

Area of Applied Linguistics

THE USE OF RHYMES AND TONGUE TWISTERS AS A RESOURCE TO IMPROVE PRONUNCIATION

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Presented by:

Liz Gamboa PEFPMTFL580156

Director:

Lidia Casalini

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THE USE OF RHYMES AND TONGUE TWISTERS AS A RESOURCE TO IMPROVE PRONUNCIATION

1. INTRODUCTION

As Jeremy Harmer (2001) well describes, students' English pronunciation has been left behind by the majority of teachers who have left the explicit teaching of pronunciation. This has been done due to the assumption that learners will somehow grab the pronunciation as they learn the language. However, the explicit inclusion of pronunciation in the teaching practice benefits students not only in their English pronunciation itself, as Harmer (2001) mentions but also in their overall language learning. Therefore, the current research paper focuses on analysing the pronunciation aspect of the speaking skill, the most common problems students face with pronunciation and the teaching technique presented to help students improve certain chosen sounds.

The paper will first revise the theoretical background behind the pronunciation aspect of the speaking skill. It will present the theory behind speaking skills and the different approaches used throughout history to deal with it. Additionally, the elements or components of pronunciation will be described as well as the most problematic or crucial aspects students have difficulties with. A description of the proposed technique to improve the pronunciation aspect of the speaking skill will be presented and explained too.

After that, in the Methodology chapter, the research methodology that was applied is the objective when conducting this quantitative research study is to determine the relationship between the use of the tongue twister technique (independent variable) and the students' pronunciation (dependent variable) within the population of students from the first course of English from Universidad Privada del Norte corresponding to the A1 Level.

In the Study Chapter, I have included a thorough description of the institution this research was carried out. Additionally, a complete participants' profile can be found. Also, I have described when and how the research was carried out, as well as the schedule designed and followed for this research project. I included the description of each stage of this research: pre-test, intervention, post-test. I have also included the research tools I used for the analysis. There is an in-depth analysis of the elements of pronunciation observed in this research paper. This analysis is aligned with the research questions and objectives presented in the Second Chapter of this paper.

In the Results chapter, the results of each criterion included in the present study, that is to say Intelligibility and Individual Sounds are shown. Charts and graphics were included to help explain the behaviour of each one of the criterion had in the pre and post tests to determine the variables presented in the hypothesis.

Finally, in the Conclusions Chapter, answers to the general and specific objectives of this study will be given taking into account the analysis of the results found and the research questions included in Chapter 3.

2. JUSTIFICATION OF ACADEMIC AND PERSONAL INTEREST

I have been a teacher of English of different levels, from kindergarten to adults. For the last eight years I have been in charge of teaching in the Working Adult Program at Universidad Privada del Norte. In these years I have experienced the difficulties my adult students face regarding pronunciation. Based on my personal teaching experience I have noticed that insufficient practice to pronunciation is included in the everyday teaching practice with the adult learners group. Consequently, adult students feel reluctant to speak in front of their classmates because they do not want to be exposed making mistakes specially mispronunciation ones. There is much stress in them when they have to speak that is why I believe that through the use of rhymes and tongue twisters they can practice certain sounds in a fun and practical way without feeling they are being observed. This will mean that after the intervention my students will pronounce better, lower their affective filter and will therefore achieve better results.

So, teaching pronunciation is important. Several authors support this statement. For instance, Kelly, G. (2000) states that if a learner makes pronunciation mistakes frequently, this can turn into a communication problem since the learner will not be able to make his or message across to speakers of a foreign language. Kelly, G. (2000) mentions that this situation can make the learner feel demotivated especially if this learner does not have problems with the grammatical structures or the command of vocabulary his or her level.

In addition to what has been stated by Kelly, Joanne Rajadurai (2006) also states that pronunciation mistakes can mean a demerit in a learner's performance. This demerit is connected to both their academic performance and their working life performance too. That is to say that because of having a poor language performance, the person may not be able to access a better job position or even feel left behind by his or her co-workers.

The second aspect that was mentioned as justification for this research project was the importance of lowering the affective filter when teaching a foreign language, in this case English, to adults. Krashen, S. (2009) presents the importance of lowering the Affective Filter. He also mentions that teachers need to consider a variety of aspects when dealing with this in the classroom. Some of the factors listed by Krashen (2009) are motivation, self-confidence and anxiety. In our experience as teachers we know that adults don't have many issues with motivation. Whether it is extrinsic or intrinsic motivation, adult learners have it. This is because when they choose to study, they do it keeping in mind their ultimate objective which is to succeed or get what they want in their workplace. On the contrary, as

teachers we know that what it is really an issue for adult learners is performing in front of their classmates. As teachers, we usually experience situations in which our adult learners feel extremely anxious and embarrassed. They feel this way especially when they are requested to speak with their classmates or present something to the whole class. All of this happens because they do not want others to notice their mistakes. Because of what has been described, Krashen (2009) states that teachers should propose pedagogical actions that promotes the lowering of the affective filter such as providing input that is understandable for the learners without compromising the level and the contents that need to be taught. Krashen also mentions (2009) that this can be done by seeing the teaching practice from a new perspective using new ways to provide the input. Here comes the usefulness of using tongue twisters to practice this problematic aspect of their spoken performance since they are not seen as an academic content but as a fun element to include in class. Everybody laughs when trying to say a tongue-twister correctly. So, without noticing it, my adult learners will be practicing pronunciation and as a consequence improving their performance

Finally, the third aspect to be considered is the importance of mastering English for my Adult Learners. The Adult Learners I have in my programs not only have the regular difficulties of learning a new language but also, they have the extra pressure from their workplaces. This is supported by Pagnotta, Joni, (2016). In his article he explains in detail the crucial role that languages have in the current world. Pagnotta, (2016) mentions that in addition to work and education, the good command of a new language different from the mother tongue is essential. He mentions that the most wanted language to be eligible for a good job or escalate in a better job position in the current days is English. He also explains that many big corporations are looking forward to expanding into new markets so they employees who can put up with this new challenge (Pagnotta, J. 2016).

This panorama is also shown in a report made by the World Bank (Patiño, M. 2017) in which it states that companies let go ten percent of their business contracts because they don't have enough competency in a foreign language, in this case English. Patiño (2017) also explains that the correlation between business making and domain of English is direct. This is explained by difference in the Gross Domestic Product (GDP) which determines the quality of education future employees get. (Patiño, M. 2017)

3. RESEARCH QUESTION AND OBJECTIVES

3.1 Research questions

In order to conduct the following research, I have considered the following research questions which will guide the process

- Which sounds in English do the students of a Working Adult Program at Universidad Privada del Norte have problems with?
- What is the influence of rhymes and tongue twisters as a resource to improve pronunciation?

3.2. Objectives

In this research I aim at determining which sounds students at the Woking Adult Program at Universidad Privada del Norte have problems with.

After having determined this, our proposal is to put into practice the technique of using the tongue twisters and rhymes as the strategy to help students improve their pronunciation.

Therefore, as a result they will also improve their overall speaking performance.

In order to achieve my aims I have divided them into the following categories: main objective and specific objectives

3.2.1 Main objective:

The main objective of this research study is:

To determine how significantly pronunciation of the students of the Working Adult Program at Universidad Privada del Norte improves after the application of rhymes and tongue twisters.

3.2.2 Specific objectives:

The specific objectives of this research study are:

- To identify the sounds in English students of a working adult program at Universidad Privada del Norte have problems pronouncing.

- To research about the influence of rhymes and tongue twisters as a resource to improve pronunciation.
- To apply rhymes and tongue twisters to improve the pronunciation of students of a working adult program at Universidad Privada del Norte.
- To measure the results of the application of rhymes and tongue twisters in the pronunciation of students of a working adult program at Universidad Privada del Norte.
- To analyse the results of the application of rhymes and tongue twisters in the pronunciation of students of a working adult program at Universidad Privada del Norte.

4. THEORETICAL BACKGROUND

4.1. Teaching English and its pronunciation

4.1.1 English Language Teaching in Peru

English teaching in Peru has two very different realities regarding public and private education. On the one hand, public schools offer English as foreign language to the students in a wide range of different modalities. Some public schools include the course of English at the fourteen levels of the education process while some others do not. That is to say that for example some public schools teach English in kindergarten, elementary and high school. However, others only teach it from elementary school. Finally, the vast majority of public schools only teach it at the high school level. Whichever the scenario, the number of hours assigned is two hours a week at the most. On the other hand, private schools also teach English in a wide varied range of scenarios. However, the difference is that the private sector offers at least a four-hour week program of English teaching. This situation in the public and private education doesn't seem to be aligned with what the Currículo Nacional proposes. One of the fundamental learning outcomes according to the Currículo Nacional (Ministerio de Educación, 2016) is the communication for personal development purposes and for socialization purposes whose definition is that communicating efficiently through the language is a fundamental learning that implies interacting in a variety of ways of verbal communication in bilingual and intercultural contexts.

The Currículo Nacional (Ministerio de Educación, 2016) states that apart from the domain of oral and written form of their mother tongues, it is crucial to learn, use and master a foreign, in this case English. This is because a foreign language lets students broaden their cultural horizons and move freely throughout the world in the labour or intellectual spheres. In this action, students will use a combination of resources to understand, respect and respond assertively to the perception of other cultures different from their own, interacting and establishing positive and constructive relationships. To demonstrate the level of English proficiency of the students, educators should refer to the Common European Framework of Reference for Modern Languages. From this, we determine the level we expect students to achieve so as to be inserted in today's competitive world.

4.1.2. English Language Competences

Speaking, listening, reading and writing are the four main areas in language teaching the curricula focused on. All programs or textbooks include in different layouts and approaches the teaching of these four aspects. This is because learners are expected to have a full domain of the language in order to communicate accurately and fluently. If learners, achieve this, they will have more opportunities to succeed in their academic and work life because they will have an advantage over others who only master their mother tongue.

This research has focused on only one of these factors: Speaking. The speaking skill consists of different aspects. Jeremy Harmer (Harmer, J. 2001) lists them as pronunciation, speech connection, expressive devices, vocabulary and grammatical resources and language for negotiation. In this research, I have focused on one of the elements mentioned before which is pronunciation

4.1.3. Teaching Pronunciation

According to the Handbook for Teachers for exams (2020) from Cambridge University this component is described as follows:

4.1.3.1. Intelligibility

The Cambridge English Assessment (2018) from Cambridge University defines intelligible as the language produced by the student which is able to be understood by a regular listener. A regular listener is a person who is not a learner of English. This understanding happens even when the speaker is a non-native one.

Joanne Kenworthy (1988) defines intelligibility as the ability a learner has to make him or herself understood by the person who listens. Likewise, Marianne Celce-Murcia (2001) defines intelligibility as the spoken English of a non-native learner whose accent does not distract the person who listens. For Joanne Kenworthy (1988) the goal when teaching pronunciation should not be to achieve a native –like sound. Instead, she states that the goal should be intelligibility. In the same view, Marianne Celce-Murcia (2001) mentions that teachers should not pursue the eradication of the foreign accent in their students. She claims that in the present times accent is being welcome as long as students can make themselves understood.

4.1.3.1.1 Factors that affect intelligibility

Joanne Kenworthy (1988) states that there are two types of factors that affect intelligibility: the speaker factor and the listener factor. As for the speaker's factors, one of them is the closeness to the native accent a foreign language learner can get when pronouncing in English. Kenworthy (1988) also mentions that too many pauses (hesitation), self-error correction (grammatical restructuring) from the speaker can make the person who listens have problems understanding.

Another speaker factor which Joanne Kenworthy (1988) mentions is the speed the learners use in his or her speech. If a person speaks too fast, the listener may have problems understanding, even if the pronunciation is accurate.

Joanne Kenworthy mentions fillers as another factor affecting intelligibility as they can be part of the idiosyncratic speech habits. Joanne Kenworthy (1988) explains this as the effect tag words - which are typically used in a certain language - have when learners use them in the target language. She states that this effect can be the confusion the listeners have when they hear them in the spoken speech as they can think it is a word in English - in this case (1988). In addition to what has been mentioned, Kenworthy lists two listener factors which are really important. The first one is how familiar the listener is with the speaker's foreign accent. The second one is how able the listener is to use the context to help understanding when listening. (Kenworthy, J, 1988)

According to Joanne Kenworthy, these two factors play a key role when a listener tries to understand the speaker's accent. (1988). This is to say that if the listener I accustomed to listening people from a particular foreign accent, this listener will have less trouble understanding as opposed to another listener who hasn't been accustomed to listening to that accent on a regular basis. (Kenworthy, J, 1988)

One example can be the easiness we Peruvians have to understand each other when we speak in English. However, when we (as Peruvians) hear Asian people speaking in English, we cannot understand them as easily as we would like. This is because we are not used to listening to them when they speak in English.

The second listener factor mentioned by Joanne Kenworthy (1988) is the ability a listener has to use the context to enhance understanding. This is to say that if the listener knows the topic the speaker is talking about, the listener can deduce, infer or make an educated

guess to understand the message the speaker wants to transmit regardless of the accuracy in the pronunciation.

4.1.3.1.2 Sources of intelligibility

4.1.3.1.2.1 Sound substitutions

Sound substitutions are defined by Kenworthy (1988) as the use the speaker makes of another sound instead of a specific sound. For example, we Peruvians use the /S/ sound in our regular Spanish spoken performance. However, we do not use the TH / θ / sound in our Peruvian Spanish. This is the reason why we substitute the TH / θ / in the word THINK by the sound /S/ SINK.

4.1.3.1.2.2 Sound deletions

Sound deletion is defined by Kenworthy (1988) as the elimination of a sound or sounds the speaker makes when pronouncing. An example I was able to notice with my students is that they omit to pronounce the final sounds of the word. Instead of saying NAME the just say NEI. So, when they introduce themselves students usually say My NEI is Antonio instead of My NAME is Antonio.

4.1.3.1.2.3 Sound insertions

As opposed to sound deletion, for Kenworthy (1988) sound insertion is the addition of sounds the foreign speakers tend to make. A very typical example for Spanish speakers is the addition of the vowel E before an initial S sound. So instead of saying SPEAK we tend to say ESPEAK just as we do in Spanish.

4.2. English phonology

4.2.1 Phonemes

Gerald Kelly (2000) defines phonemes as the different sounds a language has. Kelly also mentions that there are minor differences regarding the articulation of the individual sounds. However, what is taken into account to differentiate one sound from another as a new phoneme is the impact this has on meaning.

Marianne Celce-Murcia (2001) mentions that the most important aim when teaching pronunciation shouldn't be to sound like a native speaker of the language but rather to be able to convey the message in an effective way.

The British Encyclopaedia (Britannica, 2019), defines the phoneme from the linguistics perspective as the smallest unit which differentiates one sound from another. The variations of the phonemes are called allophones which despite having differences in the articulation, create no difference in the meaning.

4.2.2 Phonetics and Phonology

4.2.2.1 Phonetics

According to Davenport and Hannahs (2005) phonetics studies the sounds of speech. It is divided in three main groups: articulatory, auditory and acoustic.

McMahon (2002) describes articulatory phonetics as the one that identifies which organs and muscles take part in the production of different sounds in the different languages. Additionally, she defines acoustic and auditory phonetics as the ones that concentrate on the sound waves which travel in the air and the effect they have on the person's ears and brain.

Gerald, K. (2000) adds that phonetics studies the physical features of sounds.

4.2.2.2 Phonology

According to Davenport and Hannahs (2005) phonology studies the organization of the sounds into the system of every language. This organization can include the combination of sounds and the relation between sounds. Likewise, Roach, P. (2009) also defines phonology as the study of the relation between phonemes.

Additionally, McMahon (2002) says that phonology deals with the specific selection and organisation of sounds that a language has to express meaning.

4.2.2.3 International Phonetic Alphabet

Edmund Gussman (2002) states that the original purpose of the phonetic transcription was to avoid the ambiguities that the traditional spelling systems had.

The International Phonetic Association (The International Phonetic Association, 2020) shows in its website "The International Phonetic Alphabet" (IPA). According to the International Phonetic Association (The International Phonetic Association, 2020) the beginnings of this alphabet can be traced back to the 19th century. The objective of this International Phonetic Alphabet (IPA) is to have a standard set of symbols to identify all the sounds in all languages.

The International Phonetic Association (The International Phonetic Association, 2020) is responsible for the alphabet and publishes a chart summarizing it. See Figure 4.1.

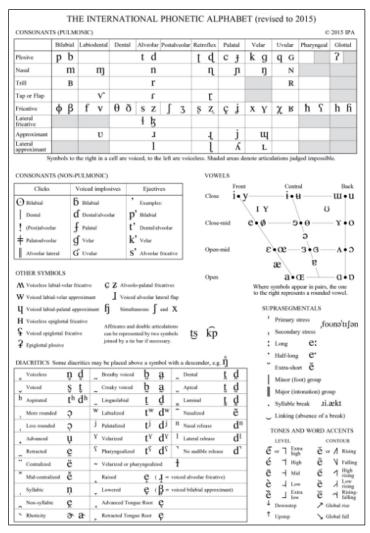


Figure 4.1: The International Phonetic Alphabet. The International Phonetic Association (2020).

4.2.3 Common problems in second language pronunciation

Gerald Kelly (2000) classifies the features of pronunciation using the following diagram. See Figure 4.2

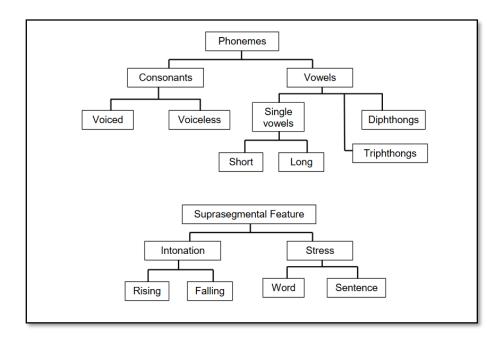


Figure 4.2: Features of Pronunciation. (2000).

