goes down to 69.92 dB during /ʌ/ phoneme. The /g/ phoneme from 69.7 dB goes down to 51.79 dB over 100 dB. As a result, this phoneme was easy to pronounce; however, the intensity in the sound is very strong instead of soft.

Figure 25 Analysis of /ʤ / phoneme on jug

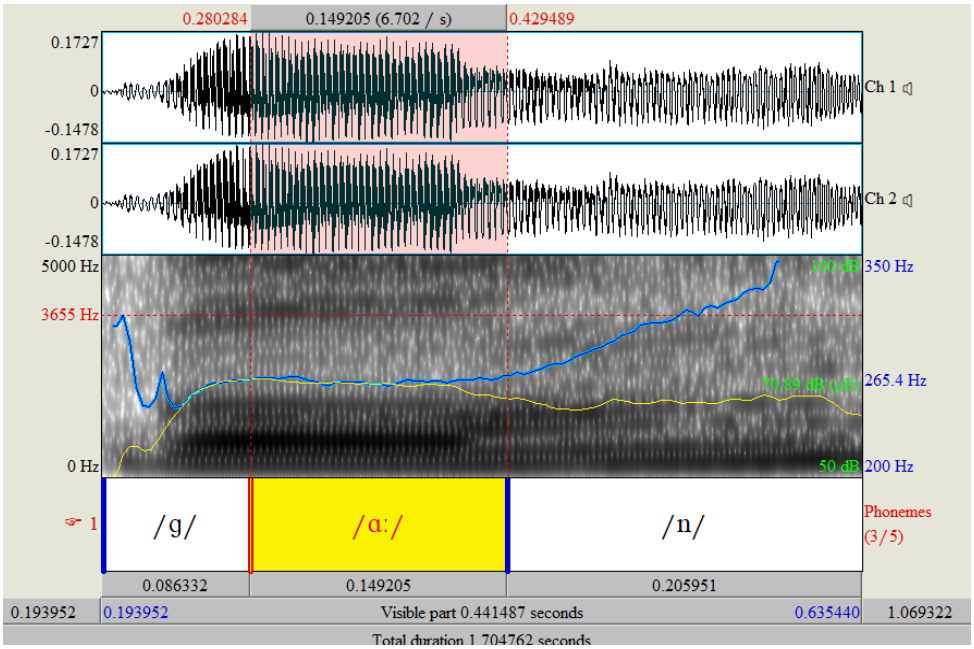


Chulde (2022)

/n/ phoneme was easy to pronounce as well as to identify. The visible part in the figure 41 is 0.441487 seconds. In the *figure* 26 *Analysis /n/ phoneme through PRAAT* is visible the emphasis in the pitch of /g/ phoneme in the word *gone.* It has a 308.9 Hz and

down to 248.3 Hz in the same second. On the other hand, /ɑː/ phoneme has a stable pitch of 266.9 Hz during 0.149205 seconds. In addition, /g/ and /ɑː/ phonemes is visible a dark color which refers to the vibration. /n/ phoneme goes up from 269.8Hz to the highest point 345.2 Hz. The intensity of the sounds goes from 50 dB to 71.53 dB forming almost a straight line; however, this goes down in a zig-zag between 64.56 dB to 68.42 dB.

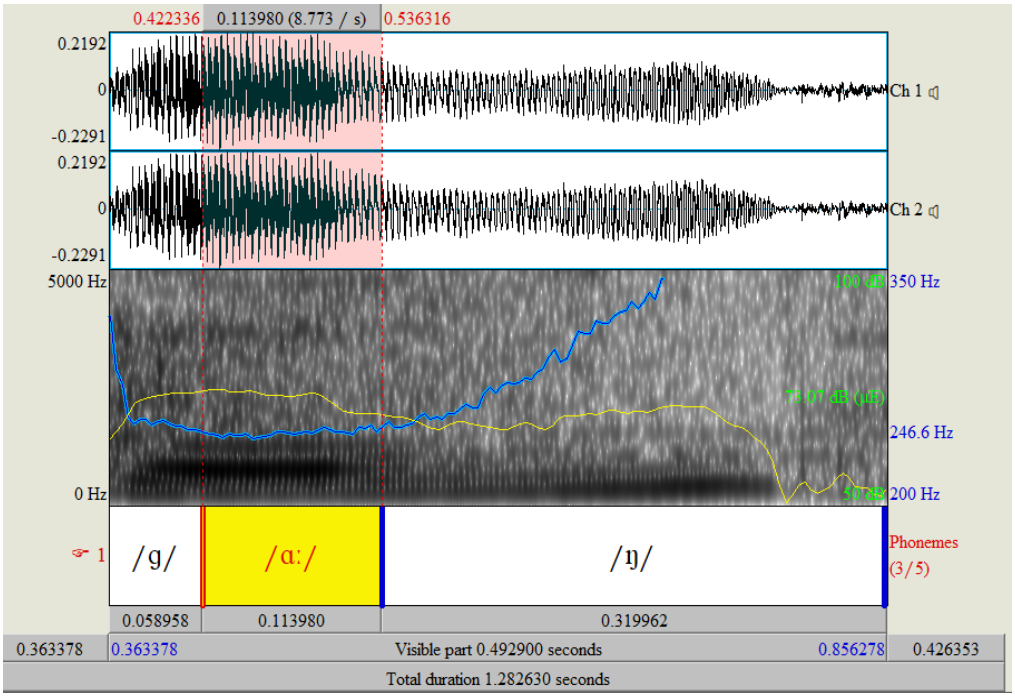
Figure 26 Analysis /n/ phoneme through PRAAT



Done by Chulde (2022)

In the analysis of "*gong"* word was identify all phonemes: /g/; /ɑː/; /ŋ/. This time the phonemes have different lengths of duration. /g/ phoneme has a 0.051 second and the pitch is almost straight in a parameter between 252.4 to 248.2 Hz. The intensity is different and goes higher than the pitch with 73.84 dB. /ɑː/ phoneme has ~~a~~ 0.113980 seconds. During the pronunciation of the phoneme, there is a dark color showing a low vibration. In addition, the pitch is low with 246.6 Hz while the intensity goes to 73.07 dB. Finally, /ŋ/ phoneme has a duration of 0.317515 seconds. The pitch goes to 286.7 Hz and an intensity of 67.63 dB. There can be seen vibration almost ending the pronunciation of /ŋ/. This means that the /ŋ/ phoneme had a final strong ending.

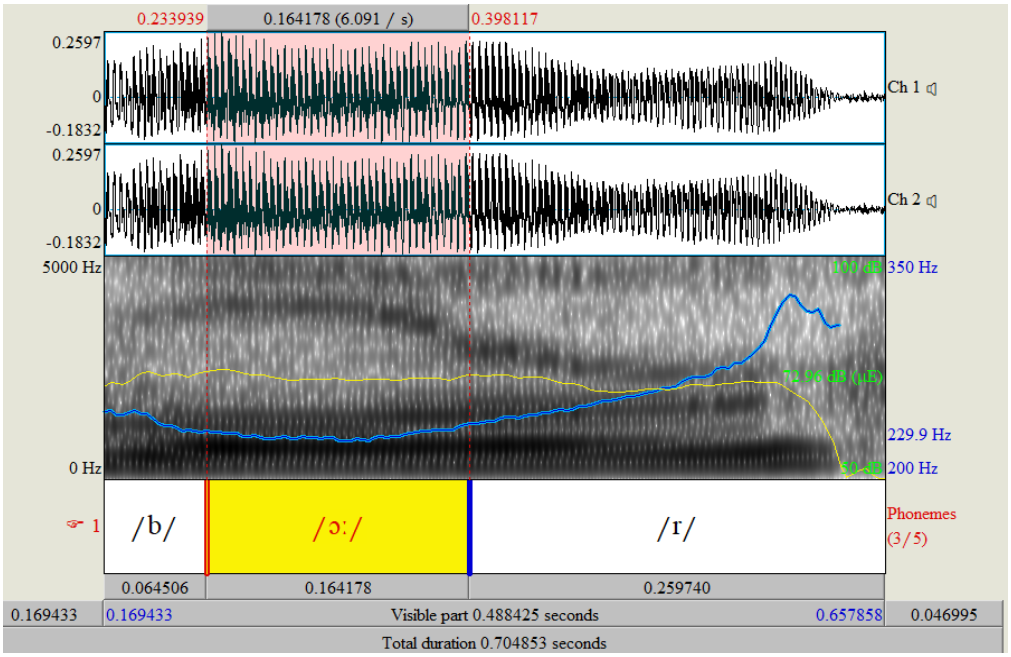
Figure 27 Analysis /ŋ/ phoneme through PRAAT



Chulde (2022)

The following *figure 28* presents the analysis of the /t/ phoneme at the end. Even though the participant tried to say the word, he could not do it. He pronounced the word boar /bɔːr/ instead of boat /bəʊt/. The analysis is based on the participant´s pronunciation. /b/ phoneme has a length of 0.064506 second with a base of 239.5 Hz and 73.14 dB. /ɔː/ has a length of 0.164178 with a low pitch of 229.9 Hz and 72.96 Db both pitch and intensity are almost straight. Finally, /r/ phoneme has 0.259740 seconds. The pitch goes up from 267.9 Hz to 323 Hz while the intensity keeps its level of 70.66 dB.

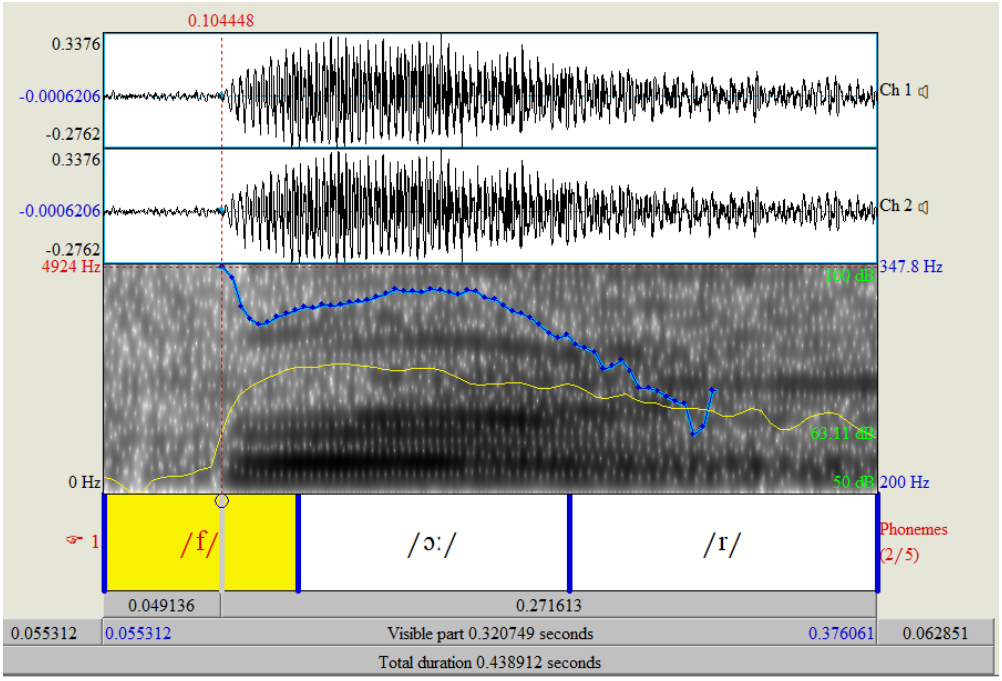
Figure 28 Analysis /t/ phoneme at the end through PRAAT



Chulde (2022)

As the last result, in the *Figure 29 Analysis /θ/ phoneme through PRAAT* can be seen that the phoneme is not identified. The participant did not pronounce the phoneme. He related the ordinal number 4th with cardinal number 4. The visible part contains 0.320291 seconds. /f/ phoneme has 0.079938 seconds with 321.5 Hz and 70.63 dB. /ɔː/ phoneme has 0.112383 seconds with 323.8 Hz and a kind of straight line showing the 76.28 dB. Finally, /r/ phoneme has 0.127520 seconds and its pitch is low 68.86 dB with an intensity of 273.1 Hz. The vibration is low during the connection of /f/ and /ɔː/ phoneme.

Figure 29 Analysis /θ/ phoneme through PRAAT



Chulde (2022)

4.4. Analysis of POST- TEST

4.4.1. Results of POST- TEST

The post test results were successful due to the age of participants and length of the application of the interactive activities allowing to get positive changes. During the last month, two participants become 1 year old and the group ended with 5 participants who are 6 years old, and 1 participant who is 4 years old. The difference in age did not cause any difficulties. All participants were treated the same. Even though there were 7 participants, the post- test was applied to 5 participants. The other two participants did not attend class because of a flu. The following results represent a great progress in the pronunciation, which means that their pre-listening skills develop as was proposed.

During the first part of the post-test, participants were tested on their pre-listening skills. Participants have to listen to and order the pictures. To organize, they have to draw the numbers 1 to 4 over the picture or a small number in a corner. The second part, they have to listen to and color the correct picture. Finally, they recorded an audio repeating the rhyme.

In table 8, the result is 80% of 100%. Two participants were absent because of sickness. 100% of participants achieved the listening part. During the application, they were remembering the rhymes and the rhythm that those had. The test was applied one by one.

Each participant completed the posttest in a different length of time. The researcher prepared the post-test for 15 minutes each; however, they did it in a shorter time from 6 to 10 minutes. Bunny was the first. He did it in 8 minutes. The participant asked the researcher to repeat the first rhyme in order to complete. He also said "me equivoque, ¿puedo corregir?" He corrected the number 1 in the first rhyme. The second rhyme, he listened first and color. He used the color purple, and pink which reflected the strong memory he got after the games and practices. Finally, he had to order the pictures again. This time, he drew by himself the numbers without listening. Once again, he corrected the numbers after listening to the rhyme.

"Lola" completed the test easily. At the beginning, she felt a bit nervous, but after a joke, she became confident. The first rhyme was done perfectly as well as the second rhyme. Just that this time Lola used the colors yellow and pink to color the "*gong*". The last rhyme she organized correctly with little doubts, but correctly.

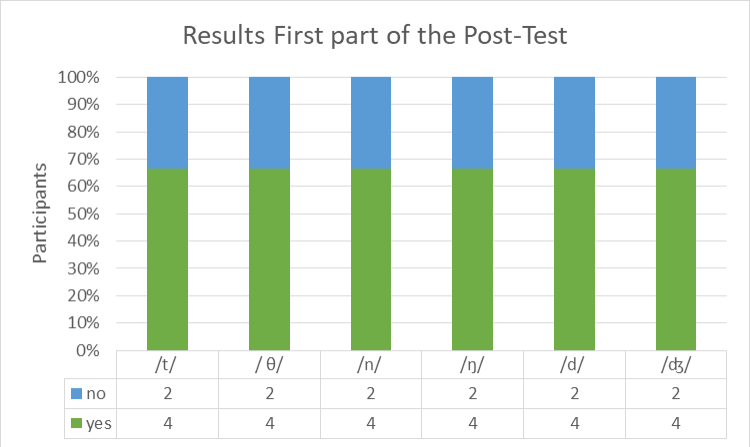
"Piolin" as well as "Lola" completed at first the rhyme number one and two. This time, he as Bunny used the colors pink, and purple as the "gong" in the picture shown during the classes. He remembered all of the colors. Finally in the last rhyme, he got a bit confused, so that when the researcher said the rhyme, he made the movements as in the classroom. It took her 8 minutes.

"Corre- Caminos" got two pictures wrong in the first rhyme. She confused the words "*both"* and *"fourth*" as the rhyme was repeated twice. She identified the mistake and she said them out loud. The second rhyme was perfectly done. She identified the pictures and used the colors of the original flashcards and video. The final rhyme, she organized the pictures perfectly. The test took her 8 minutes.

"Wolf" did it slowly. The rhymes had to do it slower so he could identify the sounds and words. This method was applied in the first rhyme, he said it was too fast and confused himself. The second rhyme in which he had to listen to and color, he

completely correctly and as other participants used the same colors as in the original flashcards. The final rhyme was easier. For a moment, he doubted the words *"dug"*, and "*jug".* At the end, he got the right answer by singing the rhyme.

Table 5 Results of First Part of Post- Test



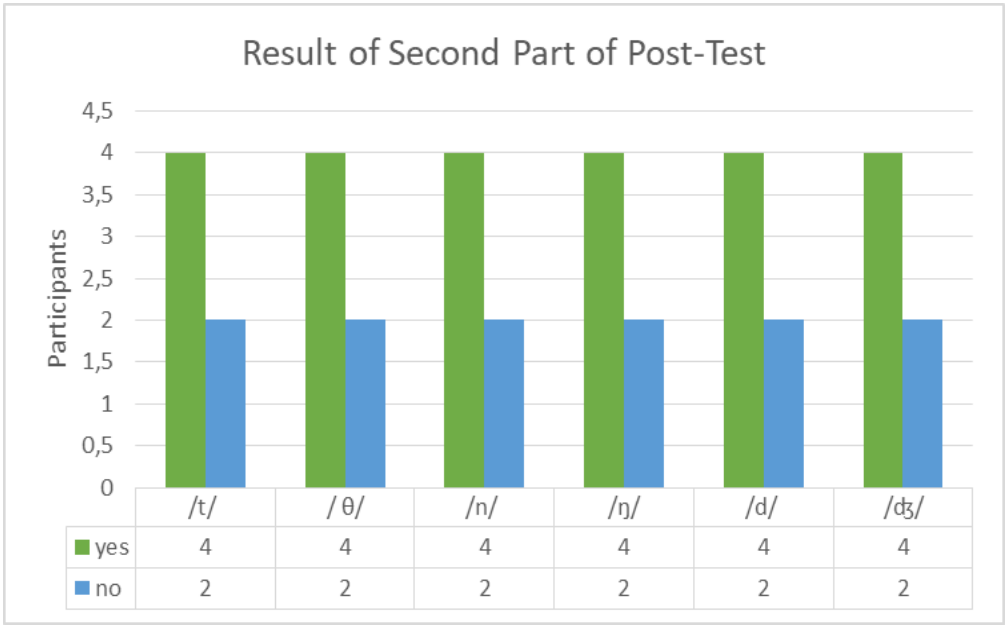
Done by Chulde (2022)

4.4.2 Analysis of PRATT of the POST- TEST

As was mentioned at the beginning of the application, there were two participants who were shy. One of them enjoyed the activities and opened herself to participate and talk out loud. The other, who was not used to talking a lot and most of the time was quiet, recorded the three rhymes completely. Furthermore, the participants showed enthusiasm at the moment of the application of the post-test- which was different at the beginning. They were open to talk and use "*spanglish"* with the words they learned.

Furthermore, Corre-caminos and Wolf were the principal participants that constantly participated. To remind you, Wolf were the participants who did not pronounce the sounds at the end of the words, and Corre-caminos who did not like to talk out loud and used few words. The following figure shows the second part of the Post-test which was applied to 5 participants. 80% of participants completed successfully the pronunciation of rhymes.

Table 6 Results of Second Part of Post- Test

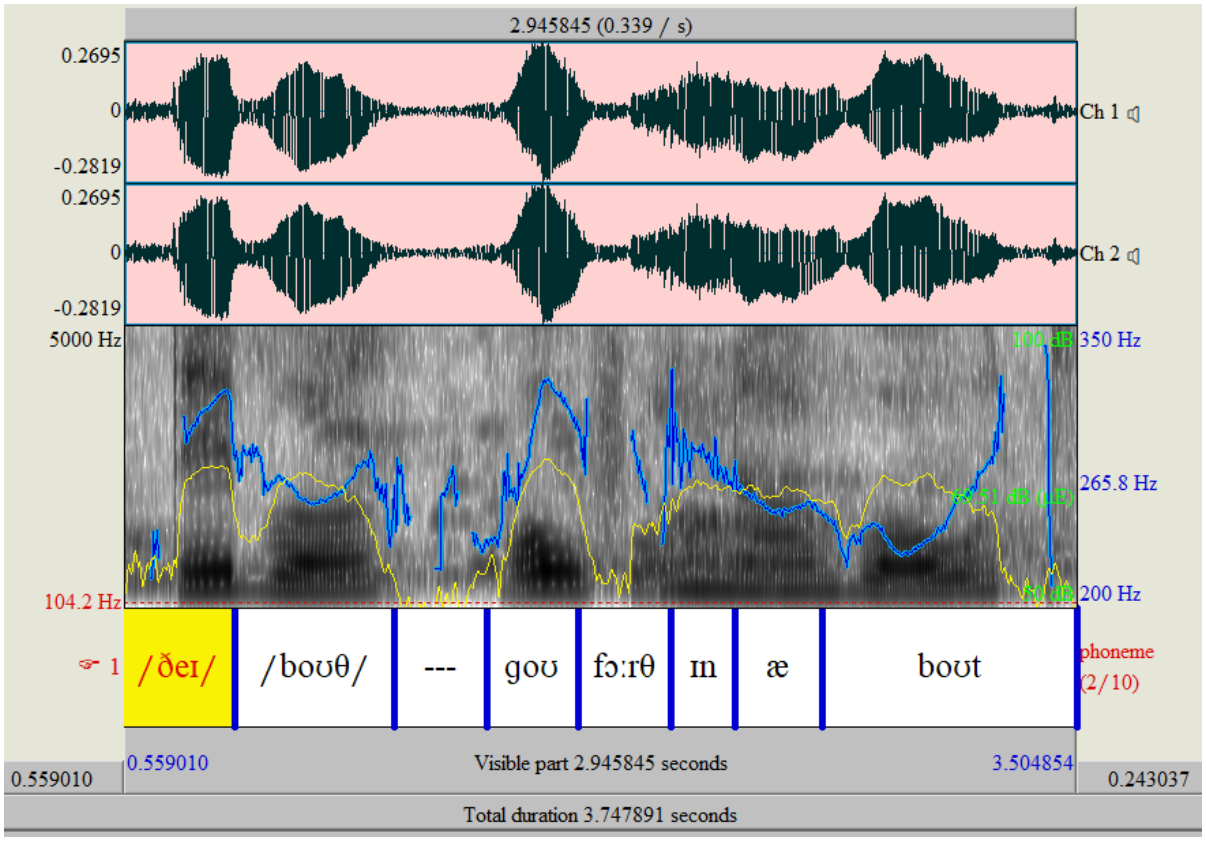


Done by Chulde (2022)

The following results make reference to PRAAT evaluation. There can be seen the difference of pronouncing the words at the beginning and after the application of the project. To show the results, the researcher considered Wolf and Corre-caminos as the principals. Wolf was not used to pronouncing the final sounds and confused them sometimes. During the activities he developed his listening skills and began pronouncing correctly.

In the first place, you can see the schemata of a part of the rhyme which says *"They both go fourth in a boat".* The participants were able to pronounce the whole words using the phonemes studied correctly. In the figures can be seen the spectrum and the vibration of words. Most of the words have a black shadow; however, "*fourth " does* not have it due to the soft pronunciation. The range of the pitch goes from 288.6 Hz the highest to 247.5 Hz the lowest. Talking about the intensity, it is strong from 72.35 dB in the word "*go*" the highest, and the lowest is 63.09 dB in the word "*fourth*".