4.2.3.1 Problems related to vowels and consonants sounds

Alex Case (2012) describes in detail the main problems Spanish speakers face when it comes down to pronunciation in English.

4.2.3.1.1 The articulation of vowels

Short and long vowel pairs

According to Alex Case (2012) the most serious pronunciation problem he could identify is the inability to distinguish long and short vowels. This is because that distinction is not present in Spanish. Some examples he mentions ate the pair conformed by bit and beat or pull and pool. Alex Case (2012) what can be done to fix this problem is to work on the different mouth positions long and short vowels use.

4.2.3.1.2 The articulation of consonants

Alex Case (2012) presents the problems pronouncing different consonants. The main causes for the problems pronouncing consonants is again the position of the mouth. Some problematic consonants are the voiced and unvoiced, according to Alex Case (2012).

Another problematic pair of consonants difficult for Spanish speakers are the initial S sounds. This is because Spanish does not have S as any initial sound in any word. Alex Case (2012) states that this can be fixed but giving students the option of making a hissing sound which, according to him, it is not difficult for native speakers of Spanish.

One typical problem for native speakers of Spanish is the pronunciation of the TH θ sound. This for Alex Case (2012) is a problem for those speakers whose variations of Spanish does not include it in their pronunciation.

According to Gerald Kelly (2000), there are six manners of pronouncing consonants which are the plosive, nasal, affricative, lateral, fricative and approximant. Marianne Celce-Murcia (2001) defines the manner of pronunciation as the kind of obstacle course the air passes through.

For the purpose of this research paper we are going to describe fricative and affricatives as well as the consonant clusters mentioned by Kelly (2000).

Fricative Consonants

According to Carr (2013) fricative sounds occur when the airstream is partially obstructed. These sounds are /f v s z θ δ \int 3/. Gerald Kelly (2000) also explains there are different fricatives sounds which are dental, labio-dental, alveolar, palato-alveolar and glottal.

For the purpose of this research we have identified dental, palato-alveolar and alveolar in the following words: think /θɪŋk/, things /θɪŋ/, three /θriː/, Thursday /ˈθɜːz·deɪ/, shoes /ʃuː/, shirt /ʃɜːt/, shorts /ʃɔːts/, chef /ʃef/, sit /sɪt/, Sunday /ˈsʌn·deɪ/, sometimes /ˈsʌm·taɪmz/, zero /ˈzɪə·rəʊ/, sunglasses /ˈsʌnˌglɑː·sɪz/, busy /ˈbɪz·i/.

Roach (2009) describes the fricative dental sounds as the sound produced when the air goes through the space between the tongue and the teeth.

Palato-alveolar fricative sounds are the sounds that occur when the air goes through a space between along the centre of the tongue. (Roach 2009). Roach also called these sounds as post-alveolar.

Finally, Roach (2009) describes alveolar fricative sounds as the sounds which occur when the air goes through a narrow space along the centre of the tongue. This sound is an intense sound.

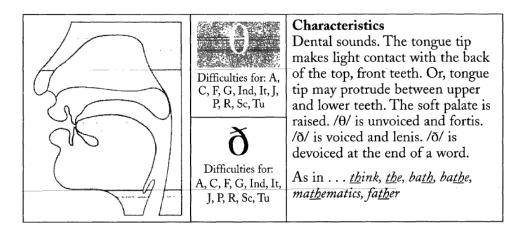


Figure 4.3: Fricative – Dental sounds. How to teach Pronunciation (2000).

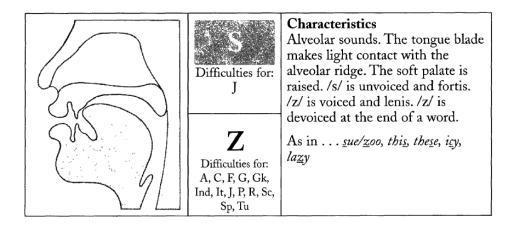


Figure 4.4: Fricative – Alveolar sounds. How to teach Pronunciation (2000).

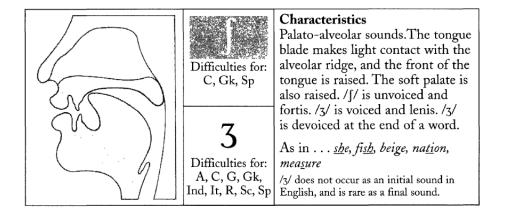


Figure 4.5: Fricative – Palato-alveolar sounds. How to teach Pronunciation (2000).

Affricate Consonants

According to Carr (2013) affricates sounds occur when a complete closure of the airstream is made.

According to McMahon (2002) this palato-alveolar or post-alveolar affricate sounds happen when the tip of the tongue is moved behind the alveolar ridge and then moved back again to the soft palate or velum.

For the purpose of this research we have identified palato-alveolar in the following words: Cheese /tʃiːz/, China /ˈtʃaɪ·nə/, changes /tʃeɪndʒ/.

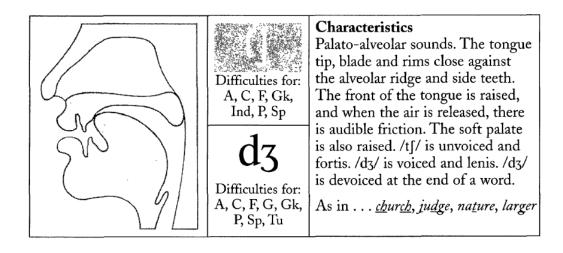


Figure 4.6: Affricate – Palato-alveolar sounds. How to teach Pronunciation (2000).

Clusters

Roach (2009) defines consonant clusters as the fact of two or more consonants together. Roach (2009) also classifies the consonant clusters in two groups: pre-initial and post-initial. Pre-initial consonant clusters refer to the combination of s followed by one of the following consonants: See Figure 4.7

Pre-initial s followed by:																	
									INI	ΓIAL							
p	t	k	b	d	g	f	θ	S	ſ	h	v	ð	Z	3	m	n	ŋ
spin	stık	skin	-	-	-	sfıə	-	_	-	-	-	-	-	-	smel	snou	-

Figure 4.7: Pre-initial s cluster. English Phonetics and Phonology (2009).

For the purpose of this research we have identified the following clusters: school /sku:l/, speak /spi:k/, study /'stʌd·i/, score /skɔ:r/, sleep /sli:p/, street /stri:t/, swim /swɪm/.

According to Kelly (2000) clusters can cause many difficulties for learners especially when they do not have these sounds in their mother tongue. Kelly (2000) also mentions that in Spanish the cluster /sp/ does not exist at the beginning of a word. So, people tend to add an /e/ before the initial sounds /sp/, /st/, /sk/.

4.3. Factors affecting pronunciation

4.3.1 Learner's age

According to Penny Ur (1991) children are more likely to grab the accent. This ability is believed to decrease as the person grow older. Even though this ability decreases, it is compensated by other skills adult learners' have such us understanding more abstract explanation and concepts.

Susan Gass (2008) mentions that people usually believe that children learn faster and better than adults. This is according her making a reference to the ability children have to be successful when acquiring a second language. This is known as the Critical Period Hypothesis (CPH).

Birdsong (Birdsong, 1999 cited by Gass, 2008) defines the CPH as the period of time when it is feasible to acquire a first or - if this is the case – a second language at a native like level.

This period of time is also defined as the *sensitive* period, which according to Long is a gradual period of time which has different degrees of achievement. (Long, 1990 cited by Gass, 2008).

Gass (2008) also cites Lennenberg in the original definition of the CPH. Lenneberg states that the natural acquisition of a language that happens just by being exposed to the language disappears at puberty. After this period in the person's age, it is more unlikely to acquire a language at the same level of command as that of an earlier age.

Regarding this matter, Douglas Brown (2007) mentions that all this phenomenon is explained by vast neurological research conducted to study how the brain functions at the different period of time when language acquisition is taking place. In this study they considered processes like hemispheric lateralization and biological timetables to explain

how the brain changes and therefore their different aspects of language acquisition that are more optimal at different ages.

Specifically referring to pronunciation Brown cites Walsh and Diller and explains that pronunciation is a low –order process which depends on the early maturity and the macro neural circuit adaptation. This is the reason why acquiring the native-like accent becomes less feasible after the early childhood. (Walsh and Diller, 1981 cited by Brown, 2007).

For Jeremy Harmer (2001) despite the fact that there is physiological consideration as the ones mentioned before, adult learners have other advantages over other leaners. For example, Harmer (2001) are able to understand abstract thought. They can use their life experience to relate to what they are learning. Because of their age, adults can be more disciplined and self-motivated to engage in formal studying. For all these reasons, adult learners are easier to work with for teachers who do not need to work really hard on motivating them.

Nevertheless, Harmer (2001) also mentions that some disadvantages of adult learners is their critical attitude to teaching methodologies. This can lead to not accepting the activities they are requested to do in class and therefore, delay they achievement of their learning outcomes. Additionally, adult learners can bring with them negative experiences from their past educational contexts which may prevent them from performing well in their present learning contexts. Finally, as what mentioned before, adult learners may tend to think that their age is a huge obstacle for their leaning and therefore give up before even trying it.

4.3.2 The native language

According to Kenworthy (1988) the native language is an essential factor when learning English pronunciation. This can be easily seen and noticed when we her a non-native speaker of English using typical features of their native tongue in their accent.

These features relate to both the segmental elements such as individual sounds and the suprasegmentally ones such as rhythm and intonation. This is to say that the more different the native tongue is from English, the more noticeable the accent will be and the more difficult it will be for the learner or pronounce accurately. Kenworthy (1988).

4.3.3 Interference between first and second languages

Douglas Brown (2000) mentions that the neurological processes carried out by young learners is the same when acquiring their first and second language simultaneously.

However, when this is done as an adult, the linguistic processes are more sensitive to be influenced by the first language. This is because the adult brain uses all the information it has to learn the new language and therefore what is more available in the brain is what the adult knows form their mother tongue (Brown, D. 2007). This phenomenon or process can be known as interlingual transfer.

Another process which also has an effect on acquiring pronunciation is the intralingual transfer. This is explained by Douglas Brown (2007) as the interference caused by the same target language. This means that learners tend to generalize the rules of pronunciation of specific sounds in English and use them to pronounce other sounds which do not follow the same rule.

4.4. Rhymes and tongue twisters in a language learning context

4.4.1. History of Pronunciation Teaching

There has been along the year different approaches to teaching pronunciation which will be attempted to be summarize in the following paragraphs. The different teaching methods have or have not places the importance pronunciation have in the learning process.

According to Larsen-Freeman and Anderson (2011), the Grammar Translation method had as its main objective the reading of literary works written in the target language. All students needed to learn-according to his method – was the grammatical rules and the vocabulary in the target language so that they could be able to translate form language to the other. For this method the skills which were emphasized were the reading skill and the writing skill, leaving speaking and listening behind.

The Direct Method, on the contrary, stated that that learners had to learn to communicate using the target language. What we understand from this is that this method listening, reading writing and speaking were as important as grammar and vocabulary. (Larsen – Freeman, D. & Anderson, M. 2011)

For the audiolingual method, the emphasis was placed on the aural/oral skills. Therefore, as communication was the key aspect, pronunciation was highlighted from the beginning of the learning process. Followers of this method used laboratories to teach students the different aspects of pronunciation. (Larsen –Freeman, D. & Anderson, M. 2011)

Pronunciation was also considered relevant in the Silent Way Method. This method considered pronunciation as a key element from the very beginning of the learning process. This is because pronunciation was believed to provide the melody of the language students needed to acquire. (Larsen –Freeman, D. & Anderson, M. 2011)

Desuggestopedia, proposed by the psychotherapist Georgi Lozanov stated that the inefficiency to learn was caused by the *psychological barriers* students had. Therefore, their aim was to desuggest learners and help them overcome the idea they were not able to learn because of their age, their social background or any other barriers. As a result, in order to promote communication, pronunciation was considered important by this method too. (Larsen –Freeman, D. & Anderson, M. 2011).

The Community Language Learning Method considered learner as an entire entity. Therefore, not only their intellectuality was taken into account but also their feelings and emotions. This method developed by Charles Curran, placed especial importance to the perspectives adult learners had when learning the target language as they did not want to appear foolish or dumb. Curran proposed that teachers needed to act as counsellors in order to help students overcame their fears and succeed in their learning from the beginning. That is to say that as communication was the final objective, grammar, pronunciation and vocabulary were considered important (Larsen –Freeman, D. & Anderson, M. 2011).

The Total Physical Response method had as its main goal to reduce anxiety so that a low affective filter was created. (Larsen –Freeman, D. & Anderson, M. 2011).

For the Total physical Response method anxiety was reduced when students enjoyed the lessons. Therefore, this method aimed at reducing stress emphasizing grammar and vocabulary and leaving speaking for later when the learner had gained more self-confidence.

This concept of the affective filter is also mentioned by Krashen. Krashen describes this phenomenon as the relationship between anxiety and language learning. For Krashen this happens because the leaner hasn't received enough input to produce the target language. Therefore, the leaners feel unable to produce it successfully. Motivation, anxiety, self-

confidence and another emotional factor play an important role in this. Therefore, according to Krashen the main objective was to maintain the filter down so that learning/acquisition can take place (Gass, S. 2008)

The Communicative Language Teaching has as its goal to enable students to communicate in the target language. In order to achieve this, learner need to be taught form, meaning and functions of the linguistics elements. (Larsen –Freeman, D. & Anderson, M. 2011)

For the Communicative Language Teaching, each activity proposed in the classroom must have a communicative goal. Therefore, great importance is placed to pronunciation. This is because the method considered there was no point in learning vocabulary and grammar but pronouncing incorrectly. (Larsen –Freeman, D. & Anderson, M. 2011)

As described by Marianne Celce-Murcia (2001) all the methods for teaching English had a varied view of the teaching of pronunciation. That is to say that from the Grammar translation method up to the Communicative Approach addressed pronunciation as an element in their proposal.

However, it is essential to highlight that the one method that considered important to present pronunciation in context is the Communicative Approach. This approach states that the primary purpose of language is communication, using language to communicate should be the central element in all classroom language instruction.

4.4.2. Tongue Twister

4.4.2.1. Definition

Tongue twisters are phrases that are put together to make them difficult to say to help correct speech for native speakers and non-native speakers.

According to Kathleen Bailey (1994), a tongue twister is a typical game which children enjoy as well as adults do. The aim of this activity is to help learners consolidate sounds they have been taught or that they have learnt by using a game atmosphere so that the activity is enjoyable. The objective is to consolidate or use it as a remedial activity when it comes to practising minimal pairs of sound sin the target language. (Bailey, K. 1994)

Tongue twisters may be created taking into account minimal pairs of similar phonemes, different phonemes, plosive or fricative sounds or any other feature that is intended to be practised such as rhythm a or stress. (Bailey, K. 1994)

Wells, A. (2012) mentions there is a great variety of tongue twisters but that all of them have rhythm and rhyme. Wells (2012) mentions that the word tongue twisters was created in an old English song from 1951 sung by Dany Kaye. This song was called Tongue Twister and it is since the release of this song that the people started using that name to refer to a sentence or phrase that was not easy to say.

4.4.2.2. Types of Tongue Twister

Sentence type

The sentence type tongue twisters are sentences which include the specific sounds that are aimed to be practiced. For example

Repetitive type

The repetitive type tongue twisters are short phrases which contains the same sound (that is aimed to be practised) repeated several times.

Directed Tongue twisters

The directed tongue twisters type are those who are strictly designed or selected to practise specific sounds a particular learners or group of leaners need to improve on. An example of those are the ones proposed by Kozyrev, J. (2001) who proposes a list of several to improve the pronunciation of vowels and consonants. See Figure 4.8, Figure 4.9, Figure 4.10.

Tongue Twisters for Vowels

Practice with many vowel sounds $/\epsilon/$, $/\alpha/$, $/\theta/$, /0/, /1/, /e/

Betty Botter bought some butter, but she said "This butter's bitter. "If I put it in my batter, it will make my batter bitter." So, she bought some better butter, better than the bitter butter. When she put it in her batter, the butter made her batter better.

Practice with many vowel sounds /æ/, /α/, /αw/, /ο/, /e/, /αy/, Gnats are not now gnawing on the nuts at night.

Practice with /iy/ and /I/

The sheep on the ship slipped on the sheet of sleet. The keen king kissed the quick queen on her green ring.

Practice with diphthongs /\ay/, /\oy/, and /\aw/

/ay/ Quite nice white mice

/aw/ How now brown cow

/oy/ The spoiled boy foiled the coy boy's joy by purloining his toy.

Practice with /ow/

Joe told a joke he wrote on his own.

I know that's not the note that Noel wrote.

The coat from the coast cost more than most

Figure 4.8: Tongue Twisters. Talk it up! Listening, Speaking and Pronunciation (2001).

Practice with /uw/, /u/, and /ə/

Make some fun, funky food and with some luck You can bake a kooky cookie or stew a stupid duck You can look it all up in a cool cook book Or you can find a good excuse why you shouldn't have to cook.

Practice with /uw/

There was a rude dude in the mood for food. Whenever he chewed we all viewed his food. The better the food, the more he chewed, So I served crude food to this rude dude.

Practice with /u/

How much wood could a woodchuck could chuck wood? If a woodchuck could chuck wood in a truck, would a woodchuck cluck while the wood was chucked?

Practice with long and short vowels

- Put the bad bat back in the bag.
- It didn't faze the thief to thieve in my face.
- He let himself be led to the place for the plays.
- The man in the cap had a hat and a cap.

Figure 4.9: Tongue Twisters. Talk it up! Listening, Speaking and Pronunciation (2001)

Tongue Twisters for consonants

Practice with /θ/, /ð/ (TH)

Thirty thousand thirsty snakes thirstily drank three thousand lakes.

Whether the weather is cold, or whether the weather is hot, We'll be together whatever the weather, whether we like it or not.

Practice with /r/, /1/, /n/

'Round and 'round the rugged rocks the raggedly rascal ran.