Figure 30 Results of /t/ and /θ/



Done by Chulde (2022)

"They both go fourth in a boat"

Figure 31 Results of /θ/ phoneme in "both"

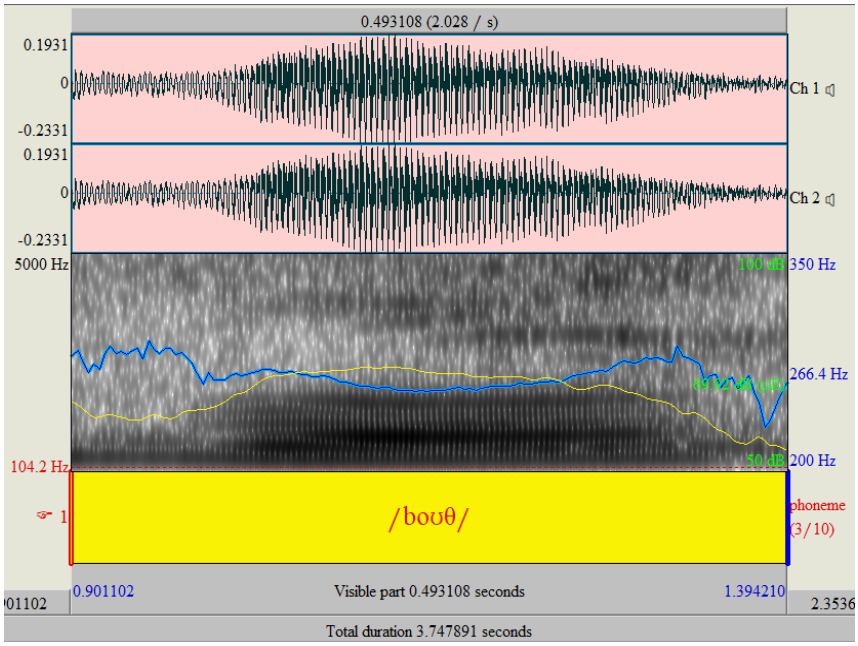


Figure 32 Results of /θ/ phoneme in "Fourth"

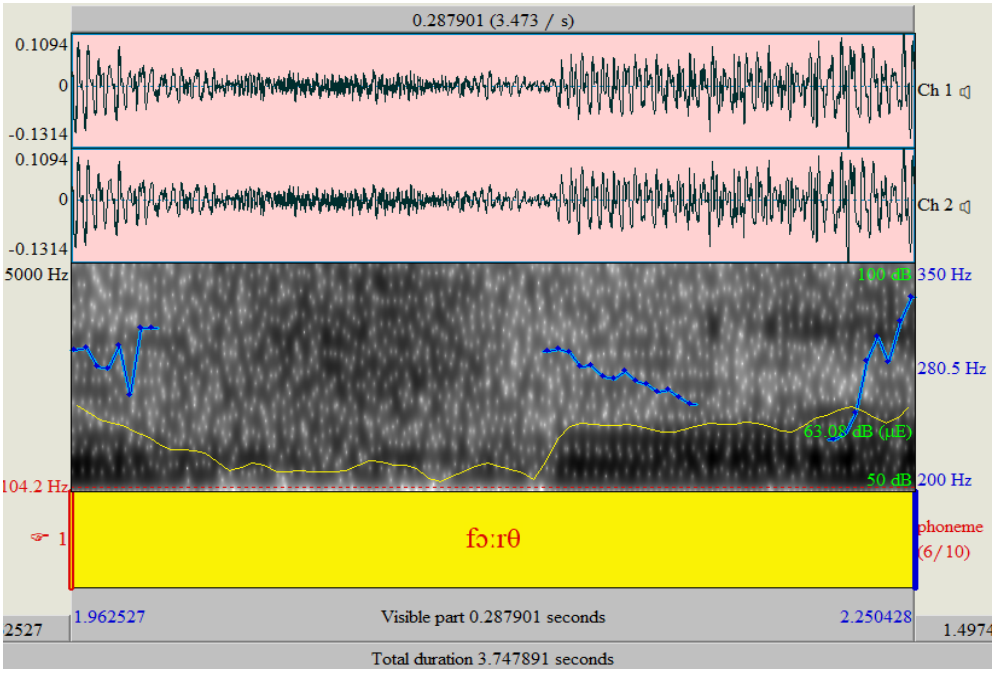
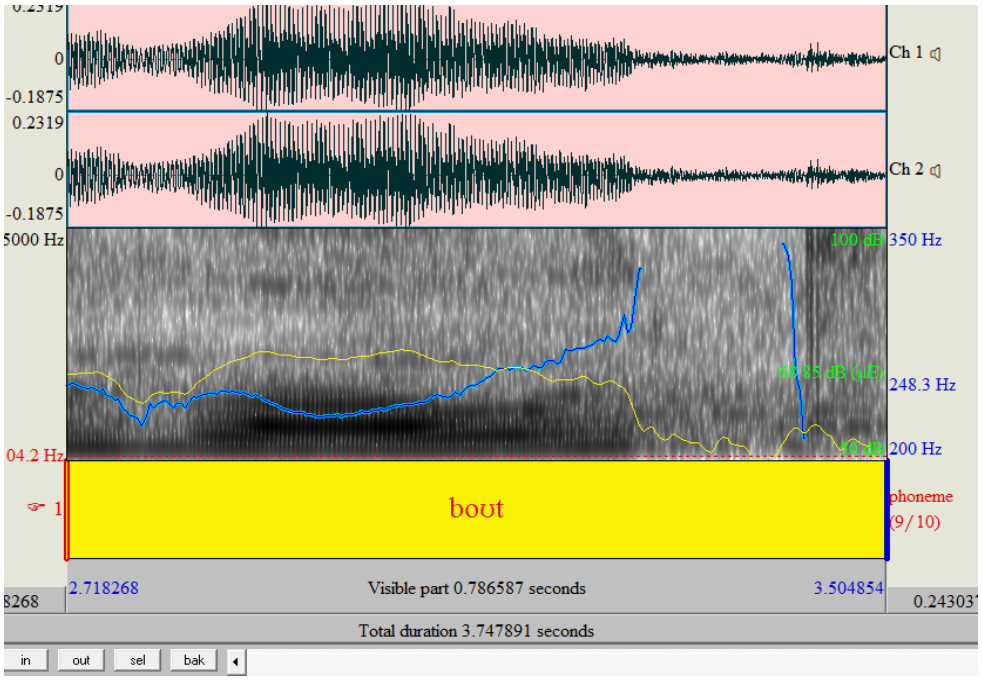


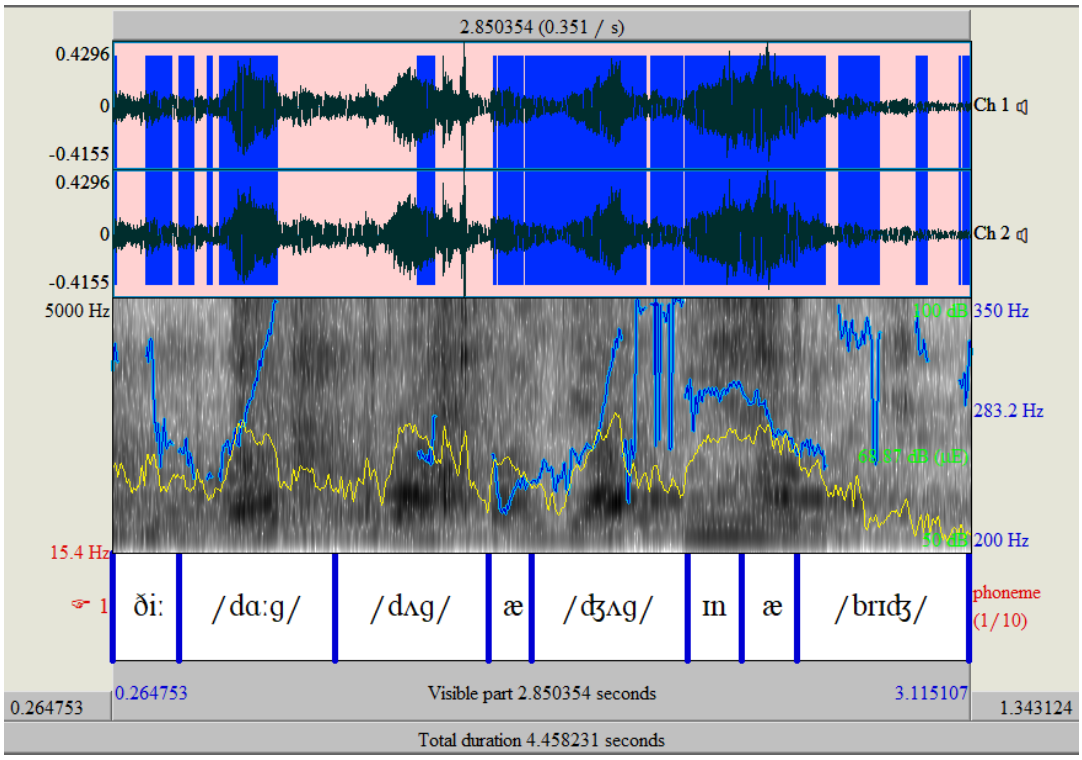
Figure 33 Results of /t/ phoneme in "boat"



The following figure represents the results of the second rhyme which contains four words with both phonemes. The highest pitch is 300.3 Hz during the word *"bridge"* and 261.3 Hz as the lowest pitch during the word *"dog"*. The range of the intensity goes from 61.63 dB during "bridge" word and 69.81 dB during "dog" word

pronunciation. In addition, the darkest parts in the analysis appeared during “dog”, “dug”, “jug”, and “bridge” words. However, the spectrum is not strong. There are few marks during the pronunciation of vowels.

Figure 34 Result of /d/ and /ʤ/ phonemes



“The dog dug a jug in a bridge”

Figure 35 Result of / ʤ/ phoneme in "jug"

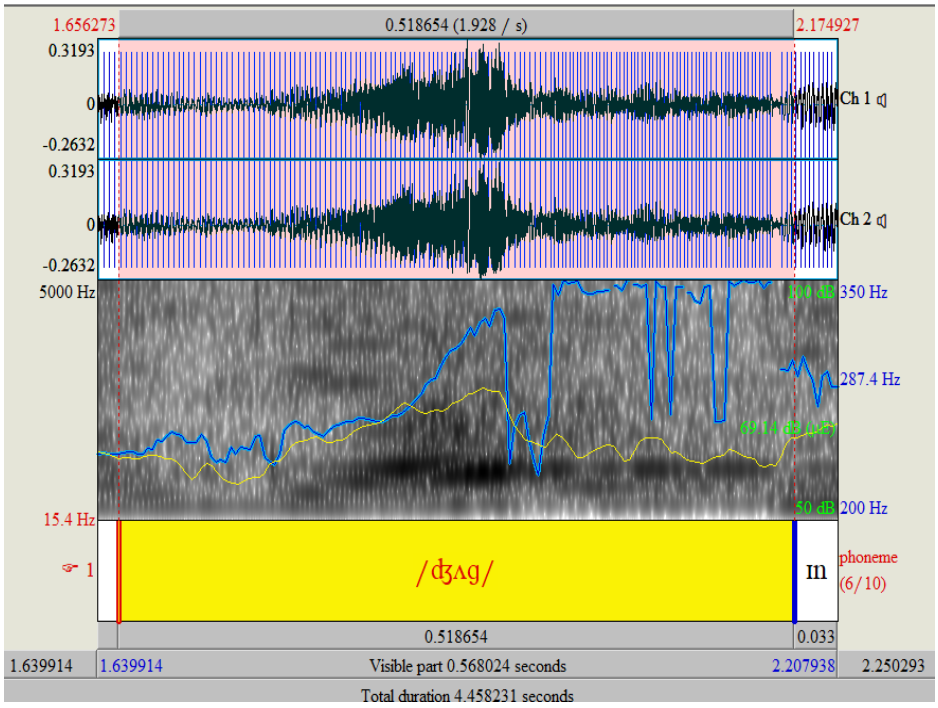


Figure 36 Results of /ʤ/ phoneme in "bridge"

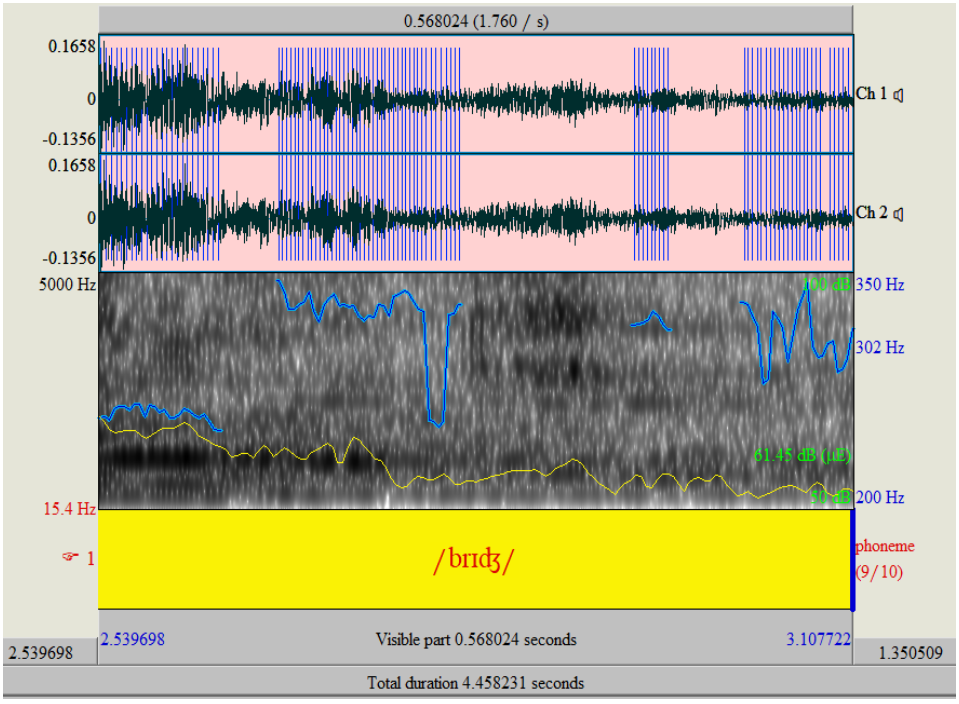


Figure 37 Result of /d/ phoneme in "dog"

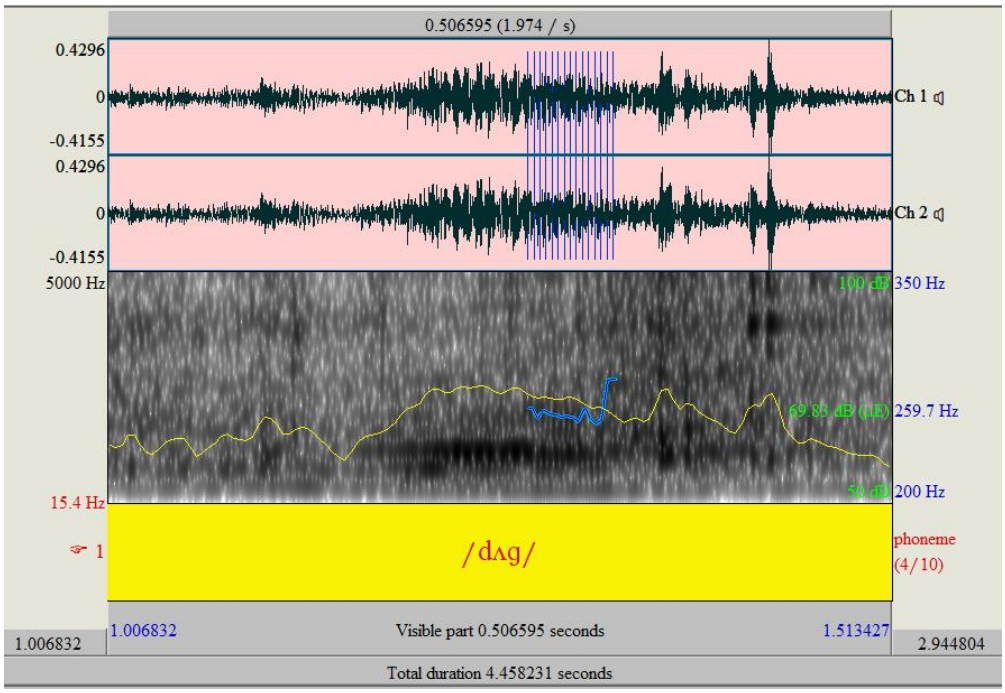
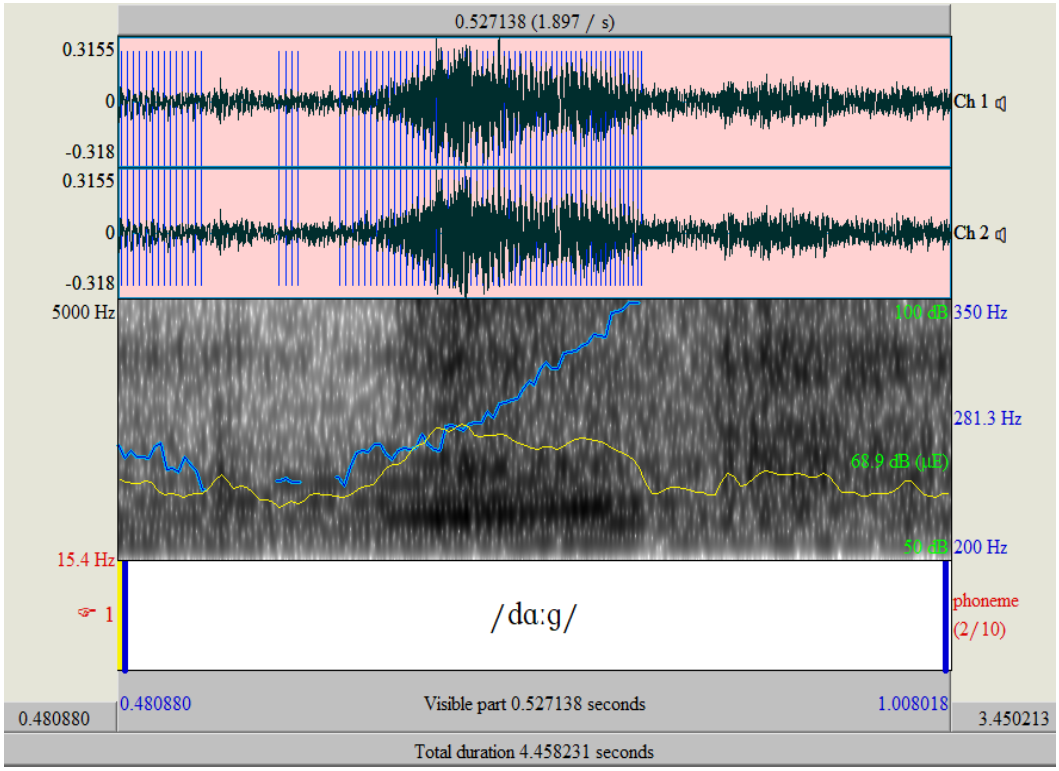
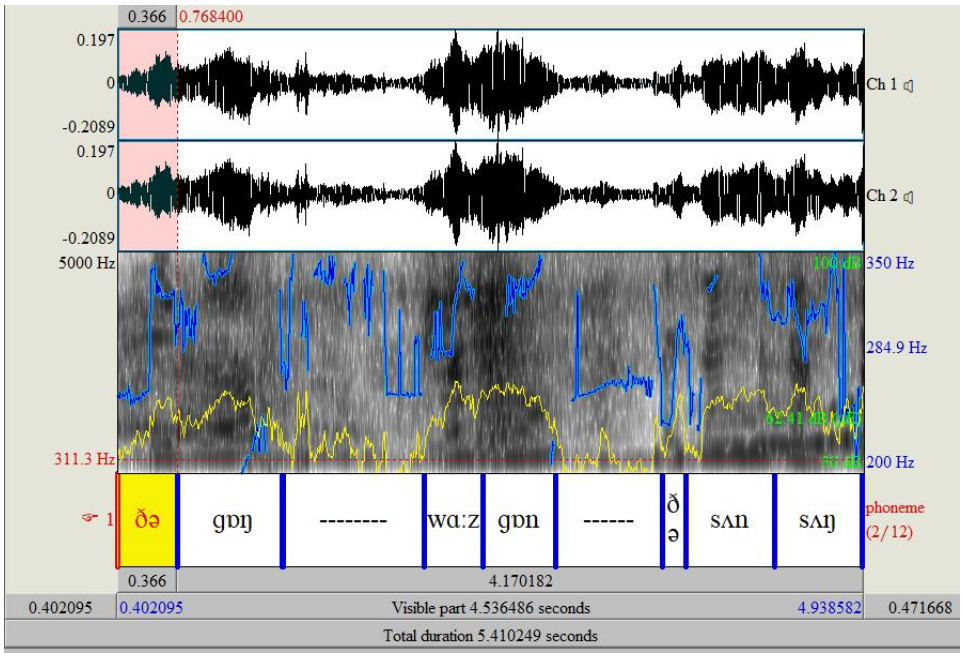


Figure 38 Result of /d/ phoneme in "dug"



The last analysis is about the last rhyme "*The gong was gone, while the sun sang*". It contains four words with the /n/ and /ŋ/. The participants applied the phonemes correctly and they tried to make emphasis at the moment of pronouncing those words. The highest pitch is 312.9 Hz during the word "*gone*" and the lowest pitch is about 294.1Hz during the "*sang*" pronunciation. It can be seen that "*sang"* has a strong pitch when pronouncing /ŋ/ phoneme. In addition, the intensity is irregular but low. The range of the intensity goes from 64.24 dB to 67.7 dB. The word *"gong"* has a strong intensity but low compared to "*gone*" which is higher. Talking about the spectrum, it has few spectrums, but the most intensive is during the pronunciation "gone". The other words have little vibration, the vibration in words "sun" and "sang" go on the last phoneme pronunciation /n/ and /ŋ/. In the last word "*sang"* has a strong pitch during the final phoneme because the participant pronounced it with more effort.

Figure 39 Result of the rhyme /n/ and /ng/



"*The gong was gone, while the sun sang*"

Figure 40 Results of /ng/ phoneme in "gong"

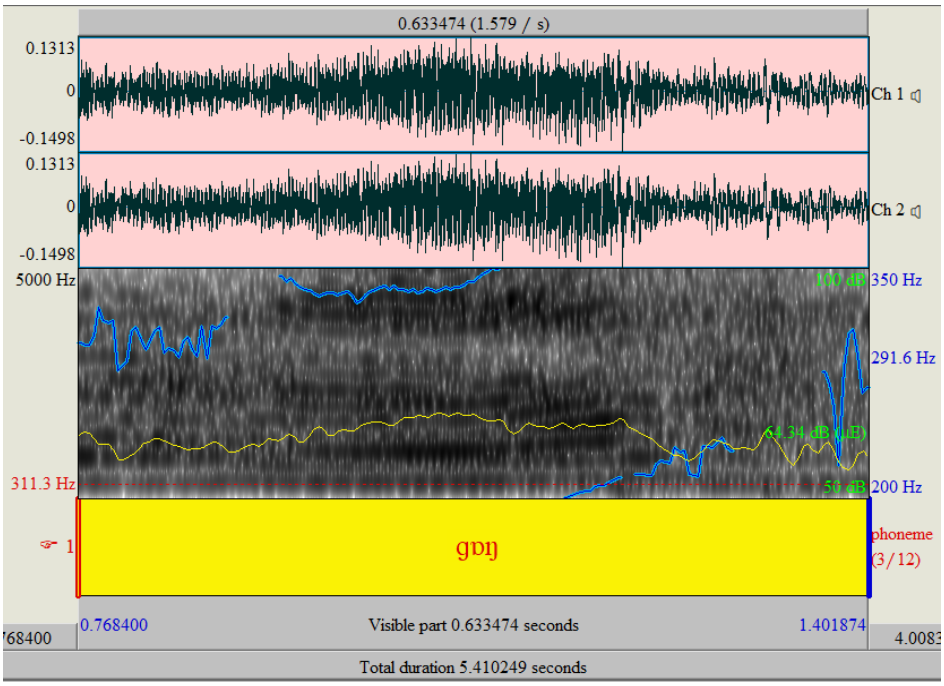


Figure 41 Results of /n/ phoneme in "gone"