Little Lucy likes to lick lemon-lime lollypops. Nice Nancy nibbles nervously on nuts.

Red lorry, yellow lorry Little Red Riding Hood

Practice with $\frac{s}{\frac{J}{y}}$ (SH), $\frac{t}{\frac{J}{y}}$ (CH), $\frac{d3}{3}$, and $\frac{J}{y}$ (y)

Suzy sells seashells by the seashore where the sun shines on the shop signs.

Yellow Jell-O, cherry cheesecake, sweet sugar cookies and a chocolate chip shake.

Practice with /p/ and /f/

Note: (Be very careful with this one!!!)

I'm not a pheasant plucker, I'm the pheasant plucker's son,

And I'm only plucking pheasants until the pheasant pluckers come.

Practice with /b/ and /v/

There's a ban on vans at the curb by the curve.

I'm very bad at volleyball, but very fine at basketball.

Practice with /p/ and /b/

Peter Piper picked a peck of pickled peppers.

Barney Babbitt bagged a bushel of big blue berries.

Practice with /v/ and /w/

We are very weary of wearing white woven wool.

We wish to wear vivid violet velvet vintage vests.

Figure 4.10: Tongue Twisters. Talk it up! Listening, Speaking and Pronunciation (2001)

4.4.2.3 The Implementation of Tongue Twister Technique in Teaching Pronunciation

The teacher can combine the practise of the tongue twisters with some other activities in order to make it more interesting, varied and keep student's attention and motivation in the activity. These are some activities that can be done:

a) Chain Reading

Miftahur Rohman (2016) also presents the technique called chain reading. Students stand up in a row at the back. Then each student says a word of the tongue twister. The teacher

or another student controls the time. Then the other group or groups do the same. At the end the winner will the group that said the tongue twister faster and correctly

b) Whisper Tongue Twister

Miftahur Rohman (2016) also presents the technique called whisper tongue twister. In this activity, students need to learn by heart a tongue twister and whisper it to a classmate. At the end of the activity, the last student needs to have the same tongue twister the first students whispered. The winner will be the group whose last students says the original tongue twister correctly. This is usually very unlikely to happen, and the final tongue twisters tend to be something different. This is what makes the activity challenging and fun for the students. However, it is rich for the teachers to make corrections and give feedback on pronunciation at the end of the activity

5. METHODOLOGY

5.1. Description of the research approach

5.1.1. Quantitative approach

In this research study, the research approach followed is the quantitative approach. Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.

The objective when conducting a quantitative research study is to determine the relationship between one thing [an independent variable] and another [a dependent variable] within a population

This type of research works using variables and hypothesis

5.1.2 Hypothesis

In this research paper the hypothesis are:

5.1.2.1 Alternative hypothesis (H1)

The use of tongue twisters significantly improves pronunciation of students of a working adult program at Universidad Privada del Norte

5.1.2.2 Null hypothesis (H0)

The use of tongue twisters does not significantly improve pronunciation of students of a working adult program at Universidad Privada del Norte.

5.1.3 Variables

5.1.3.1 Independent variable

Tongue twisters

5.1.3.2 Dependent variable

Pronunciation of students of a working adult program at Universidad Privada del Norte

5.1.4 Description of the research type

5.1.4.1 Correlational

Correlational research aims at discovering the relationship between two or more measurable variables.

This type of correlational study lets the researcher know the behaviour of the variables when interacting with each other

In this research paper, the research questions are (as mentioned in section 3):

- Which sounds in English do students of a working adult program at Universidad Privada del Norte have problems with?
- What is the influence of rhymes and tongue twisters as a resource to improve pronunciation?
- Does the application of rhymes and tongue twisters improve the pronunciation of students of a Working Adult Program at Universidad Privada del Norte?

5.1.5 Research design

5.1.5.1 Design with pre-test, post-test and control group

This design includes the administration of Pre-tests to the groups that are being part of the experiment. This is to say the experimental and the control groups respectively. The subjects are randomly assigned. After that, the pre-test is applied simultaneously to both the experimental and the control group. One group then receives the Intervention (Experimental Group) while the other doesn't (Control Group). Finally, a Post-test is applied simultaneously to both the experimental and control groups.

5.1.5.2 Diagram

R: randomization

G: group of subjects

X: intervention

O: measurement

5.1.6 Description of the research tools

5.1.6.1 Pre-test

The pre-test is made up of a word list students from the experimental have to pronounce before receiving the intervention.

Students from the control group will also receive the list to pronounce

Students will have to keep a record of their performance

5.1.6.2 Post-test

The pre-test is made up of a word list students from the experimental have to pronounce after receiving the intervention.

Students from the control group will also receive the list to pronounce

Students will have to keep a record of their performance

5.1.6.3 Checklist

This checklist is a mark sheet aligned to the A2 speaking scale. This checklist was made considering the bands, the descriptors and the components of the Pronunciation criteria in the A2 Key speaking exam. See Figure 5.1 and Figure 5.2.

Although in this checklist Stress and Intonation criteria are part of the components considered in the students' evaluation, suprasegmental features will not be dealt with in this project due to time constraints.

PRONUNCIATION CHECKLIST

Pre- test		Post- test						
GROUP: EXPERIMENTAL	CONTROL		DATE:					
Student's Name:		Student's Name:						
Intelligibility		Intellig					Γ	
Individual Sounds		Individ	ual Sounds					Γ
Stress		Stress						
Intonation		Intona	tion					
TOTAL			TOTAL					

Figure 5.1: A2 Speaking Scale from Cambridge Assessment English (2018).

5.1.7 Rubrics

5.1.7.1 A2 Speaking Scale

The Cambridge English Assessment (2018) in its Handbook for Teachers for exams from 2020 includes in the Speaking Section the following rubric for assessing speaking. See Figure 5.2.

	Grammar	Vocabulary	Pronunciation	Interactive Communication						
5	Shows a good degree of control of simple grammatical forms.	Uses a range of appropriate vocabulary when talking about everyday situations.	Is mostly intelligibly and has some control of phonological features at both utterance and word levels.	Maintains simple exchanges. Requires very little prompting and support.						
		Performance	shares features of Ba	nds 3 and 5.						
2	Shows sufficient control of simple grammatical forms.	Uses appropriate vocabulary to talk about everyday situations.	Is mostly intelligible, despite limited control of phonological features.	Maintains simple exchanges, despite some difficulty. Requires prompting and support.						
	Performance shares features of Bands 1 and 3.									
1	Shows only a limited control of a few grammatical forms.	Uses a vocabulary of isolated words and phrases.	Has very limited control of phonological features and is often unintelligible.	Has considerably difficulty maintaining simple exchanges Requires additional prompting and support.						
		Perform	ance below Band 1.							

Figure 5.2: A2 Speaking Scale from Cambridge Assessment English (2018).

5.1.7.2 Overall Speaking scales

Cambridge Assessment (2018) in its Handbook for Teachers for exams from 2020 has an overall speaking scales (see Figure 5.3) with a detailed description of how the speaking component is assessed.

CEFR level	Grammatical resource	Lexical resource	Discourse management	Pronunciation	Interactive communication
	Maintains control of a wide range of grammatical forms and uses them with flexibility.	Uses a widerange of appropriate vocabulary with flexibility to give and exchange views on unfamiliar and abstract topics.	Produces extended stretches of language with flexibility and ease and very little hestation. Contributions are relevant, coherent, varied and detailed. Makes full and effective use of a wide range of cohesive devices and discourse markers.	Is intelligible. Phonological features are used effectively to convey and enhance meaning.	Interacts with ease by skilfully interweaving his/her contributions into the conversation. Widens the scope of the interaction and develops it fully and effectively towards a negotiated outcome.
CZ	Maintains control of awide range of grammatical forms.	Uses a widerange of appropriate vocabulary to give and exchange views on unfamiliar and abstract topics.	Produces extended stretches of language with ease and with very little hesitation. Contributions are relevant, coherent and varied Uses a wide range of cohesive devices and discourse markers.	is intelligible. Intonation is appropriate. Sentence and word stress is accurately placed. individual sounds are articulated dearly.	Interacts with ease, linking contributions to those of other speakers. Widens the scope of the interaction annegotiates towards an outcome.
C1 degree of con of a range of s and some con grammatical	Shows a good degree of control of a range of simple and some complex grammatical forms.	Uses a range of appropriate vocabulary to give and exchange views on familiar and unfamiliar topics.	Produces extended stretches of language with very little hesitation. Contributions are relevant and there is a clear organisation of ideas. Uses a range of cohesive devices and	Is intelligible. Intonation is appropriate. Sentence and word stress is accurately placed. Individual sounds are	Initiates and responds appropriately, linking contributions to those of other speakers. Maintains and develops the interaction.
	Grammar and vocabulary		discourse markers.	articulated dearly.	and regotiates towards an outcome.
B2	Shows a good degree of control of simple grammatical forms, and attempts some complex grammatical forms. Uses appropriate vocabulary to give and exchange views, on a range of familiar topics.		Produces extended stretches of language despite some hesitation. Contributions are relevant and there is very little repetition. Uses a range of cohesive devices.	Is intelligible. Intoration is generally appropriate. Sentence and word stress is generally accurately placed. Individual sounds are generally articulated clearly.	Initiates and responds appropriately. Maintains and develops the interaction and negotiates towards an outcome with very little support.
B1	Shows a good degree of control of simple grammatical forms. Uses a range of appropriate vocabulary when talking about familiar topics.		Produces responses which are extended beyond short phrases, despite hesitation. Contributions are mostly relevant, but there may be some repetition. Uses basic cohesive devices.	Is mostly intelligible, and has some control of phonological features at both utterance and word levels.	Initiates and responds appropriately. Keeps the interaction going with very little prompting and support.
A2	Shows sufficient control of simple grammatical forms. Uses appropriate vocabulary to talk about everyday situations.			Is mostly intelligible, despite limited control of phonological features.	Maintains simple exchanges, despite some difficulty. Requires prompting and support.
A1	Shows only limited control of a few grammatical forms. Uses a vocabulary of isolated words and phrases.			Has very limited control of phonological features and is often unintelligible.	 Has considerable difficulty maintaining simple exchanges. Requires additional prompting and support.

Figure 5.3: Overall Speaking Scales from Cambridge Assessment English (2018).

5.1.8 Recordings

5.1.8.1 Pre-test:

Students from both the experimental and control group will be given the Pre-test.

The Pre-test consists of a list of words extracted from their textbook Touchstone 1 Student's Book with Online Course (Second Edition) published by Cambridge University in 2015. This list of words contains the main problematic sounds for Spanish Speakers. As it was previously mentioned, these words were taken from the material students use in their everyday classes of English.

This means that students will use them during the course and therefore the intervention aims at being useful for their final overall performance in the course. The words are the following: China, Shirt, Shorts, Schools, Speak, Thursday, Study, Sleep, Sometimes, Three, Things, Chef, Swim, Shoes, Cheese, Sit, Score, Zero, Sunday, Busy, Changes, Think, Street, Sunglasses and Skirt.

After that, students from both the Experimental and Control group will record themselves in class pronouncing the words. They will upload their videos using a phone app called Flipgrid. Their pronunciation will be assessed using the checklist presented in number 5.1.6.3.

5.1.8.2 Intervention: Tongue twisters

The activity will be done in class during 12 sessions with the experimental group. The first and last sessions will be used to record the Pre and Post-test. Students from the Experimental Group will record their own pronunciation using a phone app called Flipgrid.

This means that we will actually have ten sessions to apply the tongue twisters as a technique to improve their pronunciation. Students from the Experimental Group will practice two tongue twisters per session. Tongue twisters will be presented and practiced individually, in pairs, in groups or as a whole class every session. The tongue twisters that will be used are the following. See Figure 5.4.

Tongue Twisters

- The thirty-three thieves thought that they thrilled the throne throughout Thursday.
- Six sick hicks nick six slick bricks with picks and sticks.
- I wish to wish the wish you wish to wish, but if you
 wish the wish the witch wishes, I won't wish the wish
 you wish to wish.
- Six sleek swans swam swiftly southwards.
- She saw Sherif's shoes on the sofa. But was she so sure she saw Sherif's shoes on the sofa?
- Six slimy snails sailed silently.
- I thought, I thought of thinking of thanking you.
- Seven slick slimey snakes slowly sliding southward.
- Singing Sammy sung songs on sinking sand.
- I wish to wash my Irish wristwatch.
- He threw three free throws.
- Chester Cheetah chews a chunk of cheap cheddar cheese.
- Suzie, Suzie, working in a shoeshine shop. All day long she sits and shines, all day long she shines and sits, and sits and shines, and shines and sits, and sits and shines, and shines and sits. Suzie, Suzie, working in a shoeshine shop.
- She sells sea shells on the sea shore; the shells that she sells are sea shells I'm sure. So, if she sells sea shells on the sea shore, I'm sure that the shells are sea shore shells.
- I wish to wish the wish you wish to wish, but if you wish the wish the witch wishes, I won't wish the wish you wish to wish.
- A snake sneaks to seek a snack.
- Sleep sweetly! Sleep sweetly!
- · He threw three free throws.
- I saw Susie sitting in a shoe shine shop.
- I scream, you scream, we all scream for ice cream!

Figure 5.4: English Tongue Twisters (2018).

5.1.8.3 Post-test

- Students from both the experimental and control group will be given the Post-test.
- The Post-test consists of the same list of words extracted from their textbook which containing the main problematic sounds for Spanish Speakers.
- The words are the following: China, Shirt, Shorts, Schools, Speak, Thursday, Study, Sleep, Sometimes, Three, Things, Chef, Swim, Shoes, Cheese, Sit, Score, Zero, Sunday, Busy, Changes, Think, Street, Sunglasses and Skirt.
- Then students from both the Experimental and Control Group will record themselves in class pronouncing the words.
- They will upload their videos using a phone app called Flipgrid.
- Their pronunciation will be assessed using the checklist presented in number 5.1.6.3.

6. STUDY

6.1. Context of the research

The undergraduate population of students in Peru can be divided in two big groups: undergraduate students who exclusively study and the ones who study and work. All of them are part of the university system of the country which is ruled by the same standards both for private and state universities. This is to say that whether the university is private or public, it will be regulated by the Superintendencia Nacional de Educación Superior Universitaria (SUNEDU). One of the requirements this institution has established is that in order to graduate every university student has to show any proof of their command of a foreign language. Each university has the autonomy to decide which foreign language their students have to study.

In this context all undergraduate students take into consideration different reasons or factors before deciding which university to choose. Some factors include the prestige the university has, the variety of degrees, the fees among others. One important factor considered especially by the undergraduate students who work and study is flexibility the institution can offer regarding schedules. Taking into account this last factor it can be said that the majority of people who work and study, choose the private system because it is less traditional than the state one in terms of flexible schedule.

Having described in broad terms the university system in Peru, I can now say this research was conducted in a private university called Universidad Privada del Norte. This university offers a variety of different degrees both for undergraduate and graduate students just as a regular state university does. In this university, these programs include mainly business degrees such as Administration, Accounting, International Business and some engineering degrees. Also, just as the other public and private universities, Universidad Privada del Norte includes a foreign language requirement for graduation to all its degrees. This is a regulation stated by the National Organization that Supervises the functioning of the Universities in Peru called Superintendencia Nacional de Educación Superior Universitaria (SUNEDU) as mentioned above in the previous paragraph. SUNEDU states – among other requirements - that all undergraduate students must prove the command of a foreign language as a requirement for graduation. The foreign language and the proficiency level students have to show is determined by each university. Each university makes this decision according to their social and economic context, cultural background, academic

approach and their nature (this means taking into account the fat of being a public or private university). Universidad Privada del Norte has chosen English as the foreign language for undergraduate students. Considering the Common European Framework of Reference (CEFR), Universidad Privada del Norte has established the minimum level to graduate is B1 (Intermediate).

Additional to the regular degrees already mentioned, the Universidad Privada del Norte offers a program specially designed for students who work and study. This program called the Working Adult Program is designed and offered respecting the same regulations given by SUNEDU. The main feature of this program is that it is offered to people who have verified working experience in their careers and who can prove that they are currently inserted in the job market. This type of program which is offered by other private universities has become highly chosen by the working students. This is because these students are already working in the market in their different careers but, for different reasons could not start and/or complete their academic background. By choosing this kind of program they can certify their knowledge taking classes within a flexible schedule. This characteristic is the main motivation for students to take up courses after their working hours.

These students are generally above the average studying –age of a regular undergraduate. Because of the changes in the modern school system nowadays students are sixteen or seventeen when they finish school. This is to say, that the average college student is a teenager or in the better case scenario a young adult with little or no responsibility in life other than studying. On the contrary, students of the Working Adult Program are people whose age ranges between the early thirties up to late fifties or more. Additionally, to their work load, these students generally also have family responsibilities such as their household, children in school age and many others. Therefore, having a flexible schedule is a key factor for them. Universidad Privada del Norte offers them evening and weekend shifts. This is done in order to not to interfere with their everyday fixed personal and work routine.

The main characteristic and advantage of this Working Adult Program group is that the students are highly motivated to successfully complete their studies. This is because their goal is to complete their degrees as soon as possible. As mentioned before these students are already part of the job market system. Some of them, have been working almost all their lives and their know-how is wider than any recent graduated manager. However, in the current competitive world they need official qualifications in order to get a promotion or

an increase in their salary. Additionally, if they aim at changing to a better job, they cannot rely only on their expertise, they need to prove it. As a result of what has been mentioned, this program has students for whom the schedule of the classes and the length of them is not an issue as it might be for the regular younger undergraduate.

Another main characteristic of this Working Adult Programs group is the students' age. This is also the main challenge both for the teachers and the students especially with foreign language learning. This is the result of a variety of reasons. The most common one is the lack of language background students have since they devoted their time to working rather than to studying due to different circumstances. So, teachers must be innovative, creative and meaningful when delivering their lessons so that they can meet the needs and demands of their students. This is essential especially because most of the time students of this Working Adult Program, in general, arrive tired and sometime even late due to their working schedules. This means that after a long hard-working day, the least they are expecting is a tedious lesson.