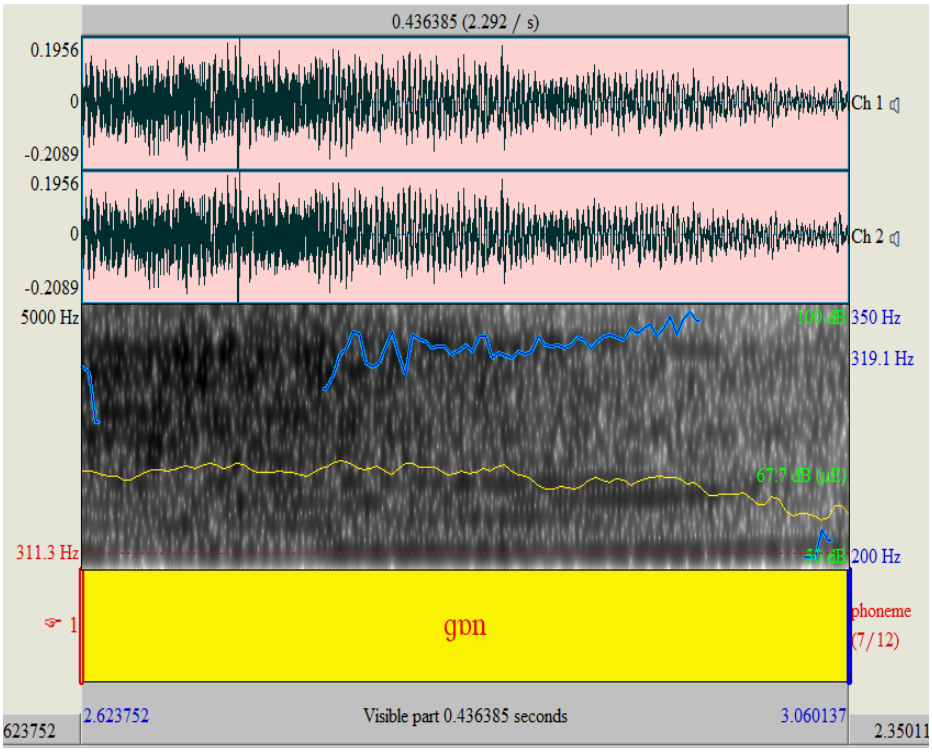


Figure 42 Results of /n/ phoneme in "sun"

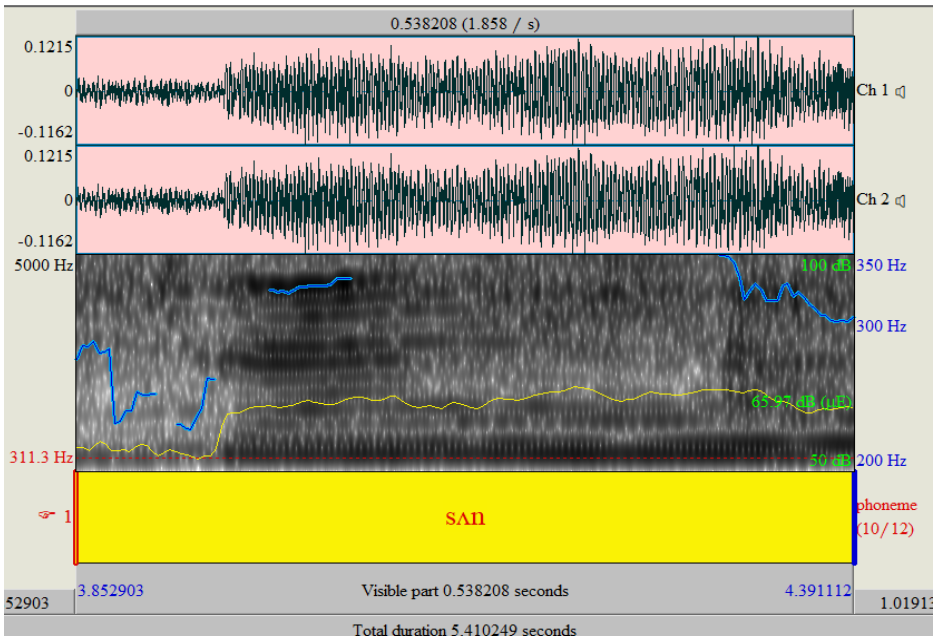
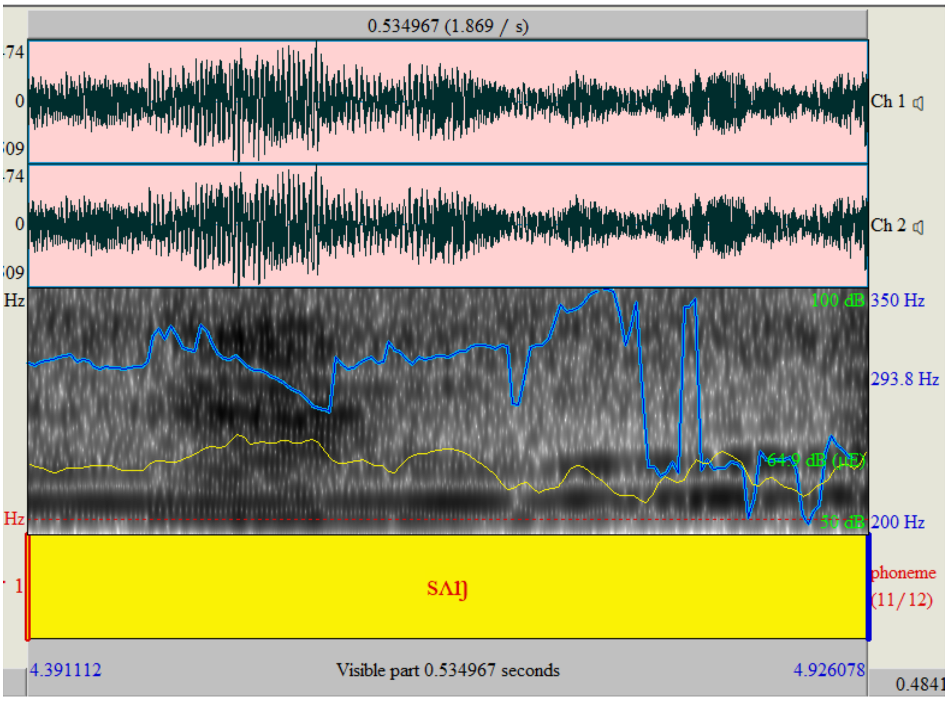


Figure 43 Results of /ng/ phoneme in "sang"


0.534967 (1.869 / s)
Ch 1
Ch 2
100 dB
350 Hz
293.8 Hz
64.9 dB (μE)
50 dB
200 Hz
SʌIŋ
phoneme
(11/12)
4.391112
Visible part 0.534967 seconds
4.926078
0.4841

DEVELOPMENT OF THE PROPOSAL

To develop the proposal, the researcher created a chronogram based on the observation worksheet Annex 2. In addition, there are several activities which were applied in the proposal as playing with puzzles, using the body parts- clapping, singing music, jumping rope, drawing and painting, reading pictograms, classifying pictures and sounds, matching pairs, and recording audios. The calendar presents the length of application for each phoneme and the post-test. It is important to mention that the length of each class was 40 minutes each; however, there were few classes which had at least 30 minutes of length. To present the proof of applying the activities was used the General Observation. Seen Annex 5

5.1 Procedures to create the rhymes

During the first week of May, the researcher created three rhymes with words that have the minimal pairs in consonant sound. The minimal pairs with consonant sounds selected after the teacher survey were /t/ / θ/, /n/ and /ŋ/, and */d/ /ʤ/.* To create the rhymes, it was necessary to create a list of words for each minimal pair. Following, you can see the list, rhyme, and link of each minimal pair.

- **/t/ / θ/**

  List of words:

/t/	**/ θ/**
boat	Fourth
tank	thank
robot	both
cat	mouth

  Rhyme:

  They go fourth in a boat. In a boat they both go fourth. They both thank and fell into the tank.

Link: https://youtu.be/j7idLZDQMJA *by Sandra Valentina Chulde Cabrera*

- **/d/ and /ʤ/ Minimal pairs**

/d/	**/ʤ/**
dog	jug
dug	bridge
duck	magic
doll	orange
Dolfin	soldier

List of words:

Rhyme: *The dog dug a jug in a bridge, in a bridge. The bridge's jug was dug by the dog. The dog dug in a bridge, in a bridge, a jug*.

Link: *https://youtu.be/ghYQRegbuUs by Sandra Valentina Chulde Cabrera*

- /n/ and /ŋ/

List of words:

/n/	/ŋ/
sun	sung
run	gong
gone	song
hen	swing
pen	bang

Rhyme: *The gong was gone while the sun sang in a long tone. A long song was sung by the sun.*

Link: *https://youtu.be/1jRi9qCxyhU by Sandra Valentina Chulde Cabrera*

5.2 **Example of Lesson plans of application of Rhymes:**

Lesson Plan 1.1

Topic of the lesson: /t/ and / θ/ phoneme

Video: https://youtu.be/j7idLZDQMJA *by Sandra Valentina Chulde Cabrera*

Date: May 10thth, 2022

Level: A1. Beginners

Time: 40 minutes

Objectives:

- Classify the /t/ and / θ/ phonemes.
- Identify the phonemes /t/ and / θ/ phonemes

Warm-up:

a. Students watch a video with /t/ and / θ/ phonemes https://youtu.be/j7idLZDQMJA *by Sandra Valentina Chulde Cabrera*

b. Teacher asks questions about the video:

- Can you name the characters?
- What did you see?
- What happened?

Activities:

a. Teacher will introduce the vocabulary words through flash cards. First, presents the IPA symbol of the phoneme and then the pictures that have initial and final phonemes.

b. **Group activity:** Students practice their listening skill through the classification of phonemes. Teacher will say out loud the word and show a picture. Students will run from right to left in order to indicate which phoneme is. The left is /t/ and / θ/ is right.

Evaluation:

a. **Individual activity:** Students will match the pictures with the phonemes. Teacher will provide 4 cards to each student. The phonemes will be stick on a wall where students will match the pictures given with the phonemes.

Lesson Plan 1.2

Topic of the lesson: /d/ and /ʤ/ phoneme

Video: https://youtu.be/j7idLZDQMJA *by Sandra Valentina Chulde Cabrera*

Date: May 18thth, 2022

Level: A1. Beginners

Time: 40 minutes

Objectives:

- Sing and practice their listening skills through dancing.
- Use the phonemes learned while jumping.

Warm-up:

Teacher gives a card to each student. Students memorize the cards secretly, and then they give the cards back to the teacher. Teacher exposes all the card on the floor and

students standing in a row say the word out loud; then, they have to take the correct card.

Activities:

b. **Group activity:** Teacher plays the audio of the rhyme. Students have to listen to and then follow the rhythm. Use their hand to clap when they listen to a word with /d/ phoneme, and jump when they listen to /ʤ/ phoneme.

c. **Individual activity:** Student stand up. Teacher shows them four positions using the words they will listen to in the rhyme. Dog, dug, jug, bridge. They have to clap to the left when listen "dog", clap to the right "dug", over the head "jug", and down "bridge".

Evaluation:

a. Students will jump a rope. They have to be in a row and think in a word learned. During jumping they have to shot the word. Ex. "Bridge".