The Working Adult Program in Universidad Privada del Norte consists of three years of studies where students take general career courses specific to their different degrees. Each term lasts 18 weeks divided throughout the year. This means that in a year students of the Working Adult Program can complete three terms. The Working Adult Program is designed in such a way that during the first year students complete only career courses. This is done in order to ensure all the students get a standard formation at the beginning of the studies. During the second and third year students can choose from a variety of electives the one they consider complement their studies. In this same period, once students have got familiarised with the system, they can also start their foreign language courses.

This Working Adult Program offers four courses of English which go from English 1 (A1) to English 4 (B1). These four levels have been included in order to ensure students reach the intermediate level at the end of their studies. The B1 level have been chosen as the requirement because it allows a person to interact both socially and professionally at an intermediate level. The courses offered have different schedules, especially at night which range from 7:00pm to 10.30pm. This program has chosen the Touchstone Series to deliver the lessons. Touchstone is a four-level series for young adults and adults. It takes students from beginning to intermediate levels (A1–B1).

In the Touchstone series the language is presented in a natural way in authentic contexts. It explicitly develops conversation strategies to promote fluency and confidence.

Another characteristic of these series is that it offers three modalities: Printed, Blended and Fully Online. Due to the nature of the Working Adult Program and the students' backgrounds, the Blended modality was chosen. This is because it offers wide extra autonomous practice students can and should do outside the classroom in the time they consider most appropriate according to their schedules and routines.

The English courses of the Working Adult Program are designed to cover the four skills in an integrated way. All the courses include Listening Activities to provide input and practice of English at a different level. Additionally, the Speaking Activities have been programmed to be covered in every lesson as a way to promote interaction, fluency and communication among students. Another component included in the written production. This component aims at providing students with the basic elements they need to express themselves in a written way at the beginning and move forward little by little until they can have a good command of the different writing formats by the end of the four courses. Reading is another component of the program. It aims at getting students familiarized with the different texts formats they will encounter both in a familiar or professional context. Finally, the last component which can or cannot be considered a skill is the Grammar and Vocabulary content. This final component is detailed, just as the others, in the syllabus for each level so that student know what they are expected to learn and do by the end of each course.

For this research paper the group of students chosen were the students of the first course of English of the Woking Adult Program. The course was English 1 which corresponds to the A1 level of the CEFR. This means that English 1 course is a basic course whose students are mainly real beginners, beginners as well as a few false beginners. That is to say that although some students of this course may have some previous knowledge, they do not have a fluent command of the language yet. Additionally, their vocabulary range is still very limited since they have not been exposed to sufficient written or aural input.

The English 1 Course basically covers vocabulary that provides input about the alphabet, numbers, colors, days of the week, the time, months of the year, countries, nationalities, clothes, appearance, personality and several adjectives related to the vocabulary. Additionally, the course aims at developing strategies to express personal information, everyday activities, people and job's descriptions, short invitations among others. Finally, it includes a grammar section which covers the structures to perform the previous listed strategies. Some of these are: Simple Present of some routine verbs or the Conjugation of the Verb To Be in affirmative, negative and interrogative form.

6.2. Corpus and data collection

This research project was designed to follow the "Pre–Test, Intervention, Post –Test" Model. Two groups were involved in this research project: The Experimental Group and The Control Group. The three stages were developed along the third term of the academic year. Both the Experimental and Control groups shared the same schedule and the same teacher just on different days of the week. While the Experimental Group had classes on Mondays and Saturdays, the Control Group had classes on Tuesdays and Saturdays. The classes were delivered on the weekdays and in the evening shift from 7:00 pm to 10:30 pm. However, on the weekend all of them were delivered in the morning shift from 7:00am to 10.30am

The first stage of the study, the pre – test, was applied during the first week of classes in both the Experimental and Control Groups. Students from the Experimental Group were the ones who had their classes on Mondays and Saturdays. Their first day of class, their teacher informed them they were going to take part in an activity to improve their pronunciation. The teacher informed the students of the process and steps of the activity. The teacher also informed the students, this activity would be an ungraded complement to the rest of their regular activity. This was done in order to not to make students feel anxious or nervous about the activity and so that they participate the most natural way possible. Once all the students had arrived, the teacher explained the activity, the process, the purpose and the steps. Finally, the teacher applied the first stage of the activity as follows:

1. The teacher showed the list of words taken from the textbook Touchstone 1 Student's book on a Power Point Slide on the screen. The list of selected words is the following:

China	Shirt	Shorts	Schools	Speak
Thursday	Study	Sleep	Sometimes	Three
Things	Chef	Swim	Shoes	Cheese
Sit	Score	Zero	Sunday	Busy
Changes	Think	Street	Sunglasses	Skirt

2. The teacher informed the students that the list of words was taken from their textbook. Also, since not all of them had their books already, they were instructed to copy the list on their notebooks.

- 3. The teacher explain students that the very first step was for them to record themselves individually reading the list of words using the application Flipgrid.
- 4. The teacher opened the application on the screen and showed the students the activity code she had previously created for the Experimental Group. The teacher gave students some time to time to download the application and install it in the phones. The teacher monitored this step of the process to make sure all of the students managed to complete this step.
- 6. Once, all the students had installed the Flipgrid application in their phones, the teacher explained how they should use it in order to record and upload themselves reading the list of words.

The instructions to complete this step were the following:

- a. Students had to first enter the activity code the teacher had previously shown on the screen or board or sent to their e-mails via the Virtual Campus students also use.
- b. After that, students clicked on the plus (+) icon to start the video camera from the phone application Flipgrid to record themselves reading the list of words.
- c. Then, once they finished reading the list, they had to take a selfie and enter their name and last name.
- d. Finally, their recording would be uploaded and would automatically appear on the teacher's screen.
- 7. For this part of the activity corresponding to the Pre-test, the teacher instructed the students from the Experimental Group to read the words as they knew or felt the words were pronounced. Students were not given time to practice or rehearse or look up the pronunciation in the dictionary. This was done in this way so that the teacher could have the most real idea of the status of her students' pronunciation in the Experimental Group is. If the students have been notified in advance of the words or the activity, their normal behaviour would have been to practice to be ready and to have a good performance. This, then, would have altered the results.
- 8. After all these instructions were given, students recorded themselves reading the words and uploaded their individual recording to the Flipgrid app. Being this the first contact

students had with the activity; it is important to mention that students from the Experimental Group showed a positive attitude towards the activity. This is because, they understood the proposed activity intended to help them improve their spoken performance rather than evaluating them.

Also, they felt motivated and interested in the activity because it was something completely different from their other classes they were taking. As we have mentioned, our students from the Working Adult Program are students who are already part of the working system. They have experience and in order to support their expertise, they need their diploma. Therefore, they take a variety of business-related courses in order to complete their degree. Then inserting a completely different element in their classes will renew their motivation and interest and therefore their final performance.

Likewise, students from the Control Group were the ones who had their classes on Tuesdays and Saturdays. The same process was followed with the Control Group. Their first day of class, their teacher informed them that because it was their first class, she needed to have an idea of the status of their pronunciation and so they were going to take part in an activity. The teacher informed the students that this activity would be an ungraded activity designed only for diagnosis purposes so that students from the Control Group did not react anxiously to the activity. This was done in order to have the most authentic data possible to compare it to that of the Experimental Group. The teacher also informed the students of the process and steps. Once all the students had arrived, the teacher explained the activity, the process, the purpose and the steps. Finally, the Pre-test with the Control Group was applied as follows:

1. The teacher showed the list of words taken from the textbook Touchstone 1 Student's book on a Power Point Slide on the screen. The list of selected words is the following:

China	Shirt	Shorts	Schools	Speak
Thursday	Study	Sleep	Sometimes	Three
Things	Chef	Swim	Shoes	Cheese
Sit	Score	Zero	Sunday	Busy
Changes	Think	Street	Sunglasses	Skirt

2. The teacher informed the students that the list of words was taken from their textbook. Also, just as it was done with the Experimental Group, they were instructed to copy the list

on their notebooks. This back-up plan was done because not all of them had their books. The activity was designed to be don the first day of class and normally, students come to class straight from work at night which doesn't allow them to buy any material for their classes.

- 3. The teacher explained students that the very first step was for them to record themselves individually reading the list of words using the application Flipgrid. The teacher also explained that the words were extracted from their course book units.
- 4. The teacher opened the application on the screen and showed the students another activity code she had previously created for the Control Group. The teacher gave students some time to time to download the application and install it in the phones. The teacher monitored this step of the process to make sure all of the students managed to complete this step.
- 5. Once, all the students had installed the Flipgrid application in their phones, the teacher explained how they should use it in order to record and upload themselves reading the list of words. The instructions to complete this step were the following:
- a. Students had to first enter the activity code the teacher had previously shown.
- b. After that, students clicked on the plus (+) icon to start the video camera from Flipgrid to record themselves reading the list of words.
- c. Then, once they finished reading the list, they had to take a selfie and entered their name and last name.
- d. Finally, their recording would be uploaded and would automatically appear on the teacher's screen.
- 6. For this part of the activity corresponding to the Pre-test, the teacher instructed the students from the Control Group to read the words as they knew or felt the words were pronounced. Students were not given time to practice or rehearse or look up the pronunciation in the dictionary. This was done in this way so that the teacher could have the most authentic data possible.

7. After all these instructions were given, students recorded themselves reading the words and uploaded their individual recording to the Flipgrid app.

The second stage of the study was the Intervention. The Intervention Stage was applied during the second and sixth week of classes only to the Experimental group. The Control Group was not part of this stage. In order to start with the Intervention Stage, the teacher first graded the student's pronunciation in both the Experimental and the Control group so that she could have the necessary scores to be compared in the third stage, the Post-test.

The Tongue Twisters technique described in detail in Chapter 5 was used from the second week of classes until the sixth week of classes. The Tongue Twister activity as a strategy to improve pronunciation was used only with the Experimental Group. The teacher reminded the students they were informed the first day of class, they were going to participate in an activity throughout the period to improve their pronunciation. The teacher, then informed her students the activity consisted on saying and repeating different Tongue Twisters as accurately as possible.

The activity was designed to be done every hour for a period of 15 to 20 minutes of the session the students from the experimental group had which lasted four hours. There were many reasons taken into account when deciding to place the Tongue Twister activity every hour for a period of 15 to 20 minutes of each 4-hour lesson. As described in the Pre-test stage, the students' schedules went from 7:00 pm until 10:30 pm. Given the profile of the Working Adult Program, it is not difficult to imagine that by the end of the first hour of class students were going to be tired and sleepy. This was the first reason considered to place this fun, different, challenging, active and, most of all ungraded activity at the end of every hour. In other words, the reason to include the tongue twister activity at these times of the session was for students to have a brain break. This is to say students could have a completely different activity to disconnect, recharge energy, regain concentration and practice their pronunciation. During this activity (the tongue twister activity) some students recorded themselves practising their tongue twisters in the Flipgrid application they used the first day of class. Although this was not mandatory, some students did because the found the application appealing and interesting.

The second reason to place the activity every hour for a period of 15 to 20 minutes of each 4-hour lesson was to ensure that the majority of the students, if not all, from the Experimental Group were part of the intervention. Also, this was done to ensure that the

majority of the class had the chance to participate in the activity and make use of the Tongue Twister technique. As mentioned before at the beginning of this Chapter, the Working Adult Program offers their students the flexibility to have a wider tolerance in their entry time. This is stated like this so that they have no problem arriving form their jobs. Having said this, if the activity had been done during the first minutes of the class, it was very likely that only very few students took part of it. Additionally, if the activity had been done at the end of the whole class session the nature and purpose of it of providing students with a brain break as well as pronunciation practice would have been lost.

The third reason to include and place this activity at the end of each hour was to force students to adopt the student's role. We have mentioned in detail that the student's profile of the Working Adult Program of the Universidad Privada del Norte is people who already work. In addition to this, it is worth mentioning that the majority of them work on managing positions. This means that they are used to giving instructions and directives rather than receiving and following them. This sometimes causes them to be reluctant to develop activities in class – in any class. Therefore, designing activities that are out of regular working routine, allows the teachers to make them forget their working "brain chip" and engage completely in the lesson. As a result of this, the teacher ensures the learning process is completed as well as the learning outcomes. For this research paper, this means that students from the experimental group will be fully engaged and motivated in the lesson acting solely as students. So, the objectives of the tongue twister activity would be reached and most importantly students would learn and improve to some extent.

The third and last stage of the study, the Post-test was applied during the last week (the seventh week of classes both to the Experimental and the Control Group. In order to start with the Post-test Stage, the teacher reminded both groups they had taken notes of the list of words taken from their textbooks. The teacher also asked her students if they remembered the activity they did with that list. After eliciting some answers randomly, the teacher explained they had to record themselves again reading the same list of words using the application Flipgrid. The teacher explained the students the same process and the same steps previously detailed in this chapter. Just as it was done in the Pre-test Stage, students were reminded to just record themselves reading without rehearsing or practising since the idea was to observe how much their pronunciation had changed after a whole period of classes.

6.3 Research tools

In order to for the teacher to gather the information about the students' performance both in the Pre-test and Post-test in this research paper with the two groups (Experimental and Control), the students and the teacher used different research tools. The tools include regular teaching class material, additional online tools and statistics measurements.

The regular teaching class material used as research tool was the coursebook. The textbook which is used at Universidad Privada del Norte is a six-level English program where language is presented in authentic contexts. Additionally, the textbook is designed to develop conversation strategies so learners can speak with confidence. Here the importance of the focus of this research study on improving students' pronunciation

Each unit in the course book presents a standard organization that includes different sections. Just as the other language teaching material there are the grammar, listening, writing, and vocabulary and reading sections. However, the most relevant sections for the present research study are the extra grammar section, the common error information section and the "sounds right" section.

- 1. An extra grammar practice section which focuses on key grammar points in each unit which will be integrated with the other skills in order to promote fluency both spoken and written.
- 2. A common error information section which helps students avoid making basic errors and therefore improving their accuracy both spoken and written.
- 3. A "Sounds right" section which consists on activities that provide some pronunciation practices and enable students to speak with confidence. The presence of this section shows the emphasis the course book places on pronunciation. This is another reason to highlight the importance of the focus of this research study.

These series also offer the students an online component. This online component is a platform which gives students extra practice through different grammar and vocabulary exercises, games, video activities, pronunciation activities, self-recording activities and tests which students can complete at their own pace and as many times as they need until they get it right.

The list of words used in the Pre and Post Tests, that students recorded themselves pronouncing, were taken from this course book units. They were selected for two reasons:

- 1. The first reason is because they appear repeatedly along the units. This means they are important words for students to know and practice.
- 2. The second reason is because they contain the most problematic sounds Spanish speakers have when pronouncing words in English. This is to say that students would benefit not only academically when improving the pronunciation of these words, but also, they will improve personally. This is because they will pronounce better not only in class but also in the other contexts in which they need to speak in English

As it was explained before in 6.2 (Corpus and Data Collection), the online tool used in this research study was the cell phone application called Flip grid.

The Flipgrid application is an online free video platform that allows people to make short videos. The users of this cell phone application can use it to make regular videos and also, they can make videos including other characteristics such as emojis or stickers. These additional elements make the application appealing to everybody.

This cell phone application has become very popular in the educational field lately. This is because it promoted what is called social learning. Social learning is a trend that aims at promoting collaborative learning in a stress-free environment using social media as a learning tool. By using this kind of tool, students can work individually or in pairs. They can also work in groups. All the participants in the "grid" can see what the others have produced. Also, they can make comments, add reactions and in a more academic environment, provide peer-feedback

Additionally, this application is a good tool for teachers of English. This is because it provides motivation, diversification and opportunity for everybody to show their spoken performance in a different way. It provides motivation since it gives the students the opportunity to "use their cell phones in class": Most of the time, teachers struggle to get students eyes away from their phones. By inserting an element that students like to use, teacher not only ensure motivation but also diversification.

Another characteristic of this tool is that it is set only in English, therefore it makes students use the language even more.

Finally, Flipgrid is a modern tool. Nowadays, almost all the activities – academic, personal, professional and recreational - are done through the cell phone. Currently, it is almost

impossible for anybody to imagine a regular day without the cell phone. This is because doing the activities with the phone is faster, easier and more appealing for any student to have an app they can download in their phones. This is an advantage to the teaching purposes since it adds the element of motivation that sometimes it is a bit hard to get, especially with adult students.

As explained before, in this research paper the application was used following these instructions:

- 1. The teacher showed the list of words taken from the course book students used in the classes. The list of works is shown on a Power Point Slide on the screen.
- 2. The teacher informed the students that the list of words was taken from their textbook. Also, they were instructed to copy the list on their notebooks. Students were requested to do this for several reasons. The main one is because sometimes students do not get their material. They do not get it because they do not consider is necessary and also because the institution cannot oblige them to buy the course book. Then, if they have the words written on their notebooks, they can practise it even if they do not have the course book.
- 3. The teacher explained students that the very first step was for them to record themselves individually reading the list of words using the Flipgrid application.
- 4. The teacher opened the application on the screen and showed the students a code. The teacher gave students some time to download the application and install it in the phones.
- 5. Once, all the students had installed the Flipgrid application in their phones, the teacher explained what they should use it in order to record and upload themselves reading the list of words.

In order to evaluate the students' performance both in the Pre-test and Post-test, the checklist and rubrics shown and deeply described in Chapter 5 were used.

The results were recorded in separated excel files both for the Experimental and Control group so the results could be organized and analysed more clearly.

The results were recorded including the students' names and scores. However, for ethical reasons, their names were taken out from the charts and graphics used in the Result Chapter.

Finally, in order to analyse the results and compare them to the main objective, the specific objective and the hypothesis, there were different statistics measurements which were used using the corresponding software. The statistic measurements included in this research paper are the average, Combrach's alpha and correlation coefficient.