Lesson Plan 1.3

Topic of the lesson: /n/ and /ŋ/ phoneme

Video: *https://youtu.be/1jRi9qCxyhU by Sandra Valentina Chulde Cabrera*

Date: May 27th, 2022

Level: A1. Beginners

Time: 40 minutes

Objectives:

- Identify phonemes through listening
- Develop reading skills through the use of pictograms

Warm-up:

a. Students will watch the video *https://youtu.be/1jRi9qCxyhU by Sandra Valentina Chulde Cabrera*

b. Teacher will ask students to name 4 words from the video (3 minutes)

Activities:

Students need a sheet of paper divided in four parts, pencil, and colors.

a. **Group activity:** Teacher will dictate four words used in the rhyme. Students have to draw each word in each square. Students will have time to color. (15 minutes)

Evaluation:

a. **Individual activity:**

   Students will remember the rhyme and read their pictures. Use the pictograms. (12 minutes) Check more activities Annex

CONCLUSIONS

After applying the project, the researcher could conclude that students at early ages are able to acquire and learn a second language easily. It is essential to select the proper methodologies according to the age and material to be used. In addition, the researcher should get to know the participants in order to know what they like and how they learn so that the application of the activities is comfortable for both research and participants.

Even though the participants were 5 years old, they can learn through IPA symbols and sounds. This way, the students were able to develop their listening skills. The application of the constructivism method influenced children's learning because the researcher used students´ previous knowledge and checked the memory. Furthermore, the application of multisensory activities was essential. The participants were children who liked to learn through interactive activities and due to the generation, it was necessary the technology like videos, games, and music.

Due to the age, students were evaluated individually. Students were tested based on listening skills. Although they could use their hands and answer by themselves, it was necessary to separate them from the group the day of the evaluation. Even though working in groups was a good way to have effective feedback, it did not help the researcher to collect the real data. For that reason, during the week, participants worked individually and in groups so they could develop their authenticity and independence.

To sum up, students develop their listening skills. To know if they acquired the correct pronunciation, the researcher used PRAAT to analyze the pronunciation. In the analysis applied, there were identified differences from the pretest to post-test. All changes were developed through the use of interactive activities from the use of their body and mind, to technology to project and show the rhymes and rhythm.

RECOMMENDATIONS

It is recommended to continue with the research and application of teaching phonemes in kindergarten and other levels so that students develop their listening skills and pronunciation. The application of the research was for three weeks which was considered short time. Because of time, it was a limitation to the collection of more data and application of more activities.

The researcher could apply for at least two weeks using a different rhyme that includes the other words from the list. This way, the researcher could collect more data and go deeper in the research. It would have been another experience with more days for each phoneme.

This kind of research should be applied in all levels of the institution so that students who do not have developed their pre-listening skills could beginning from the beginning. The use of minimal pairs for teaching have been provide another perspective of seen things and teaching. Teaching is not only use of grammar. It is essential to be good listeners in order to understand English or any other language.

The researcher should consider the age of students in order to select the material and the methodology to be used in order to full fill all of the activities planned. The material can be adapted according to the level of the students, it is not necessary to be used only on children.

To sum up, it is recommendable to apply teaching phonological awareness in all levels of school and high school. Students would be able to develop their listening skills, for instances, they would have much better pronunciation. In addition, the material proposed could be used in a different way or be adapted according to the age. The rhymes are easy to understand and the length is short.

REFERENCES

Adkins, S. (n.d.). *Connecting the Power of Music to the Learning of Language*.

Barlow, J. A., & Gierut, J. A. (2002). Minimal Pair Approaches to Phonological Remediation. Seminars in Speech and Language, 23(1), 057–068. https://doi.org/10.1055/S-2002-24969

Barrett, C. (2015). A sociocultural view of engagement in the music-based pronunciation classroom. In J. Levis, R. Mohammed, M. Qian & Z. Zhou (Eds). Proceedings of the 6th Pronunciation in Second Language Learning and Teaching Conference (ISSN 2380-9566), Santa Barbara, CA (pp. 143-153). Ames, IA: Iowa State University.

Burgess SR, Lonigan CJ. *Bidirectional relations of phonological sensitivity and prereading abilities: evidence from a preschool sample*. J Exp Child Psychol. 1998 Aug;70(2):117-41. https://doi:10.1006/jecp.1998.2450 PMID: 9729452.

Cha, K. W. (2012). Children's Authority Perception and Linguistic Discrimination. *Korean Journal of Applied Linguistics*. 28 (2) 259. https://doi.org/10.17154/kjal.2012.06.28.2.259

Derwing, T. M., Munro, M. J., & Wiebe, G. E. (1998). *Evidence in favour of a broad framework for pronunciation instruction*. Language Learning, 48, 393– 410

Dondu, N. B., & Perıhan, T. S. (2020). Analysis of Preschool Period Children's Listening Skill According to. *World Journal of Education*, Vol. 10, No. 3; 2020.

Edunova, 2012. Musical/Rhythmic Intelligence.org

Musical/Rhythmic Intelligence | EduNova - Innovations from Leading Education Experts (Edu-nova.com)

EdUHK. (2022). *Phonetics and Phonology*. Obtenido de https://corpus.eduhk.hk/english_pronunciation/index.php/1-2-introduction-of-praat/#:~:text=Praat%20is%20a%20freeware%20program,uva.nl%2FPraat%2F.

English Club. (2022). *English Club*. Obtenido de https://www.englishclub.com/pronunciation/minimal-pairs-d-dj.htm#:~:text=%2F%CA%A4%2F%20is%20an%20explosive%20sound,tongue%20behind%20your%20top%20teeth

English Club. (2022). *English Club- Minimal Pair /t/ and /θ/*. Obtenido de https://www.englishclub.com/pronunciation/minimal-pairs-t-th.php#:~:text=%2Ft%2F%20is%20made%20by%20clicking,air%20without%20the%20tongue%20moving

English Language Club. (4 de September de 2021). *Learn English Online*. Obtenido de n Sound: How to pronounce the n Sound (/n/ Phoneme): https://www.englishlanguageclub.co.uk/n-sound/

English Phonetics. (April de 2022). *English Phonetics*. Obtenido de https://englishphonetics.net/english-pronunciation-tools/minimal-pair/dotjot.html

Fuchs, S., & Birkholz, P. (2019). Phonetics of Consonants. *Oxford Research Encyclopedia of Linguistics, August*. https://doi.org/10.1093/acrefore/9780199384655.013.410

Friedrichsen, A. (Spring, 2020). Second Language Acquisition Theories and What It Means For Teacher Instruction. *Northwestern College, Iowa*.

Gitsak, C. (1998). Second Language Acquisition Theories: Overview and Evaluation. *Journal of Communication and International Studies 4* , 89-98.

Gardner, H. (2012). Frequently asked questions- Multiple Intelligences and related educational topics. *WordPress*.

Hestbaek, L. A., Olesen, L. G., Elmose, M., Bleses, D., Andersen, S. C., & & Lauridsen, H. H. (2017). Influence of motor skills training on children's development evaluated

in the Motor skills in PreSchool (MiPS). https://doi.org/10.1186/s13063-017-2143-9

Howard Gardner of The Multiple Intelligence Theory. Edutopia.org. https://youtu.be/l2QtSbP4FRg

Jodell, Jade . (2021). *Speak Well*. Obtenido de Lesson 40: /ŋ/ Sound in 'King': https://jadejoddle.com/ng-sound-pronunciation/#:~:text=Pronunciation%20Rules%20%2F%C5%8B%2F%20%2F%C5%8B%2F%20is%20spelt%20%3Cng%3E%20at,hu%20nk%20sku%20nk%20ju%20nk%20pu%20nk

KARAKAġ, A., & SÖNMEZ, E. (May 5-7 2011). The Teaching of [θ] and [ð] Sounds in English. *1st International Conference on Foreign Language Teaching and Applied Linguistics*.

Kivistö-de Souza, H. (2016). *Phonological awareness and pronunciation in a second language*. 501 p. http://cataleg.ub.edu/record=b2197909~S1%2Acat

Linways Team. (2017). *ICT enabled education*. https://stories.linways.in/ict-enabled-education-d190bcc91bf0

McBride-Chang, C. (1995). What is phonological awareness? *Journal of Educational Psychology, 87*(2), 179–192. https://doi.org/10.1037/0022-0663.87.2.179

Mendelsohn, D. (1998). Teaching Listening.

Neumann, M. M., Hyde, M. B., Neumann, D. L., Hood, M., & Ford, R. M. (2012). Multisensory methods for early literacy learning. *Beyond the Lab: Applications of Cognitive Research in Memory and Learning, June 2021*, 197–216.

Phonetics, P. T. S. O. (n.d.). *International Phonetic Alphabet*. https://www.internationalphoneticalphabet.org/

Pronuncian. (August de 2016). *Seattle Learning Academy* . Obtenido de https://pronuncian.com/pronounce-t-sound

Pullen, P. C., & Justice, L. M. (2003). Enhancing Phonological Awareness, Print Awareness, and Oral Language Skills in Preschool Children. *Intervention in School and Clinic*, *39*(2), 87–98. https://doi.org/10.1177/10534512030390020401

Reinhard, J. (2015). Howard Gardner's MULTIPLE INTELLIGENCES: A Minority view: Musical Intelligence. . Music Scholarship Problemy Muzkal'noj Nauki 4, 38-42. https://doi.org/10.17674/1997-0854.2015.4.038-042

Richards, JC; Rodgers, T SA. (1987). Approaches and Methods in language teaching. En *The Natural Approach* (págs. 128-141). HYPERLINK https://howardgardner01.files.wordpress.com/2012/06/faq_march2013.pdf

Shams, L., & Seitz, A. R. (2008). Benefits of multisensory learning. *Trends in Cognitive Sciences*, *12*(11), 411–417. https://doi.org/10.1016/j.tics.2008.07.006

Teachworth, J. (2009). *Sounds Abound Multisensory Phonological Awareness*.

Tinto, V. L. (2002). Eprimer-Edu.Pdf (Application/Pdf Object). *Ict in Education*, 34. http://www.apdip.net/publications/iespprimers/eprimer-edu.pdf

Trubetzkoy NS. Principles of Phonology. Los Angeles: University of California Press

(original work published 1958); 1969

Tools for Clear Speech. (2022). Obtenido de https://tfcs.baruch.cuny.edu/

ANNEX

Annex 1 Survey for Teachers: Phonological Awareness

Survey for teachers: Phonological awareness

The following survey is conducted in order to determine the teachers' perception about the topic: Phonological Awareness and determine a group of minimal pairs to conduct the research: Listening skills through rhymes and minimal pairs with consonant sounds.

*Obligatorio

Based on your knowledge, select the ideas related to the statement:

1. What age should phonics be taught? *

   Marca solo un óvalo.

   - ◯ Toddlers
   - ◯ Children
   - ◯ Teenagers
   - ◯ Adults
   - ◯ I don't know
   - ◯ All above

2. Benefits of teaching phonics... *

   More than one answer is possible

   Selecciona todos los que correspondan.

   - ☐ Students are able to improve pronunciation

3. How must phonics be taught? *

   More than one answer is possible

   Selecciona todos los que correspondan.

   - ☐ Video games, videos, music, and so on
   - ☐ Repetition (sun, sun, sun)
   - ☐ spelling (s- u-n)
   - ☐ symbols (sun)
   - ☐ I don't know

Phonological Awareness - Minimal Pairs

4. Do you know what minimal pairs are? *

Marca solo un óvalo.

- yes
- no
- I don't know

5. Are minimal pairs element from Phonics and Phonological Awareness? *

Marca solo un óvalo.

- yes
- no
- I don't know

6. Did you know that minimal pairs can be found on consonants and vowels? *

Marca solo un óvalo.

- yes
- no
- I didn't know

7. Did you know that minimal pairs can be used to develop students' listening skills? *

Marca solo un óvalo.