6.4 Research plan

The stages considered for this research were three: The Pre-test, the Intervention and the Post-test. These stages were included following the research design. This design includes the administration of pre-tests to the groups that form the experiment. The subjects are randomly assigned. After that, the Pre-test is applied simultaneously. One group then receives the Intervention (Experimental Group) and the other does not (Control Group). Finally, a Post-test is applied simultaneously to both groups.

The period considered to develop the Pre-Test Stage was the first week. This corresponds to the beginning of the term of the course the students from Universidad Privada del Norte were studying. Students were informed of the activity the very first day of class in both groups (Experimental and Control). The teacher explained what the activity consisted on and the students participated eagerly and enthusiastically as it was planned as part of the session as an icebreaker. After the activity was completed, the teacher explained the students in both groups (Experimental and Control) that at the end of the term they would repeat the activity so that they could compare themselves their own performances.

For the Intervention Stage, the students from the experimental group were informed by the teacher that after watching their videos (from the Pre-test activity) they were going to do an activity in order to improve their pronunciation. The teacher explained the kind of activity they were going to complete at the end of every class. After students received the information of what the activity consisted on, they showed a proactive attitude towards it. Then, the students were given the tongue twister activity for a period of seven weeks. During this period, students from the experimental group developed the tongue twister activity every week at the end of their sessions. Students from the Control Group did not develop this activity in their sessions.

The period considered to develop the Post-test Stage was the week after the Intervention Stage was completed. In order to complete this final stage, students from both the experimental and the control group were reminded by their teacher of the video they recorded the very first session of the term. Then, the teachers instructed both groups

(Experimental and Control) to record themselves reading the same list of words. As a wrapup activity the teacher asked both groups (Experimental and Control) to compare themselves their videos and evaluate empirically their own performance. After this, one more month was scheduled to work on the statistical analysis and the final report.

As it can be seen in the following chart, the research was planned to be developed during the months of December and January. Despite the fact that they were three holidays, the schedule could be followed accordingly. This is because the holidays were made up in advanced in order not to interfere what the number of hours students were supposed to study and the number of sessions the course has.

Month		Эесе	mbe	r		Jar	nuary		February
Activity	1st week	2 nd week	3 _{rd} week	4 th week	1st week	2nd week	3rd week	4th week	1st week
Pre -test	X								
Intervention		X	X	X	X	X	Х		
Post -test								Х	
Evaluation & Final Report									X

The first stage of the Pre-test was developed the first week of December both with the Experimental and Control groups as it has been thoroughly described in section 6.3.

Then the Intervention Stage that consisted on the application of the tongue twister technique was applied with the Experimental Group during the next three weeks of December and the first four weeks of January.

The Post-test was applied on the fourth week of January with both the Experimental and

Control Group.

During the last week of January and the first week of February the evaluation of the data

collected was carried out. In this stage the checklist and the rubrics widely explained in

Chapter 5 were used to evaluate students' performance (both from the Experimental and

Control Group) through their Flipgrid Videos.

Additionally, the obtained results were analyzed using the corresponding statistical

measurement in order to complete the discussion and conclusions chapters.

For this purpose, Intelligibility and Individual Sounds were analyzed. As I mentioned before,

even though the evaluation tool has four criteria, suprasegmental features (Stress and

Intonation) are not considered in this analysis.

The results students obtained in each criterion in the Pre and Post-tests in both groups

(Experimental and Control) were organized in the tables and graphics that will be shown in

the next chapter (Results and Discussion).

Additionally, the reliability of the checklist used as a research tool was measured with the

Cronbach Alpha.

Furthermore, apart from analyzing Intelligibility and Individual Sounds, the individual

performance of each word was measured using the Likert Scale where the following ranges

were stated:

Very good: 16-20

Good: 11-15

Fair: 6 – 10

Bad: 0 - 5

50

7. RESULTS AND DISCUSSION

In this section we will analyse the results obtained during the application stage which was conducted following the research questions mentioned in Chapter 3. These were:

- Which sounds in English do the students of a Working Adult Program at Universidad Privada del Norte have problems with?
- What is the influence of rhymes and tongue twisters as a resource to improve pronunciation?
- Does the application of rhymes and tongue twisters improve the pronunciation of students of a Working Adult Program at Universidad Privada del Norte?

In order to answer these questions, the results were organised including only two criteria (Intelligibility and Individual Sounds) as it will be shown in the Tables 7.1 to 7.12 and Graphics 7.1 to 7.10.

Additionally, the reliability of the research tool will be shown in the Charts with the Cronbach Alpha.

Also, the individual performance of each word will be shown in the Charts and Graphics in the Appendix Section.

The statistics analysis applied corresponds to an experiment with two groups of subjects and two occasions of observation. What is intended to evaluate is the response the subjects give to the intervention with the Tongue Twisters Technique.

Before mentioning the sounds that students have difficulties with, it is important to mention how the sounds are produced in the English language. Kelly (2000) divides the production of sounds in two main groups: vowels and consonants. On one hand, vowels are classified as close vowels, mid vowels and open vowels as well as the combination with vowels called diphthongs (centring and closing).

On the other hand, the consonants can be classified according to their articulation in three groups: the manner of articulation, the place of articulation and the force of articulation.

According to the manner of articulation, consonants can be plosives, affricates, fricatives, nasal, lateral and approximant.

According to the place of articulation, consonants can be bilabial, labiodental, dental, alveolar, palate-alveolar, palatal, velar and glottal.

According to the force of articulation, consonants can be fortis or strong and lenis or weak.

This research aimed at identifying the sounds students from the Working Adult Program at Universidad Privada del Norte had problems with. After reviewing the literature previously summarised and taking into account what was mentioned by Kelly (2000) described indepth in Chapter 4, the sounds Spanish speakers in general have problems with are the clusters: /sp/, /st/, /sk/ which do not exist at the beginning of a word. So, people tend to add an /e/ before the initial sounds.

For the purpose of this research and in order to answer the first research question: Which sounds in English do the students of a Working Adult Program at Universidad Privada del Norte have problems with?, I selected the following sounds which are the most problematic ones for my students: tf/, f/, t/, t/,

In order to improve the production of these sounds in a contextualized and inductive way, the sounds were identified in the following words taken from the students' book used in their everyday classes Touchstone 1 Student's book with Online Course

China	Shirt	Shorts	Schools	Speak
/ˈtʃaɪ·nə/	/ʃaːt/	/ʃɔːts/	/skuːl/	/spi:k/
Thursday	Study	Sleep	Sometimes	Three
/ˈθɜːz·deɪ/	/ˈstʌd·i/	/sliːp/	/ˈsʌm·taɪmz/	/θriː/
Things	Chef	Swim	Shoes	Cheese
/θ ɪ ŋ/	/ʃef/	/swim/	/ʃuː/	/tʃiːz/
Sit	Score	Zero	Sunday	Busy
/sit/	/skɔːr/	/ˈzɪə·rəʊ/	/ˈsʌn·deɪ/	/ˈbɪz·i/
Changes	Think	Street	Sunglasses	Skirt
/tʃeɪndʒ/	/θɪŋk/	/striːt/	/ˈsʌnˌglaː·sɪz/	/skɜːt/

These words can be found in the different units students covered in the first course Basic 1 Elementary corresponding to the A1 level in the CEFR. See Appendix Figure 10.1 to Figure 10.20.

For the purpose of this research and in order to answer the second and the third research questions: What is the influence of Rhymes and Tongue Twisters as a resource to improve pronunciation? and Does the application of Rhymes and Tongue Twisters improve the pronunciation of students of a Working Adult Program at Universidad Privada del Norte? I am going to present the following charts and graphics with the scores per each criterion.

In Table 7.1, Graphic 7.1, Table 7.2 and Graphic 7.2, I am going to show the general average results of both the Control and the Experimental Groups.

Table 7.1: Average Pre-Test and Post-Test Experimental Group

PARTICIPANTS	Pre-test	Post-test
1	11.88	16.4
2	9.16	12.4
3	12.04	18.3
4	15.00	18.5
5	11.24	14.0
6	14.80	18.7
7	7.00	7.8
8	10.08	11.8
9	9.56	8.8
10	13.36	15.3
11	6.04	7.5
12	10.40	12.8
13	13.08	14.6
14	11.72	15.1
15	14.24	16.6
16	12.00	14.1
17	7.32	8.3
18	10.60	12.4
19	7.36	8.3

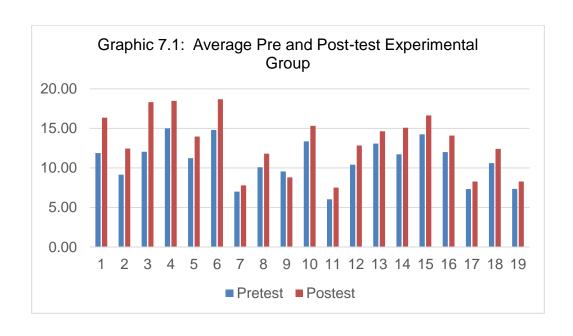


Table 7.2. Average Increase Experimental Group

PARTICIPANTS	INCREASE EXPERIMENTAL GROUP
1	4.52
2	3.24
3	6.26
4	3.5
5	2.76
6	3.9
7	0.8
8	1.72
10	1.94
11	1.46
12	2.4
13	1.52
14	3.38
15	2.36
16	2.1
17	0.98
18	1.8
19	0.94
AVERAGE INCREASE (18 SUBJECTS)	2.532222222

Table 7.3: Average Pre-test and Post-test Control Group

PARTICIPANTS	Pre-test	Post-test
1	13.64	14.9
2	9.64	9.0
3	18.56	19.8
4	7.64	8.6
5	11.08	10.6
6	9.56	9.8
7	10.08	5.1
8	9.12	9.4
9	12.24	11.3
10	5.64	6.0
11	4.16	4.9
12	5.48	8.9
13	10.00	10.1
14	7.40	8.0
15	13.52	15.1

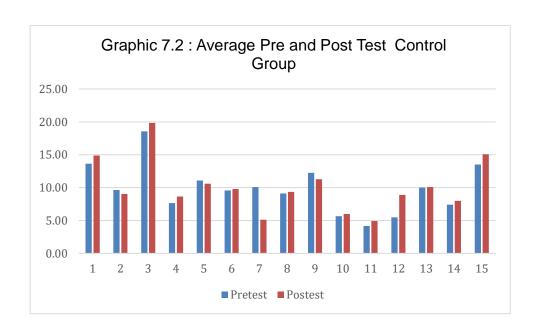


Table 7.4. Average Increase Control Group

	INCREASE
PARTICIPANTS	CONTROL
	GROUP
1	1.26
2	-0.64
3	1.24
4	0.96
5	-0.48
6	0.24
7	-4.98
8	0.28
9	-0.94
11	0.74
12	3.42
13	0.1
14	0.6
15	1.58
AVERAGE INCREASE (8 SUBJECTS)	1.3025

This research was intended to be applied in the Experimental and Control Group of English 1, the first course of the Working Adult Program of Universidad Privada del Norte corresponding to the A1 level of the CEFR. There were 25 students in each group who participated in the two stages of the project. It is worth mentioning that because of different factors not all the students registered in the course participated in the two stages of the study (Pre-test and Post-test). These factors include both academic and personal reasons. Some of the academic reasons which interfere in the full participation of the subjects are the overlapping of exams and assignments they usually have at the end of the semester. For this reason, students choose to prioritize other courses which they consider are more difficult to pass. This situation happened even though students from both the Experimental and Control Group were given the chance to do the recording both at the university or at

home. This was because that by the end of the period some students who were registered at the beginning decided to drop out the course in order to focus their full attention to other courses. Others, did not participate in the activity because they decided not to go to classes in order to study for their final exams. Finally, the last possible reason was that some students never showed up to class or withdraw complete from the term in all the courses.

Furthermore, some personal reasons that can cause the decreasing of the number of students is the economical factor because the majority of the students of the Working Adult Program of Universidad Privada del Norte are the responsible of their families in most of the cases, sometimes, they cannot afford the fee, so they must withdraw from the semester.

Another personal reason has to do with their working studies, in some cases students from the Working Adult Program are sent to other locations by their companies. So, they cannot continue attending their lessons at the university. In some other cases, students of the Working Adult Program are requested to constantly travel due to their jobs. This prevents them from attending their regular classes.

Having explained the possible factors for not maintaining the same number of subjects, it is worth mentioning that only 19 subjects from the Experimental Group and 15 subjects from the Control Group participated both in the Pre and Post-test stages. Therefore, in order to not to alter the data, only these participations (19 from the Experimental Group and 15 from the Control Group) were included in this results section.

Table 7.1 shows there is an increase in the total average of the evaluation of Pronunciation in the Post-test compared to the Pre-test in the Experimental Group. The table and more visually the Graphic 7.1 shows that all the subjects improved their average except for one subject (subject 9).

Table 7.2 specifically shows the exact points of the increase of all the subjects in the Posttest compared to the Pre-test in the Experimental Group with an average increase of 2.53, except for subject 9 who decreased in only 0.76.

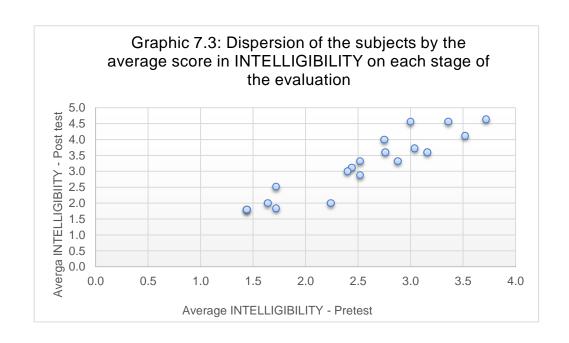
Table 7.3 shows there are some changes in the total Average of the Evaluation of Pronunciation in the Post-test compared to the Pre-test in the Control Group. The table and more visually the Graphic 7.2 shows that only eight subjects out of 15 improved their average whereas other subjects either maintained their first score or even decreased it.

This can be seen more clearly in Table 7.4 corresponding to the average of eight participants out of 15 of 1.30. Seven participants showed a decreased on their scores in the Post-test compared to the Pre-test in the Control Group.

This behaviour of the total performance both in the Control and Experimental Group can be explained by what was mentioned before by Marianne Celce-Murcia (2001) and Abby Wells Smith (2012) who agreed on presenting tongue twisters as a technique to help correct speech for native speakers and non-native speakers and help the muscle in the mouth work so that the person can speak more clearly, respectively.

Table 7.5: Average Intelligibility Pre-test and Post-test Experimental Group

Participants	Pre-test	Post-test
1	2.8	4.0
2	2.4	3.1
3	3.0	4.6
4	3.4	4.6
5	2.5	3.3
6	3.7	4.6
7	1.7	1.8
8	1.7	2.5
9	2.2	2.0
10	3.0	3.7
11	1.4	1.8
12	2.4	3.0
13	3.2	3.6
14	2.8	3.6
15	3.5	4.1
16	2.9	3.3
17	1.6	2.0
18	2.5	2.9
19	1.4	1.8



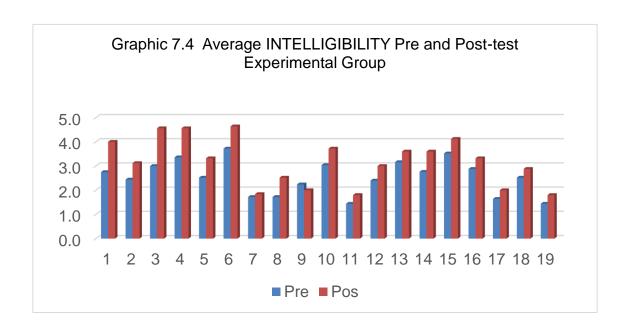
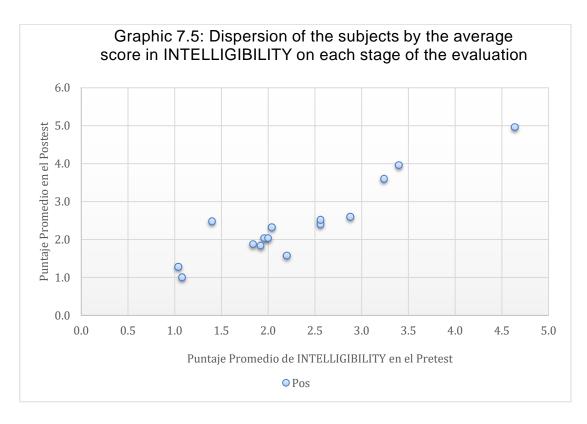


Table 7.6. Average Increase Experimental Group (Intelligibility)

Participants	INCREASE EXPERIMENTAL GROUP
1	1.2
2	0.7
3	1.6
4	1.2
5	0.8
6	0.9
7	0.1
8	0.8
10	0.7
11	0.4
12	0.6
13	0.4
14	0.8
15	0.6
16	0.4
17	0.4
18	0.4
19	0.4
AVERAGE INCREASE (18 SUBJECTS)	0.688888889

Table 7.7: Average Intelligibility Pre-Test and Post-Test Control Group

PARTICIPANTS	Pre-test	Post-test
1	3.2	3.6
2	2.0	2.0
3	4.6	5.0
4	1.9	1.8
5	2.6	2.4
6	2.0	2.3
7	2.2	1.6
8	1.8	1.9
9	2.9	2.6
10	1.1	1.0
11	1.0	1.3
12	1.4	2.5
13	2.6	2.5
14	2.0	2.0
15	3.4	4.0



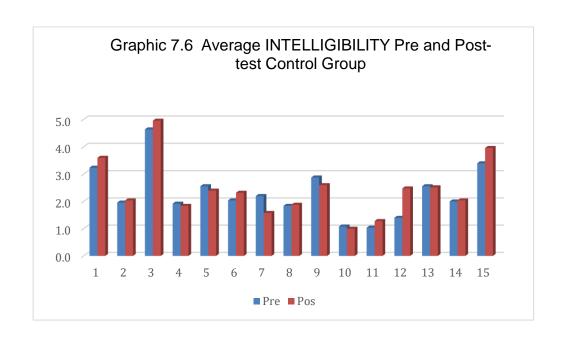


Table 7.8: Average Increase Control Group (Intelligibility)

PARTICIPANTS	INCREASE CONTROL GROUP
1	0.4
2	0
3	0.4
4	-0.1
5	-0.2
6	0.3
7	-0.6
8	0.1
9	-0.3
10	-0.1
11	0.3
12	1.1
13	-0.1
14	0
15	0.6
AVERAGE INCREASE (7 SUBJECTS)	0.45714286

Table 7.5 shows there is an increase in the total average of the evaluation of Intelligibility in the Post-test compared to the Pre-test in the Experimental Group. The general average shows that eighteen out of nineteen participants in the Experimental Group improved the Intelligibility aspect of the 25 words of the list. Only one subject (subject 9) shows a slight decrease in this aspect. In Graphic 7.4 this increase in the average of the Intelligibility criterion obtained by each subject can be more clearly observed.

Additionally, Graphic 7.3 shows how the dispersion of the average of the scores of Intelligibility in the Pre-test is concentrated in the lower scores whereas the scores of the Post-test can be seen concentrated on the upper scores.

Table 7.6 specifically shows the exact points of the increase of all the subjects in the Posttest compared to the Pre-test in the Experimental Group with an average increase in the Intelligibility criterion of 0.68, except for subject 9 who decreased in only 0.3.

Table 7.7 shows there is not an increase in all the fifteen subjects in Intelligibility in the Posttest compared to the Pre-test in the Control Group. The general average shows that only five subjects increased their performance regarding Intelligibility whereas the rest maintain their score or even decreased it.

This behaviour can be more visually clear in Graphic 7.6 in which the increase of the Intelligibility criterion obtained by each subject can be more clearly observed.

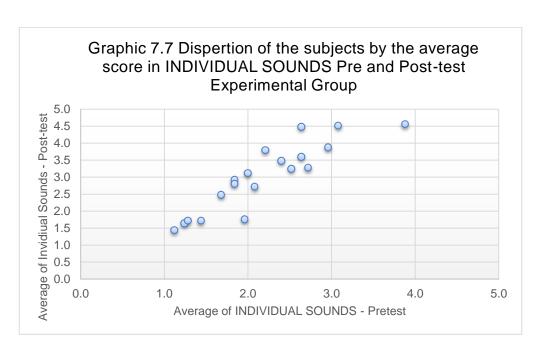
Likewise, Graphic 7.5 shows that the dispersion of the scores both in the Pre-test and the Post-test are concentrated in the same range of scores.

Table 7.8 specifically shows the exact points of the increase of the seven subjects in the Post-test compared to the Pre-test in the Control Group with an average increase in the Intelligibility criterion of 0.45.

Additionally, this Table 7.8 shows that two subjects obtained the same average and six subjects decreased their Intelligibility scores in 0.2.

Table 7.9: Average Individual Sounds Pre-Test and Post- Test Experimental Group

Participants	Pre-test	Post-test
1	2.2	3.8
2	1.8	2.9
3	2.6	4.5
4	3.9	4.6
5	2.0	3.1
6	3.1	4.5
7	1.4	1.7
8	1.7	2.5
9	2.0	1.8
10	2.6	3.6
11	1.2	1.6
12	1.8	2.8
13	2.7	3.3
14	2.4	3.5
15	3.0	3.9
16	2.5	3.2
17	1.3	1.7
18	2.1	2.7
19	1.1	1.4



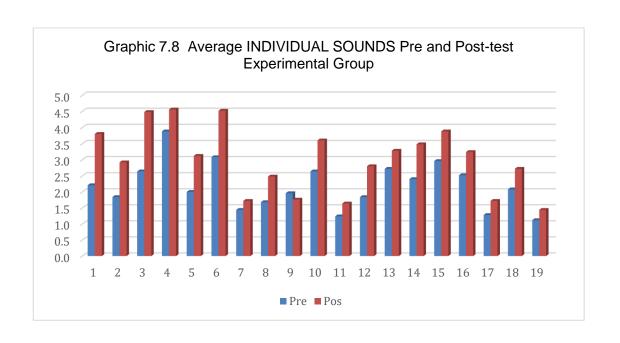
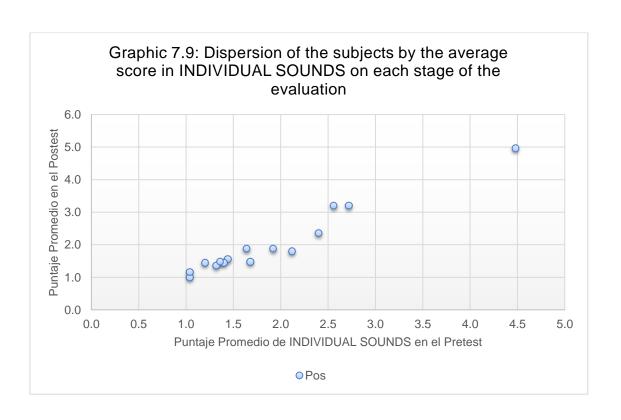


Table 7.10: Average Increase Experimental Group (Individual Sounds)

Participants	INCREASE EXPERIMENTAL GROUP
1	1.6
2	1.1
3	1.9
4	0.7
5	1.1
6	1.4
7	0.3
8	0.8
10	1
11	0.4
12	1
13	0.6
14	1.1
15	0.9
16	0.7
17	0.4
18	0.6
19	0.3
AVERAGE INCREASE (18 SUBJECTS)	0.88333333

Table 7.11: Average Individual Sounds Pre-test and Post-test Control Group

PARTICIPANTS	Pre-test	Post-test
1	2.6	3.2
2	1.4	1.6
3	4.5	5.0
4	1.4	1.4
5	2.1	1.8
6	1.6	1.9
7	1.7	1.5
8	1.3	1.4
9	2.4	2.4
10	1.0	1.0
11	1.0	1.2
12	1.2	1.4
13	1.9	1.9
14	1.4	1.5
15	2.7	3.2



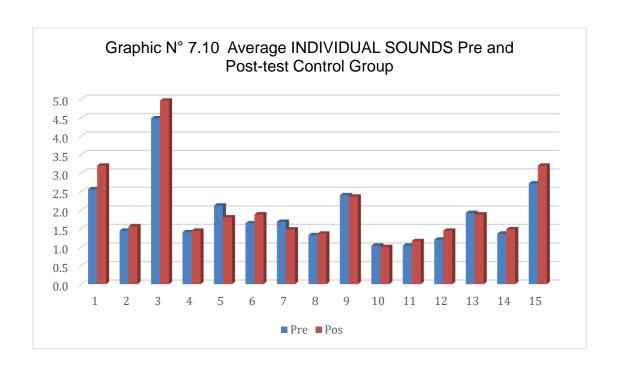


Table 7.12: Average Increase Control Group (Individual Sounds)

PARTICIPANTS	INCREASE CONTROL GROUP
1	0.6
2	0.2
3	0.5
4	0
5	-0.3
6	0.3
7	-0.2
8	0.1
9	0
10	0
11	0.2
12	0.2
13	0
14	0.1
15	0.5
AVERAGE INCREASE (9 SUBJECTS)	0.3

Table 7.9 shows there is an increase in the total average of the evaluation of Individual Sounds in the Post-test compared to the Pre-test in the Experimental Group. The general average shows that eighteen out of nineteen participants in the Experimental Group improved the Individual Sounds aspect of the 25 words of the list. Only one subject (subject 9) shows a slight decrease in this component.

This behaviour can be seen in Graphic 7.7 which shows how the dispersion of the average of the scores of Individual Sounds in the Pre-test is concentrated in the lower scores whereas the scores of the Post-test can be seen concentrated on the upper scores.

In addition, this can be more visually clear in Graphic 7.8 in which the increase of the Individual Sounds criterion obtained by each subject can be more clearly observed.

Table 7.10 specifically shows the exact points of the increase of the eighteen subjects in the Post-test compared to the Pre-test in the Control Group with an average increase in the Individual Sounds criterion of 0.88, except for subject 9 who decreased in only 023.

Table 7.11 shows that even though the number of subjects who increased their performance is higher (9 subjects) compared to the aspect of Intelligibility (7 subjects), not all the fifteen subjects improved in the aspect of Individual Sounds in the Post-test compared to the Pretest in the Control Group. The general average shows that only nine subjects increased their performance regarding Individual Sounds whereas the rest maintained their score or even decreased it.

This can be seen more visually clear in Graphic 7.10 in which the increase of the Individual Sounds criterion obtained by each subject can be more clearly observed.

Likewise, Graphic 7.9 shows that the dispersion of the scores both in the Pre-test and the Post-test are concentrated in the same range of scores.

Table 7.12 specifically shows the exact points of the increase of the nine subjects in the Post-test compared to the Pre-test in the Control Group with an average increase in the Individual Sounds criterion of 0.3.

Additionally, this Table 7.12 shows that four subjects obtained the same average and two subjects decreased their Individual Sounds scores in 0.25.

At the beginning of the Chapter we explained how the results were going to be presented and analysed in the different charts of the two criteria: Intelligibility and Individual Sounds.

Additionally, at the beginning of the Chapter we also mentioned we have included the Reliability Charts using the statistical measure of the Cronbach Alpha.

Table 7.13: Reliability Experimental Group: Pre-test

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Casos	Valid	19	100,0
	Excluded	0	,0
	Total	19	100,0

Reliability statistics

	Cronbach's alpha based on						
Cronbach's alpha	standarized elements	N of elements					
,912	,910	25					

Table 7.14: Reliability Experimental Group: Post-test

Scale: ALL VARIABLES

Case Processing Summary

		N	%			
Cases	Valid	19	100,0			
	Excluded	0	,0			
	Total	19	100,0			

Reliability statistics

Cronbach's	
alpha	N of elements
,940	25

Table 7.15: Reliability Control Group: Pre-test

Escala: ALL VARIABLE

Case Processing Summary

		N	%
Cases	Valid	15	100,0
	Excluded	0	,0
	Total	15	100,0

Reliability statistics

Cronbach's	
alpha	N° of elements
,965	25

Table 7.16: Reliability Control Group: Post-test

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	15	100,0
	Excluded	0	,0
	Total	15	100,0

Reliability statistics

Cronbach's	
alpha	N° of elements
,971	25

The performance of the subjects both in the Experimental and Control Group was also examined using the Cronbach's Alpha to test the reliability of the evaluation. This was done taking into account the performance the subjects had in each word (25 words) in each stage (Pre-test and Post-test) of this research. This is to say that the scores obtained by word by subject both in the Pre-test and Post-test in the Experimental and Control Group were analysed and proven to be reliable as it can be seen in Tables 7.13 to 7.16 respectively. Additionally, the corresponding tables and graphics by word can be found in the Appendix Section (Tables 10.7 to 10.106, Graphics 10.1 to 10.100).

From Table 10.7 and Graphic 10.1 Experimental Group to Table 10.31 and Graphic 10.25 Experimental Group in the Appendix section, it is shown that in the Experimental Group in the Pre-test the majority of the results are concentrated in the fair section with few participants in the good and very good sections. However, in the Post-test, some participants moved from fair to good and very good and in some words the poor section disappeared, compared to the Pre-test as it can be seen from Table 10.32, Graphic 10.26 to Table 10.56, Graphic 10.50.

Additionally, from Table 10.57, Graphic 10.51 to Table 10.81, Graphic 10.75, in the Appendix section, it can be seen that in the Control Group in the Pre-test the majority of the results are concentrated in the poor and fair section with few participants in the good and very good sections. However, even though some subjects moved from fair to good, the majority of them remained in the good and fair ranges and some of the subjects even fell into the poor section as it can be seen from Table 10.82, Graphic 10.76 to Table 10.106, Graphic 10.100.

The present research paper intended to prove the following hypothesis:

Alternative hypothesis (H1): The use of tongue twisters significantly improves pronunciation of students of a working adult program at Universidad Privada del Norte.

Null hypothesis (H0): The use of tongue twisters does not significantly improve pronunciation of students of a working adult program at Universidad Privada del Norte.

The alternative hypothesis (H1) in this research paper states that the use of tongue twisters significantly improves pronunciation of students of a Working Adult Program at Universidad

Privada del Norte. This hypothesis has been proved to be true as it can be seen in the following charts:

Table 7.17: Correlation Coefficient – Experimental Group

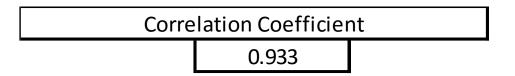
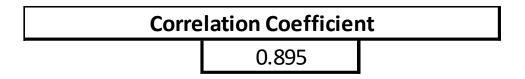


Table 7.18: Correlation Coefficient – Control Group



As the results show the correlation between the variables of the hypothesis is strong and positive. This is because the values both in the Experimental and Control groups are close to 1.0. However, it is important to draw the attention to the difference between the values of the Experimental Group versus the Control Group where it can be seen that the Experimental Group shows a stronger correlation between the variables.

Table 7.19: Analysis of Variance for the Intelligibility, Individual Sounds,
Scores achieved by each student in the two applications of the Test

media before	2.5	2.2	3.1	3.1	2.7	2.8
media after	3.2	3.0	3.5	3.5	3.3	3.4
var before	0.49	0.5041	0.4761	0.4761	0.4489	0.4761
var after	0.9604	1.0404	0.7744	0.7744	0.8649	1.1449
var common		0.77225	0.62525	0.62525	0.6569	0.8105
F	0.5102041	2.0638762	0.6147986	0.6147986	0.5190195	0.415844
	0.9295659	0.0566744	0.8574859	0.8574859	0.9244597	0.97182
Dif	0.6	0.8	0.4	0.4	0.6	0.5
Error dif	0.26	0.27	0.24	0.24	0.25	0.28
t	2.43	3.03	1.84	1.80	2.35	1.89
value p	9.86E-03	2.12E-03	3.68E-02	3.95E-02	1.19E-02	3.27E-02
	p << 0.000					

Decision 1: Reject Ho: The behaviour of the subjects is the same.

Decision 2: Reject Ho: The group average across the occasions is the same

Table 7.19 shows that the subject and occasional effects are significant, so that the group of participating students is heterogeneous and the averages achieved by the group in the two applications of the Test differ significantly from a horizontal line (there are significant increases); that is, there is at least a significant increase in the Group's Average Scores through the occasions as a result of the intervention.

The null hypothesis (H0) in this research paper states that the use of tongue twisters does not significantly improve pronunciation of students of a Working Adult Program at Universidad Privada del Norte. This hypothesis has been proved to be false as it can be seen in the results explained above.

Considering all the above explained, the results in the tables and graphics show that the expected outcome of this research paper has been achieved.

8. CONCLUSIONS

In this research paper the aim was to determine which sounds students at the Working Adult Program at Universidad Privada del Norte have problems with. These sounds were: /tʃ/, /ʃ/, /s/, /θ/, /z/ and the pre-initial consonant clusters /sl/, /st/, /sw/, /sp/, /sk/, /sc/.

According to the articulation of consonants mentioned by Kelly (2000) these sounds belong to the group of dental, palato-alveolar and alveolar fricative sounds as well as the palato-alveolar affricates sound which were described in Chapter 4.

These sounds were found in the following list of words which was taken from the material the students use in their classes (Touchstone 1 Student's book). See Appendix Figure 10.1 to Figure 10.20.

China	Shirt	Shorts	Schools	Speak
/ˈtʃaɪ·nə/	/ʃɜːt/	/ʃɔːts/	/skuːl/	/spiːk/
Thursday	Study	Sleep	Sometimes	Three
/ˈθɜːz·deɪ/	/ˈstʌd·i/	/sliːp/	/ˈsʌm·taɪmz/	/θri:/
Things	Chef	Swim	Shoes	Cheese
/θ ɪ ŋ/	/ʃef/	/swim/	/ʃuː/	/tʃiːz/
Sit	Score	Zero	Sunday	Busy
/sit/	/skɔːr/	/ˈzɪə·rəʊ/	/ˈsʌn·deɪ/	/ˈbɪz·i/
Changes	Think	Street	Sunglasses	Skirt
/tʃeɪndʒ/	/θɪŋk/	/striːt/	/ˈsʌnˌglaː·sɪz/	/skaːt/

After having determined this, our proposal was to put into practice of the tongue twisters and rhymes as a strategy to help students improve their pronunciation of these problematic sounds. As a result of all of this, the expected aim was the significant improvement of the overall speaking performance focusing on Intelligibility and Individual Sounds since these are the pronunciation components we were going to deal with as we mentioned in Chapter 4.

Based on this aim, the general objective was to determine how significantly pronunciation of the students of the working adult program at Universidad Privada del Norte improves after the application of rhymes and tongue twister's strategy. Additionally, this main

objective led to the specific objectives of identifying the sounds in English students of a working adult program at Universidad Privada del Norte have problems pronouncing, researching about the influence of rhymes and tongue twisters strategy as a resource to improve pronunciation, applying rhymes and tongue twisters strategy to improve the pronunciation of students of a working adult program at Universidad Privada del Norte, measuring the results of the application of rhymes and tongue twisters in the pronunciation of students of a working adult program at Universidad Privada del Norte and analysing the results of the application of rhymes and tongue twisters in the pronunciation of students of a working adult program at Universidad Privada del Norte. These specific objectives directed the analysis of the pronunciation aspect in both the experimental and control group.

One specific objective of this research was to identify which sounds were the most problematic for the students of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte. These sounds were identified taking into consideration what was mentioned by Alex Case (2012) who included some voiced and unvoiced consonants. Some of these sounds were: /tʃ/, /ʃ/, /s/, /θ/, /s/, /z/. Therefore, the list of words selected for this study, which was taken from the Student's Material used in the lessons, included several words which contained these sounds. The words considered in the list were: China, shirt, shorts, schools, speak, Thursday, study, sleep, sometimes, three, things, chef, swim, shoes, cheese, sit, score, zero, Sunday, busy, changes, think, street, sunglasses, skirt. As it can be observed this objective was achieved. These sounds as mentioned by Kelly (2000) present a difficulty for Spanish speakers especially the clusters such as school /sku:l/, speak /spi:k/, study /'stxd-i/, score /sko:r/, sleep /sli:p/, street /stri:t/, swim /swɪm/.