- yes
- no
- I didn't know

8. From the example list, select the minimal pairs in consonants that you know or are familiar with. More than one answer is possible *

Selecciona todos los que correspondan.

- [ ] berry very
- [ ] buy pie
- [ ] thin thing
- [ ] alive arrive
- [ ] catch cat
- [ ] sea she
- [ ] free three
- [ ] sink think
- [ ] with whizz
- [ ] bad badge
- [ ] quick kick
- [ ] chair share
- [ ] day they
- [ ] tree three

9. From the following list, which minimal pairs you consider are difficult and must be taught and practiced. Select 4 minimal pairs. *

Selecciona todos los que correspondan.

- [ ] /b/ and /p/ buy pie
- [ ] /n/ and /ŋ/ thin thing
- [ ] /l/ and /r/ alive arrive
- [ ] /ʧ/ and /t/ catch cat
- [ ] /s/ and /ʃ/ sea she
- [ ] /f/ and /θ/ free three
- [ ] /s/ and /θ/ sink think
- [ ] /ð/ and /z/ with whizz
- [ ] /d/ and /ʤ/ bad badge
- [ ] /tʃ/ and /ʃ/ chair share
- [ ] /t/ and /θ/ tree three

Opinion

10. Do you consider that phonics should be a subject to be taught in all levels? *

Marca solo un óvalo.

- Yes
- No

11. Justify your answer *

Annex 2 General Observation Sheet

General Observation

Observant: _____

Date: ___/_____/

School: _____

Name of teacher: _____

Grade: _____

Observation: 1st 2nd 3rd 4th 5th

Week: 1 2 3

Minimal Pair consonant sound: _____

	Material					
Class Objective and Statements	Use of videos	Use of rhymes	Use of music	Use of flash cards	Use of extra material, which?	Observations
Class 1						
Class 2						
Class 3						
Class 4						
Class 5						

	Students						
N0	Does he/she pronounce the word?	Does he/she sing the song?	Does he/she follow the rhythm?	Does he/she like the music/ video/ rhyme?	Does he/he present difficulties?	Identify the sounds /___ / and /___ /	Observations
1							
2							
3							
4							
5							
6							
7							

Sandra Valentina Chulde Cabrera - April 2022

Annex 3 Pre- Test

Facultad de Comunicación, Lingüística y Literatura
Maestría en Pedagogía del Inglés como Lengua Extranjera

Pontificia Universidad Católica del Ecuador

PRE-TEST

N° student: .....

Date: .....

School: Unidad Educativa San Francisco de Sales

Name of the teacher: Valentina Chalde

Grade: Kindergarten II

Objective: Diagnose student's pre-listening skills through a test

Instructions: Look at the pictures. The teacher will say a rhyme, listen carefully and point to the correct picture. Then, pronounce the word out loud.

Sounds /t/ / θ/
Identify the words with **/t/ / θ/** minimal pairs sounds
Rhyme: ***They go fourth in a boat. In a boat they both go fourth. They both thank and fall in tank.***

Sounds /n/ and /ŋ/

Identify the words with /n/ and /ŋ/minimal pairs sounds
<u>Rhyme:</u> The gong was gone while the sun sang in a long tone. A long song was sung by a sun.

Sounds /d/ and /ʤ/

Identify the words with /d/ and /ʤ/minimal pairs sounds
<u>Rhyme:</u> The dog dug a jug in a bridge in a bridge. The bridge's jug was dug by the dog. The dog dug in a bridge in a bridge a jug.

Results:

Annex 4 Working Calendar

Specific Objectives	***MAY***																		***JUNE***	
	Week 1					***Week 2***					***Week 3***					***Week 4***					***Week 1***	
	2	**3**	**4**	**5**	**6**	**9**	**#**	**11**	**12**	**13**	**16**	**17**	**18**	**19**	**20**	**#**	**24**	**25**	**26**	**27**	30	31
Development of Rhymes	X	X	X	X	X																	
Activities																						
1. Introduction of phonemes						X					X						X					
2. Introduce the rhyme							X					X						X				
3. Play with puzzle								X														
4. Body game- claps													X						X			
5. Singing- music									X													
6. jumping rope									X				X						X			
7. drawing and painting														X						X		
8. pictograms										X					X					X		
9. Classifiying						X					X						X					
10. Matching pairs						X	X				X	X					X	X				
12. Recording audios							X					X						X				X
12. Post- test																						X

HOLYDAY

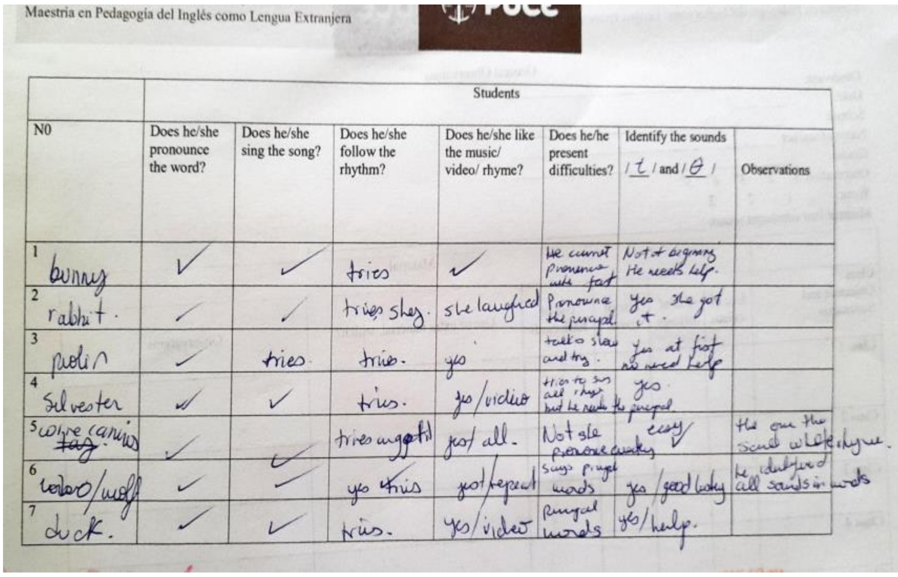
Annex 5 Identification Cards

Annex 6 Puzzle of Rhyme /t/ and /θ/

Annex 7 Rhyme Card to read Pictograms

Annex 8 Drawing the Rhyme /t/ and /θ/

Annex 9 Results of Second Week



Maestria en Pedagogía del Inglés como Lengua Extranjera

NO	Does he/she pronounce the word?	Does he/she sing the song?	Does he/she follow the rhythm?	Does he/she like the music/ video/ rhyme?	Does he/he present difficulties?	Identify the sounds /t/ and /θ/	Observations
	Students						
1 bunny	✓	✓	tries	✓	He cannot pronounce with fast	Not at beginning He needs help.	
2 rabbit.	✓	✓	tries shy.	she laughed	Pronounce the principal.	yes she got it.	
3 piolin	✓	tries.	tries.	yes	talks slow and try.	yes at first he need help	
4 Silvester	✓	✓	tries.	yes/video	tries to say all rhyme but he [illegible] the principal	yes.	
5 corre caminos	✓	✓	tries [illegible]	yes/ all.	Not she pronounce quickly	easy ✓	the one that said whole rhyme.
6 lobo/wolf	✓	✓	yes tries	yes/repeat	Says principal words	yes /good [illegible]	he identified all sounds in words
7 duck.	✓	✓	tries.	yes/video	Principal words	yes/help.	

As can be seen in the annex 9, the researcher applied the students' observation sheet to collect the evidence, in addition the researcher recorded the interventions in order to analyze them closely. This observation sheet was applied the last day of the week. As a result of the first week, all participants were able to pronounce the words, not all of them sing the song. Piolin tried to do it but he talks slowly, so this caused difficulties. All students tried to follow the rhythm; however, it was too fast for them. It was easy to identify if they like the rhythm, rhyme, and videos because of their emotions and reactions. Some of them laughed, others asked the researcher to repeat it, and others said "no ganaron", "se cayó el cerdito y el gallo".

Some difficulties that could be seen were, Bunny liked to talk fast for that reason he skipped some words or mispronounced them. Lola, Wolf, Silvester, and Duck said the rhyme but they made emphasis on the principal words. Corre-caminos was the only one that pronounced the whole rhyme.

All participants identify the minimal pairs. They had to classify 4 pictures; however, Bunny and Duck needed help to classify them. Both of them did the activity twice. Lola, Piolin, Silvester needed an example, and then, they classified the pictures. On the other hand, Corre- Caminos and Wolf did the activity easily. The 100% recognized the phonemes and said them out loud as well as recognized the picture-word.

The researcher introduced the pictograms (pictures) in disorder. They had to listen and order the rhyme, then, they read it. All participants did it.

In conclusion, Gardener (2013) mentioned that students learn through different activities according to their intelligence. Even though there were students with difficulties during the different activities, the participants achieved the goal proposed with these phonemes. The researcher not just applied one activity, she applied at least 8 interactive activities in a period of a week.

Annex 10 Dancing the rhyme /d/ and /dg/

https://youtu.be/TY4OpJUo47A

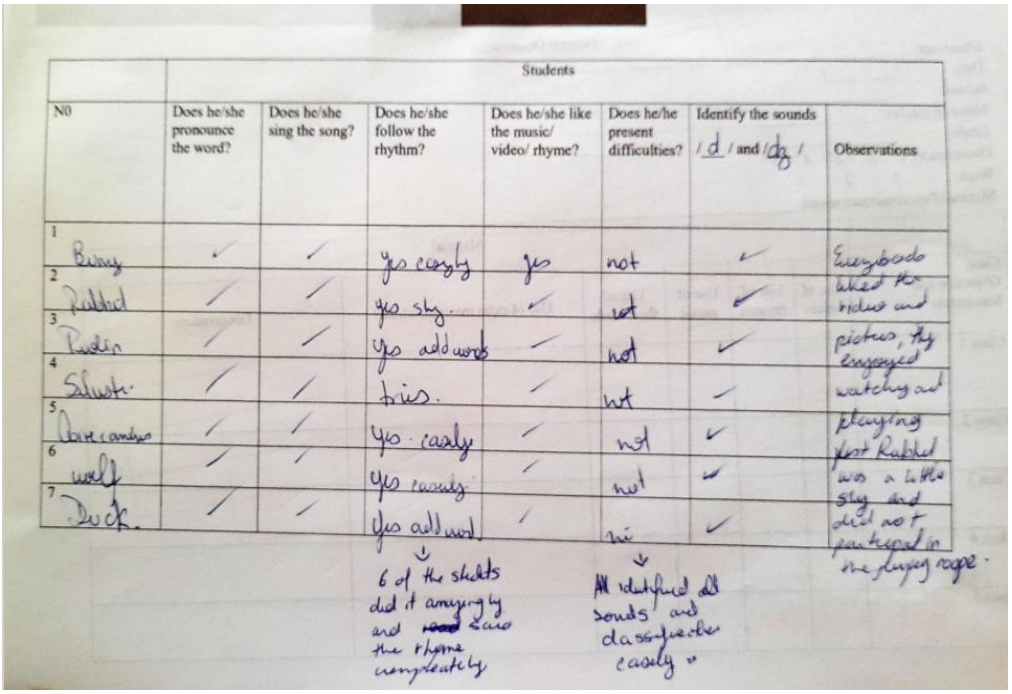
Annex 11 Link of Jumping rope activity

https://youtu.be/ejyDiZuARoA

Annex 12 Cards to play matching and classifying sounds

Annex 13 Rhyme Cards to read pictograms

Annex 14 Results of Third week



	Students						
N0	Does he/she pronounce the word?	Does he/she sing the song?	Does he/she follow the rhythm?	Does he/she like the music/ video/ rhyme?	Does he/he present difficulties?	Identify the sounds /d/ and /dʒ/	Observations
1 Bunny	✓	✓	yes easily	yes	not	✓	Everybody liked the video and pictures, they engaged watching and playing. Just Rabbit was a little shy and did not participate in the playing rope.
2 Rabbit	✓	✓	yes shy	✓	not	✓	
3 Rubin	✓	✓	yes add words	✓	not	✓	
4 Silvester	✓	✓	tries.	✓	not	✓	
5 Corre-caminos	✓	✓	yes · easily	✓	not	✓	
6 wolf	✓	✓	yes easily	✓	not	✓	
7 Duck	✓	✓	yes add word	✓	no	✓	

6 of the students did it amazingly and said the rhyme completely

All identified all sounds and classified easily.

100% of participants were able to pronounce the words correctly, as well as sing with the rhyme. 14% of participants, in this case Silvester, were not able to follow the rhythm of the rhyme. 86% of the participants did it amazingly. They followed the rhythm of the rhyme; it was easy for them to listen to and said the word out loud. For Bunny, Corre- caminos, and Wolf followed the rhyme easier than the others.

Taking in consideration that the researcher used words that are in the daily vocabulary of the students it was easier for them to identify them; however, as they are non-native English speakers, they had some failures in the pronunciation of some phonemes. The researcher focuses on the identification of the phonemes. In the chart you can see that all participants were able to identify the phonemes. During the activity, they listened carefully and classified them.

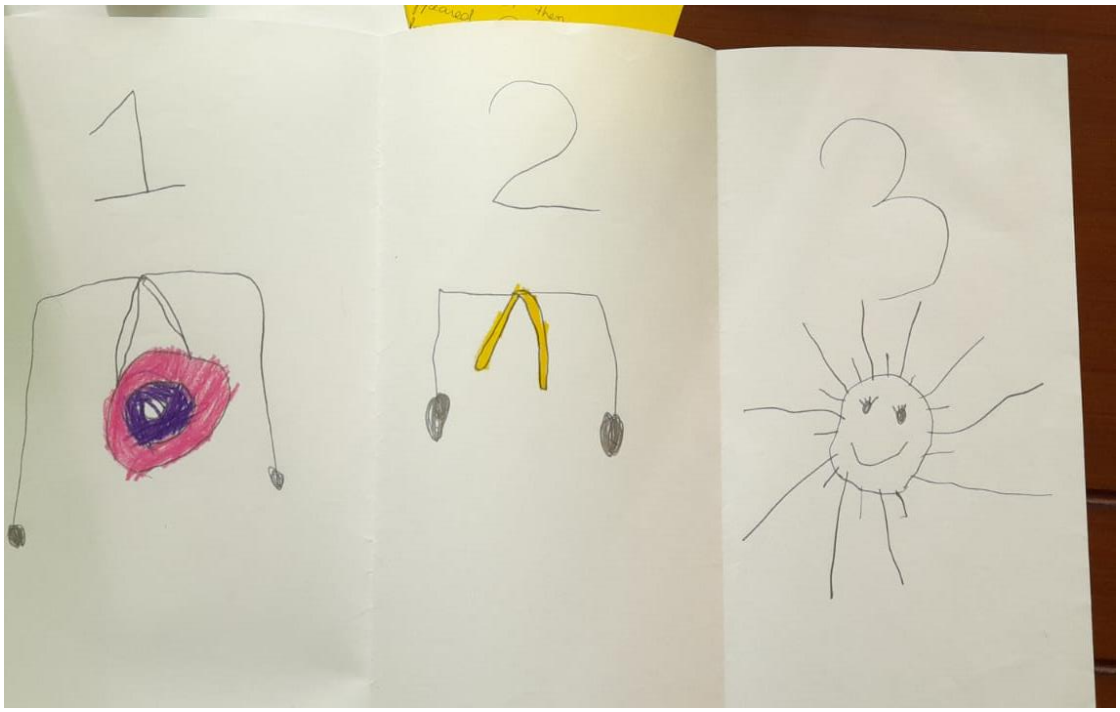
In order to see if they learned the difference, the researcher tested them in a game. The participants were in a row. In front of them, there were two symbols /d/ and /ʤ/. The researcher said the word and they had to identify the phoneme and touch the correct one. In which, 100% of participants identified the words.

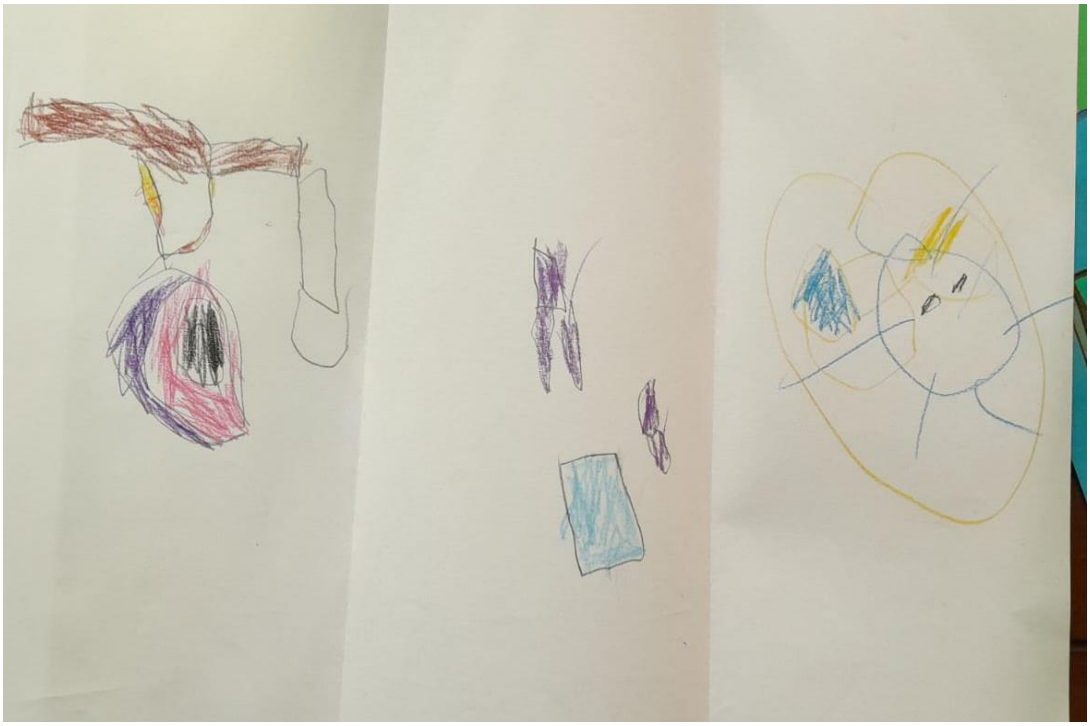
In summary, based on teaching and learning approaches it is essential to use and apply what students already know. This week was successful because all students identify the

phonemes and pronounce the words better than at the beginning. Participants liked the videos and rhymes, and after watching and listening to them they acquire a better listening and understanding.

Annex 15 Reading pictograms Rhyme /n/ and /ng/

Annex 16 Listenig Activity

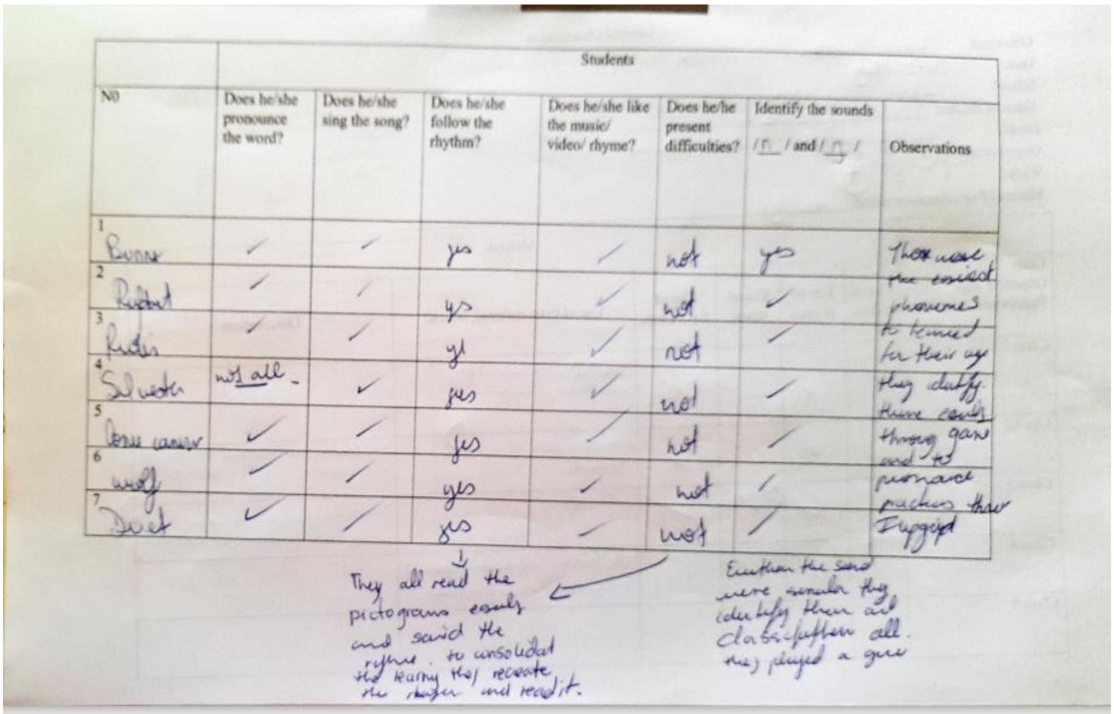




Annex 17 Pictures to play matching and classifying through Listening the sounds

Annex 18 Rhyme cards- Reading through pictograms

Annex 19 Results of Fourth Week



N0	Does he/she pronounce the word?	Does he/she sing the song?	Does he/she follow the rhythm?	Does he/she like the music/ video/ rhyme?	Does he/he present difficulties?	Identify the sounds /n/ and /ŋ/	Observations
1 [illegible]	✓	✓	yes	✓	not	yes	These were the easiest phonemes to learn for their age they identify them easily through games and to pronounce practice their [illegible]
2 Robert	✓	✓	yes	✓	not	✓	
3 [illegible]	✓	✓	yes	✓	not	✓	
4 Silvester	not all	✓	yes	✓	not	✓	
5 [illegible]	✓	✓	yes	✓	not	✓	
6 [illegible]	✓	✓	yes	✓	not	✓	
7 [illegible]	✓	✓	yes	✓	not	✓	

They all read the pictograms easily and said the rhyme. to consolidate the learning they recreate the [illegible] and read it.

Even though the sounds were similar they identify them all [illegible] all. they played a game

Results of week three /n/ and /ŋ/ phonemes, participants can pronounce the words better than at the beginning of the week. Unfortunately, Silvester was absent for two days for that reason it was not easy to have a proper evaluation about him during

the pronunciation activity. 100% of the participants are able to follow the short rhyme in the correct rhythm.

Participants liked the video and pictures. They used words such as “esta bonito”, “repítelo”. Even though the researcher did not explain why the *“gong”* went, the participants came up with different ideas as “se cayó al agua”, “se fue”, “desapareció”. Their speculations and hits provided the researcher more ideas of how their imagination comes up with results and solve the mystery.

They do not present difficulties to interpret pictograms and read them. At the beginning they just used words, but then they used the whole phrase including connectors. When testing listening skills, participants identified all the pictures with phonemes. They played the game of classification by taking cards on the floor and sticking them in the correct group of phonemes. Finally, one more time, the researcher used the “run and touch” game. They had the pictures */n/ and /ŋ/ phonemes*, the researcher called participants one by one. The researcher shot 5 words with both phonemes. They ran and touched the correct sound. 100% of participants achieve the activity perfectly, especially Corre-caminos and Wolf. Even though the sounds were similar, they identify them without repetition.

To sum up, */n/ and /ŋ/ phonemes* were easy phonemes to learn. Even though the phonemes were similar, participants identified the sounds and achieved the activities successfully. To see the progress, participants recorded a short audio saying part of the phrase using Flip.

ANNEX