Another specific objective of this research paper was to research about the influence of rhymes and tongue twisters as a resource to improve pronunciation. This topic was covered by different authors including Marianne Celce-Murcia and Abby Wells who mention that tongue twisters are a technique to help correct speech for native speakers and non-native speakers (Marianne Celce-Murcia, 2001). Also, they explain that tongue twisters help the muscle in the mouth work so that the person can speak more clearly since this effort makes the muscles of the mouth become stronger. (Abby Wells Smith, 2012)

Additionally, it has been researched that for students to enhance their learning it is important to make pauses during the period of instruction (a lesson) in order to make the brain take a rest to recharge energy to continue with the lesson. This pause is called brain break.

According to Janelle Cox (2020), a brain break is a short mental pause that is done at regular intervals during a lesson. Cox (2020) suggests, the brain breaks should be no longer than five minutes. Additionally, she explains that it is advisable they involve any kind of physical activity.

Furthermore, Judy Willis (2016) explains that brain breaks are learning activities that have previously designed to activate our brain. Because of stress or hard work, some regions of our brains are sometimes blocked. Then, if we switch to a different activity like stretches, songs or just moving to a different part of the room our brain can reenergize and as a result order networks in the brain and activate it to regain concentration, attention and a positive attitude.

Likewise, Wingett Andrea and Horner Kelley (2010) mention that brain breaks are a necessary tool to activate the brain and renew energy. They also highlight the positive effects brain breaks have on enhancing motivation, concentration and the releasing of stress. We have mentioned previously in Chapter 4 the importance of reducing anxiety to lower the affective filter and the role the physical activity has on it (Larsen –Freeman, D. & Anderson, M. 2011). Taking this into account it is worth considering any kind of activity that incorporates any kind of physical element that has the effects previously mentioned.

Cox (2020) suggests that mental breaks should be planned according to the attention span. For the Merriam Webster Dictionary (2019), the attention span is the period of time a person can keep concentrated or interested in a task or activity. This attention span varies according to the students' age. Cox (2020) explains that for younger learners these breaks are suggested to be done every five to ten minutes because their attention span is short. On the contrary, for older students these breaks can be done at longer intervals of 20-30 minutes since they can concentrate for a longer period of time before they become distracted.

For all the above explained, tongue twisters were included as a brain break activity taking into consideration all the positive effects both the tongue twisters and the brain breaks have. The positive effects that tongue twisters have in the students learning process have already been thoroughly explained in Chapter 5. However, brain breaks also have positive effects on the learning process. One of the positive effects brain breaks have on the learning process is that hey help the brain recover their supplies. The brain works by a process of communication between the cells called synapses. The synapses happen when neurotransmitters that are brain chemicals carry messages from one nerve cell to the next

accros the gaps between them. This is the reason why neurotransmitters are usually called chemical messengers. According to The Queensland Brain Institute (2017) "they are the elements the nervous system uses to send messages between neurons or from neurons to muscles". The Queensland Brain Institute also explains that the communication between the two neurons takes place in the small gap between the synapses of neurons. The electrical signals that travelled along the axon are converted into chemical signals thank to the release of neurotransmitters. As a result of this process a specific response in the receiving neuron happens. Judy Willis (2016) explains these messengers are necessary to keep the person's calm concentrated and with a good memory. However, she also explains that they can appear in a limited quantity at every synapse and the brain can even run out of them after a period of 10 minutes of a continuing repeated activity. Therefore, brain breaks help the brain replenish theses supplies of the neurotransmitters by activating other parts of the brain and therefore activating different neurotransmitters

The second benefit Judy Willis (2016) presents is the time. According to her, the brain break can be planned to be applied right before critical moments of a lesson. For instance, they can be applied before students run out of energy after doing any challenging activity. Also, they can be applied before a moment the teachers know students are likely lo loose concentration. For example, before the break or before the end of the class. All of this, depending on the age and profile of the students.

Restoring the emotional state is another benefit Judy Willis presents. Brain breaks help students distressed and prepare them for successful learning.

The last benefit mentioned by Judy Willis is how brain breaks enhance motivation. According to her, brain breaks make students feel motivated especially to study or activities of subjects or topics they consider tedious. This is precisely the case of students of the Working Adult Program of Universidad Privada del Norte. For most of our students English is not their favourite course. They study it because it a compulsory subject and a requirement for their graduation. Therefore, the implementation of innovative techniques that are both engaging and motivating is essential.

Then, after having explained the benefits tongue twisters and brain breaks have in the learning process, we can say that this specific objective of researching about the influence of rhymes and tongue twisters as a resource to improve pronunciation was achieved.

Another specific objective was to apply the rhyme and tongue twister strategy to improve the pronunciation of students of a working adult program at Universidad Privada del Norte. The schedule for the complete research paper was presented in Chapter 6 explaining it was going to be carried out in a period of nine weeks. These nine weeks were going to be used for the Pre-test (one week), Intervention (six weeks), Post-test (one week) and analysis and final report (one week). Chapter 6 also details that in this research paper the application was developed creating a grid for the Pre-test both for the Experimental and Control Group. Then, students downloaded the application and recorded themselves reading the list of words mentioned before. After that, students uploaded their videos for the teacher to see them. Finally, the same process was done for the Post-test after the intervention. During the Intervention process, students participated actively and the activity despite the time of the class and their struggle with the language. Students found the activity motivating, fun, relaxing and different. All the stages included in the research plan were developed on schedule, therefore, this objective was achieved too.

The next specific objective was to measure the results of the application of rhymes and tongue twisters in the pronunciation of students of a working adult program at Universidad Privada del Norte. As it was described in Chapter 6 the tools to measure the results were the checklist of the different components of pronunciation. This checklist was designed and evaluated using the rubrics proposed by the CEFR described in Chapter 4. Additionally, as it can be observed in the Appendix section Tables 10.1 to Table 10.6, the scores per student in the Pre and Post-test both in the Experimental and Control Group were recorded using the previously mentioned tools. These tools allowed us to measure the students' performance in an effective and formal way. Since the rubrics were specific enough for each component, we were able to record the students' scores per criterion in each word. That is to say we have the scores for Intelligibility, Individual Sounds, Stress and Intonation each participant got in each word in each stage of the study. However, this research paper only focuses on Intelligibility and Individual Sounds as it was clarified before. Likewise, we were able to get the average of the overall performance per word by participant in each stage of the study. Consequently, having a set of rubrics and a checklist aligned among them using the criteria proposed by a research-based institution like the CEFR allows the researcher to avoid being biased. Therefore, this objective was also achieved.

The last specific objective was analysing the results of the application of rhymes and tongue twisters in the pronunciation of students of a Working Adult Program at Universidad Privada del Norte. As it was described in Chapter 6 the tool to analyse the results was the statistic measure of average.

The Combrach's alpha was used to prove validity of the checklist. The results shown in Tables 11-14 present the values of the Crombach's alpha closer to 1 which proves the validity of the checklist.

After the application and the analysis of the results I can conclude that the results of the intervention of applying the rhymes and tongue twisters as a strategy allows us to show evidence that:

- The students of the Experimental Group of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte improved their overall performance. See Table 7.1, Table, 7.2, Graphics 7.1.
- The students of the Experimental Group of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte improved their performance in the Intelligibility aspect. See Table 7.5, Table 7.6, Graphics 7.3 and 7.4.
- The students of the Experimental Group of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte improved their performance in the Individual Sounds aspect. See Table 7.9, Table 7.10. Graphics 7.7 and 7.8.

When considering the direct correlation between improving pronunciation of the students of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte (dependent variable) and the application of rhymes and tongue twisters as a strategy (independent variable), a significant interaction can be appreciated between both variables, with positive effects of the independent variable on the dependent one, as demonstrated in the statistical analyses of Table 7.17 and 7.18.

As it can be interpreted from the scores obtained in Pre-test and Post-test, the Intelligibly and Individual Sounds scores of the students of the first course (English 1) of the Working Adult Program at Universidad Privada del Norte participating in the experience improved, thus the formulated hypothesis has been proved.

Taking as a starting point the tools and proposals of this research paper, it would be advisable to implement the technique of tongue twisters not only in the first course (English 1) of the Working Adult Program of Universidad Privada del Norte but also in the remaining

courses. The Working Adult Program consist of four courses in total and they all share the same students' profile discussed in Chapter 6. This means that all of the students might benefit from this strategy and improve their overall pronunciation if they are made part of the same experience. This is because knowledge can only be long lasting if frequent and constant practice is done.

Additionally, making the necessary adjustments according to the new research proposal the checklist and the rubrics can be used for any future research work. In the present research paper, the activities were focused on the pronunciation aspect of the oral production including the components of Intelligibility and Individual Sounds. However, the other aspects of the oral production such as grammatical resource, lexical resource, discourse management, interactive communication and the suprasegmental components of pronunciation as described in the A2 Speaking Scales of the CEFR in Chapter 4 can be part of a future research proposal.

Research shows that the technique of using rhymes and tongue twisters has been constantly applied to improve the speaking skill. Nevertheless, it would be worth researching whether or not this technique can also be applied to improve the other skills of the language performance such as reading, writing and listening.

The results obtained after the intervention were satisfactory. This was so as a result of the characteristics of the group and the methodology applied. However, it must be said that if this process had a longer duration, the results would have been more optimal than those already presented.

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10. APPENDIX

Table 10.1: Pre-test Experimental Group – Word Average

PRE-TEST EXPERIMENTAL GROUP

	PRE-TEST PRE-TEST																									
	china	shirt	shorts	schools	speak	Thursday	study	sleep	sometimes	three	things	chef	swim	shoes	cheese	200	score	zero	Sunday	ksnq	changes	think	street	sunglasses	skirt	A v e r a g e
1	20	11	20	12	12	8	11	11	16	8	6	20	0	0	0	0	0	0	0	0	0	0	0	0	0	6.20
2	20	6	8	10	10	7	10	10	12	4	4	16	4	0	0	0	0	0	0	0	0	0	0	0	0	4.84
3	20	11	16	11	11	8	9	11	12	12	11	16	7	0	0	0	0	0	0	0	0	0	0	0	0	6.20
4	20	20	20	16	16	8	11	11	30	8	9	10	13	0	0	0	0	0	0	0	0	0	0	0	0	7.68
5	20	8	11	10	10	8	8	9	16	8	8	16	11	0	0	0	0	0	0	0	0	0	0	0	0	5.72
6	20	20	20	10	10	8	9	9	20	8	16	20	20	0	0	0	0	0	0	0	0	0	0	0	0	7.60
7	20	9	16	6	7	4	7	7	7	6	6	12	4	0	0	0	0	0	0	0	0	0	0	0	0	4.44
8	20	10	9	9	8	8	8	8	8	8	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	4.80
9	20	10	12	10	10	4	4	7	6	6	6	20	10	0	0	0	0	0	0	0	0	0	0	0	0	5.00
10		6	10	9	9	9	9	9	13	16	9	20	20	0	0	0	0	0	0	0	0	0	0	0	0	6.36
11	12	4	4	4	7	6	7	7	4	4	4	12	4	0	0	0	0	0	0	0	0	0	0	0	0	3.16
12	20	6	6	6	6	6	9	9	11	8	10	10	9	0	0	0	0	0	0	0	0	0	0	0	0	4.64
13	16	11	12	10	10	4	8	8	16	11	16	16	20	0	0	0	0	0	0	0	0	0	0	0	0	6.32
14		16	16	9	9	9	9	9	12	6	6	20	20	0	0	0	0	0	0	0	0	0	0	0	0	6.44
15		11	20	10	10	9	9	9	8	8	16	20	20	0	0	0	0	0	0	0	0	0	0	0	0	6.80
16		3	19	0	17	15	19	13	1	5	5	20	10	0	0	0	0	0	0	0	0	0	0	0	0	5.88
17	20	9	9	9	9	6	6	7	8	6	6	6	7	0	0	0	0	0	0	0	0	0	0	0	0	4.32
18	20 a	6 0	9	9	9	6 Ω	9 g	9	16	11 o	16	16 g	16	0	0	0	0	0	0	0	0	0	0	0	0	6.08
19	9	9	9	6	9	8	8	8	10	9	6	8	6	0	0	0	0	0	0	0	0	0	0	0	0	4.20

Table 10.2: Pre-test Experimental Group – Criteria Score: Words 1-13

																																	WO	RD	LI	ST																															١
N°		1				2					3						4						5		T			6	;					7					8					9					10					11					12			Τ		13		T	ľ
	IT	IS S	T IN	T	ΙT	IS :	STI	NΙ	1	ΤI	S	ìΤ	IN	Т	ΙT	IS	S	ΤI	N	Т	ΙT	IS	S	ΓII	N.	T	IT	IS	ST	IN	T	ΙT	IS	S	T II	N ·	Г	IS	SS	T II	N 1	Ī	T IS	SS	TI	N	T	IT I	SS	II T	T V	П	T IS	S	T II	I	Π	T IS	SS	T IN	N T	П	IS	S	T IN	T	
1	5	5 5	5 5	20	3	2	3	3 1	1 !	5	5	5	5	20	3	1	4	1 .	4	12	3	1	4	. 4	1 1	12	1	1	3	3	8	2	1	4	. 4	1 1	1 2	1	4	1 4	1 1	1 4	1 4	4 4	4 4	4 1	16	1	1 3	3 3	8 8	1	1	2	2	6	5	5 5	5 5	5 5	20	0	0	0	0	0	
2	5	5 5	5 5	20	1	1	2	2 6	3	2	2	2	2	8	3	1	3	3	3	10	3	1	3	3	3 1	10	2	1	2	2	7	3	1	3	3	3 1	0 3	1	1 3	3 3	3 1	0 3	3 3	3 3	3 :	3 1	12	1	1 1	1 1	1 4	1	1	1	1	4	. 4	1 4	4	1 4	16	1	1	1	1	4	
3	5	5 5	5 5	20	3	2	3	3 1	1 4	4	4	4	4	16	3	2	3	3	3	11	3	2	3		3 1	11	1	1	3	3	8	2	1	3	3	3 9	3	2	2 3	3 3	3 1	1 3	3	3 3	3 3	3 1	12	3 :	3 3	3 3	3 1:	2 3	2	3	3	11	1 4	4	4	1 4	16	2	1	2	2	7	
4	5	5 5	5 5	20	5	5	5	5 2	0 !	5	5	5	5	20	4	4	. 4	1 .	4	16	4	4	4		1 1	16	1	1	3	3	8	3	2	3	3	3 1	1 3	2	2 3	3 3	3 1	1 3	3 2	21 3	3 3	3 3	30	1	1 3	3 3	8 8	1	2	3	3	9	2	2 2	3	3	10	3	2	4	4	13	
5	5	5 5	5 5	20	1	1	3	3 8	3 3	3	2	3	3	11	3	1	3	3	3	10	3	1	3		3 1	10	1	1	3	3	8	1	1	3	3	3 8	3 2	1		3 3	3 9) 4	1 4	4 4	4 4	4 1	16	1	1 3	3 3	8 8	1	1	3	3	8	4	4	4	1 4	16	3	2	3	3	11	
6	5	5 5	5 5	20	5	5	5	5 2	0 !	5	5	5	5	20	3	1	3	3	3	10	3	1	3		3 1	10	1	1	3	3	8	2	1	3	3	3 9	9 2	1		3 3	3 9	5	5 5	5 5	5 !	5 2	20	1	1 3	3 3	8 8	4	4	. 4	. 4	16	6 5	5 5	5	5 5	20	5	5	5	5	20	
7	5	5 5	5 5	20	2	1	3	3 9) 4	4	4	4	4	16	1	1	2	2	2	6	2	1	2	2	2	7	1	1	1	1	4	2	1	2	2	2 7	7 2	1	1 2	2 2	2 7	2	2 1	1 2	2 2	2	7	1	1 2	2 2	2 6	1	1	2	2	6	3	3	3	3	12	2 1	1	1	1	4	
8	5	5 5	5 5	20	2	2	3	3 1	0 2	2	1	3	3	9	2	1	3	3	3	9	1	1	3		3	8	1	1	3	3	8	1	1	3	3	3 8	3 1	1	3	3 3	8	3 1	1	1 :	3 ;	3	8	1	1 3	3 3	8 8	1	1	3	3	8	1	1	3	3	8	1	1	3	3	8	
9	5	5 5	5 5	20	2	2	3	3 1	0 3	3	3	3	3	12	2	2		3	3	10	2	2	3		3 1	10	1	1	1	1	4	1	1	1	1	1 4	1 2	1	1	2 2	2 7	1	1	1 2	2 2	2	6	1	1 2	2 2	2 6	1	1	2	2	6	5	5 5	5 5	5 5	20	2	2	3	3	10	
10	5	5 5	5 5	20	1	1	2	2 6	3	2	2	3	3	10	2	1	(1)	3	3	9	2	1	3	(,)	3	9	2	1	3	3	9	2	1	3	3	3 9) 2	1	1	3 3	3) 3	3 2	2 4	4 4	4 1	13	3 :	3 5	5 5	5 1	3 1	2	3	3	9	5	5 5	5	5 5	20	5	5	5	5	20	
11	3	3 3	3	12	1	1	1	1 4	1	1	1	1	1	4	1	1	1	1	1	4	2	1	2	2	2	7	1	1	2	2	6	2	1	2	2	2 7	7 2	1	1 2	2 2	2 7	1	1 1	1 '	1	1	4	1	1 1	1 1	1 4	1	1	1	1	4	. 3	3	3	3	12	2 1	1	1	1	4	
12	5	5 5	5 5	20	1	1	2	2 6	3	1	1	2	2	6	1	1	2	2	2	6	1	1	2	2	2	6	1	1	2	2	6	2	1	3	3	3 9) 2	1	1	3 3	3 9	3	3 2	2 :	3 3	3 1	11	1	1 3	3 3	8 8	2	2	3	3	10	0 3	3 1	3	3	10	2	1	3	3	9	
13	4	4 4	4	16	3	2	3	3 1	1 3	3	3	3	3	12	3	1	3	3	3	10	3	1	3		3 1	10	1	1	1	1	4	1	1	3	3	3 8	3 1	1		3 3	3 8	3 4	1 4	4 4	4 4	4 1	16	3 2	2 3	3 3	3 1	1 4	4	. 4	. 4	16	6 4	4	4	1 4	16	5	5	5	5	20	
14	5	5 5	5 5	20	4	4	4	4 1	6	4	4	4	4	16	2	1	3	3	3	9	2	1	3	3	3	9	2	1	3	3	9	2	1	3	3	3 9) 2	1	3	3	3 9) 3	3	3 3	3 :	3 1	12	1	1 2	2 2	2 6	1	1	2	2	6	5	5 5	5 5	5 5	20	5	5	5	5	20	
15	5	5 5	5 5	20	3	2	3	3 1	1 !	5	5	5	5	20	3	1	3	3	3	10	3	1	3	3	3 1	10	2	1	3	3	9	2	1	3	3	3 9) 2	1	3	3	3 9) 1	1	1 :	3 :	3	8	1	1 3	3 3	8	4	4	. 4	4	16	6 5	5 5	5 5	5 5	20	5	5	5	5	20	
16	5	5 5	5 5	20	1	1	0	1 3	3 !	5	5	5	4	19	0	0	()	0	0	4	3	5		5 1	17	3	2	5	5	15	5	4	- 5	5	5 1	9 3	2	2 4	1 4	1 1	3 1	(0 (0 (0	1	1 (0 2	2 2	2 5	1	0	2	2	5	5	5 5	5	5 5	20	3	2	3	2	10	ı
17	5	5 5	5 5	20	2	1	3	3 9) 2	2	1	3	3	9	2	1	3	3	3	9	2	1	3		3	9	1	1	2	2	6	1	1	2	2	2 (3 2	1	1	2 2	2 7	2	2 2	2 2	2 2	2	8	1	1 2	2 2	2 6	1	1	2	2	6	1	1	2	2 2	6	2	1	2	2	7	ı
18	5	5 5	5 5	20	1	1	2	2 6	3 2	2	1	3	3	9	2	1	3	3	3	9	2	1	3	- 3	3	9	1	1	2	2	6	2	1	3	3	3 9) 2	1	1 3	3	3 9) 4	1 4	4 4	4 4	4 1	16	3 2	2 3	3 3	3 1	1 4	4	. 4	. 4	16	6 4	4	4	1 4	16	3 4	4	4	4	16	
19	2	1 3	3	9	2	1	3	3 9) .	1	2	3	3	9	1	1	2	2	2	6	2	1	3	3	3	9	1	1	3	3	8	1	1	3	3	3 8	3 1	1	1	3	3 8	3 2	2 2	2 :	3 ;	3 1	10	2	1 3	3 3	3 9	1	1	2	2	6	1	1	3	3	8	1	1	2	2	6	

IT = Inteligibility
IS = Individual Sounds
ST = Stress
IN = Intonation
T = Total

Table 10.3: Pre-test Experimental Group – Criteria Score: Words 14-25

																									W	DRD	LIS	ST																							
N°		14				15				16	3	П			17				18		Т	Т	-	19				20		Т		2	21				22				23				2	4	Т		2	25	\Box
	IT	IS ST	IN	Т	IT IS	ST	IN	Т	IT	IS :	ST	IN	TI	T IS	ST	IN	Т	IT	IS S	II T	V T	П	· IS	ST	IN	Т	IT	IS S	II T	V T	IT	IS	ST	IN	ΤП	r Is	ST	IN	Т	IT I	SS	T IN	۱ T	IT	IS	ST	IN T	T IT	IS	ST	IN T
1	1	1 3	3	8	4 4	4	4	16	3	1	4	4	12	4 2	4	4	14	3	1 :	3 3	10	5	5	5	5	20	1	1 :	3 3	8	3	3	4	4	14 1	1	3	3	8	1 1	1 3	3	8	4	4	4	4 1	16 1	1	3	3 8
2	4	4 4	4	16	4 4	4	4	16	3	2	2	2	9 :	3 1	3	3	10	3	1 :	3 3	10	5	5	5	5	20	1	1	1 1	4	2	1	2	2	7 1	1	1	1	4	1 1	1 1	1	4	1	1	1	1 /	4 1	1	1	1 4
3	4	4 4	4	16	4 4	4	4	16	1	1	2	2	6	2 2	2	2	8	2	2 :	2 2	8	4	4	4	4	16	2	1 :	2 2	2 7	1	1	2	2	6 4	4	4	4	16	2 ′	1 2	2	7	5	5	5	5 2	20 5	5	5	5 20
4	5	5 5	5	20	5 5	5	5	20	2	1	4	4	11 3	3 2	4	4	13	3	2 .	4 4	13	3	3	4	4	14	3	3 ;	3 3	3 12	2 4	4	4	4	16 4	4	4	4	16	3 3	3 3	3	12	5	5	5	5 2	20 4	4	4	4 16
. 5	2	1 3	3	9	5 5	5	5	20	2	1	3	3	9 :	2 1	3	3	9	2	1 :	3 3	9	4	4	4	4	16	1	1 ;	3 3	8	2	2	3	3	10 2	2 2	3	3	10	2 ′	1 3	3	9	5	5	5	5 2	20 2	1	3	3 9
6	5	5 5	5	20	5 5	5	5	20	3	1	3	3	10	3 1	3	3	10	2	1 :	3 3	9	5	5	5	5	20	5	5 5	5 5	5 20	3	2	3	3	11 5	5	5	5	20	3 ′	1 3	3	10	5	5	5	5 2	20 3	1	3	3 10
7	3	2 3	3	11	1 1	2	2	6	1	1	1	1	4	2 1	2	2	7	1	1	1 1	4	2	2	2	2	8	1	1	1 1	4	1	1	1	1	4 1	1	1	1	4	1 1	1 1	1	4	1	1	1	1 /	4 1	1	1	1 4
8	5	5 5	5	20	1 1	3	3	8	1	1	3	3	8	1 2	3	6	12	1	1 :	3 3	8	5	5	5	5	20	1	1 :	3 3	8	1	1	3	3	8 1	1	3	3	8	1 1	1 3	3	8	4	4	4	4 1	16 1	1	3	3 8
6	4	3 4	4	15	5 5	5	5	20	4	2	4	4	14	2 1	2	2	7	3	1 :	3 3	10) 4	4	5	5	18	1	1 :	2 2	2 6	1	1	2	2	6 1	1	2	2	6	1 1	1 1	1	4	1	1	1	1 /	4 1	1	1	1 4
10	5	5 5	5	20	5 5	5	5	20	1	1	3	3	8	2 1	3	3	9	2	1 :	3 3	9	5	5	5	5	20	1	1 ;	3 3	8	4	4	4	4	16 3	3 2	3	3	11	4 3	3 5	5	17	5	5	5	5 2	20 4	3	5	5 17
11	2	2 2	2	8	1 1	2	2	6	1	1	1	1	4	2 2	2	2	8	2	1 :	3 3	9	1	1	2	2	6	1	1	1 1	4	1	1	1	1	4 1	1	1	1	4	2 '	1 2	2	7	1	1	2	2 6	6 1	1	2	2 6
12	4	4 4	4	16	4 4	4	4	16	3	1	3	3	10	2 1	3	3	9	2	1 :	3 3	9	5	5	5	5	20	3	2 :	3 3	3 1	1 1	1	3	3	8 2	1	3	3	9	2 ′	1 3	3	9	5	5	5	5 2	20 2	1	2	2 7
13	5	5 5	5	20	2 1	3	3	9	1	1	3	3	8	2 1	3	3	9	2	1 :	3 3	9	5	5	5	5	20	4	4 4	4 4	1 16	5	5	5	5	20 5	5	5	5	20	2 ′	1 3	3	9	5	5	5	5 2	20 2	1	3	3 9
14	3	2 3	3	11	3 2	3	3	11	3	2	3	3	11 :	2 1	3	3	9	3	3 .	4 4	14	5	5	5	5	20	1	1 ;	3 3	8	1	1	1	1	4 1	1	1	1	4	1 1	1 3	3	8	4	4	4	4 1	16 4	4	4	4 16
15	5	5 5	5	20	5 5	5	5	20	3	1	3	3	10	2 1	3	3	9	4	4 .	4 4	16	5	5	5	5	20	2	1 :	3 3	3 9	3	2	3	3	11 5	5	5	5	20	3 2	2 3	3	11	5	5	5	5 2	20 5	5	5	5 20
16	5	5 5	5	20	5 5	5	5	20	2	2	3	3	10	4 4	5	5	18	4	3	5 5	17	3	3	3	3	12	2	1 :	2 2	2 7	1	1	2	2	6 1	2	3	3	9	2 2	2 2	2	8	4	4	4	4 1	16 2	2	3	3 10
17	3	3 3	3	12	1 1	2	2	6	2	1	3	3	9 :	2 1	3	3	9	1	1 :	2 2	6	2	1	2	2	7	1	1 :	2 2	2 6	1	1	1	1	4 1	1	1	1	4	1 1	1 1	1	4	1	1	1	1 /	4 1	1	1	1 4
18	1	1 3	3	8	4 4	4	4	16	1	1	2	2	6	2 1	2	2	7	3	2	3 3	11	3	3	3	3	12	1	1 :	2 2	2 6	2	1	3	3	9 2	1	2	2	7	2 ′	1 2	2 2	7	3	3	3	3 1	12 3	3	3	3 12
19	1	1 2	2	6	1 1	2	2	6	1	1	2	2	6	1 1	2	2	6	2	1 :	2 2	7	2	2	2	2	8	1	1 :	2 2	6	2	1	2	2	7 1	1	2	2	6	2 ′	1 2	2	7	2	1	2	2	7 2	1	2	2 7

IT = Inteligibility
IS = Individual Sounds
ST = Stress
IN = Intonation
T = Total

Table 10.4: Pre-test Control Group – Word Average

PRE-TEST CONTROL GROUP

												PR	E-TE	ST												
N°	China	shirt	shorts	schools	speak	Thursday	study	sleep	sometimes	three	things	chef	swim	spoes	cheese	200	score	zero	Sunday	ksnq	changes	think	street	sunglasses	skirt	A v e r a g e
1	20	11	15	12	12	9	9	9	16	8	20	20	16	0	0	0	0	0	0	0	0	0	0	0	0	7.08
2	20	9	9	9	6	9	9	9	9	8	8	16	6	0	0	0	0	0	0	0	0	0	0	0	0	5.08
3	20	15	15	11	11	20	20	20	20	20	20	20	20	0	0	0	0	0	0	0	0	0	0	0	0	9.28
4	16	9	12	12	12	4	7	7	7	6	6	6	11	0	0	0	0	0	0	0	0	0	0	0	0	4.60
5	20	10	12	9	9	16	9	9	11	6	6	20	6	0	0	0	0	0	0	0	0	0	0	0	0	5.72
6	20	6	6	6	6	6	9	9	11	8	8	11	10	0	0	0	0	0	0	0	0	0	0	0	0	4.64
7	20	11	11	9	9	6	9	9	9	9	10	12	12	0	0	0	0	0	0	0	0	0	0	0	0	5.44
8	20	8	8	9	9	8	9	9	8	8	8	16	16	0	0	0	0	0	0	0	0	0	0	0	0	5.44
9	20	20	19	9	9	9	9	9	9	10	10	20	20	0	0	0	0	0	0	0	0	0	0	0	0	6.92
10	6	6	6	6	6	6	6	6	6	6	6	8	6	0	0	0	0	0	0	0	0	0	0	0	0	3.20
11	4	4	4	4	4	4	7	7	7	4 6	6	8 12	7	0	0	0	0	0	0	0	0	0	0	0	0	2.24 3.04
13	20	12	12	10	10	9	8	10	4	4	4	16	16	0	0	0	0	0	0	0	0	0	0	0	0	5.40
14	16	10	12	10	10	4	4	7	4	4	4	12	4	0	0	0	0	0	0	0	0	0	0	0	0	4.04
15	20	20	20	10	10	8	10	10	9	16	16	16	16	0	0	0	0	0	0	0	0	0	0	0	0	7.24

Table 10.5: Pre-test Control Group - Criteria Score: Words 1-13

																																		WC	ORD	LIS	ST																															٦
N°		1		Τ			2					3						4						5		Τ			- (6					7					8					9					10)				11			T		12					13			
IN	IT	IS S	TIN	I	ΙT	IS	ST	IN	Т	П	ΓĮ	S	ST	N	Т	IT	15	S	T	N	Т	IT	IS	S	ΓII	N	Т	ΙT	IS	ST	IN	Т	П	I IS	ST	ΓIN	7	ľ	T I	SS	T	N	T	ΙT	IS S	T I	N	Т	IT I	S	ST	IN	Т	ΙT	SS	ΤĮ	N	T I	ΤI	S	ST I	N .	T I	T IS	S S	T IN	۸,	Г
1	5	5	5 5	20	3	2	3	3	11	4	1	3	4	4	15	3	1		4	4	12	3	1	4	4	4 ′	12	2	1	3	3	9	2	1	3	3	9	1 2	,	1	3	3	9	4	4	4	4	16	1	1	3	3	8	5	5 !	5	5 2	20	5	5	5	5 2	20	4 4	4 4	4	1	6
2	5	5	5 5	20	2	1	3	3	9	2	2	1	3	3	9	2	1	1	3	3	9	1	1	2	1	2	6	2	1	3	3	9	2	1	3	3	9	1 2	,	1	3	3	9	2	1	3	3	9	1	1	3	3	8	1	1 :	3	3	В	4	4	4	4 1	6	1 1	1 2	2	. (6
3	5	5	5 5	20	4	3	4	4	15	4	1	3	4	4	15	3	2	2	3	3	11	3	2	3		3 ′	11	5	5	5	5	20	5	5	5	5	2	0 5	, ,	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5 !	5	5 2	20	5	5	5	5 2	20	5 5	5 5	5	2	0
4	4	4	4 4	16	2	1	3	3	9	3	3	3	3	3	12	3	3	3	3	3	12	3	3	3	13	3 ′	12	1	1	1	1	4	2	1	2	2	7	2		1 .	2	2	7	2	1	2	2	7	1	1	2	2	6	1	1 :	2	2	ô	1	1	2	2	6 3	3 2	2 3	3	1	1
5	5	5	5 5	20	2	2	3	3	10	3	3	3	3	3	12	2	1	П	3	3	9	2	1	3	13	3	9	4	4	4	4	16	2	1	3	3	9	1 2		1	3	3	9	3	2	3	3	11	1	1	2	2	6	1	1 :	2	2	ô	5	5	5	5 2	20	1 1	1 2	2	. (6
6	5	5	5 5	20	1	1	2	2	6	1	Т	1	2	2	6	1	1	Т	2	2	6	1	1	2	1	2	6	1	1	2	2	6	2	1	3	3	9	1 2		1	3	3	9	3	2	3	3	11	1	1	3	3	8	1	1 :	3	3	В	3	2	3	3 1	1 2	2 2	2 3	3	1	10
7	5	5	5 5	20	3	2	3	3	11	3	3	2	3	3	11	2	1	1	3	3	9	2	1	3	3	3	9	1	1	2	2	6	2	1	3	3	9	1 2		1	3	3	9	2	1	3	3	9	2	1	3	3	9	2	2 :	3	3 1	0	3	3	3	3 1	2 :	3 3	3 3	3	1	12
8	5	5	5 5	20	1	1	3	3	8	1		1	3	3	8	2	1	1	3	3	9	2	1	3	3	3	9	1	1	3	3	8	2	1	3	3	9	1 2		1	3	3	9	1	1	3	3	8	1	1	3	3	8	1	1 :	3	3	В	4	4	4	4 1	6	1 4	1 4	4	1	16
9	5	5	5 5	20	5	5	5	5	20	5	5	5	5	4	19	2	1	1	3	3	9	2	1	3	3	3	9	2	1	3	3	9	2	1	3	3	9	1 2		1	3	3	9	2	1	3	3	9	2	2	3	3	10	2 :	2 :	3	3 1	0	5	5	5	5 2	20	5 5	5 5	5	2	0
10	1	1	2 2	6	1	1	2	2	6	1	1	1	2	2	6	1	1	1	2	2	6	1	1	2	2	2	6	1	1	2	2	6	1	1	2	2	. 6	1		1 .	2	2	6	1	1	2	2	6	1	1	2	2	6	1	1 :	2	2	ô .	2	2	2	2	8	1 1	1 2	2	. (ô
11	1	1	1 1	4	1	1	1	1	4	1	1	1	1	1	4	1	1	1	1	1	4	1	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1		1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	2	2	2	2	8	1 1	1	1	4	4
12	1	1	1 1	4	1	1	1	1	4	1		1	1	1	4	1	1	1	1	1	4	1	1	1	1	1	4	1	1	1	1	4	2	1	2	2	7	2		1	2	2	7	2	1	2	2	7	1	1	2	2	6	1	1 :	2	2	ô	3	3	3	3 1	2 2	2 1	1 2	2	2	7
13	5	5	5 5	20	3	3	3	3	12	3	3	3	3	3	12	3	1	1	3	3	10	3	1	3	3	3 ′	10	2	1	3	3	9	1	1	3	3	8	3	,	1	3	3	10	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	4	4	4	4 1	6	1 4	1 4	4	1	6
14	4	4	4 4	16	3	1	3	3	10	3	3	3	3	3	12	3	1	1	3	3	10	3	1	3	13	3 ′	10	1	1	1	1	4	1	1	1	1	4	1 2		1 .	2	2	7	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	3	3	3	3 1	2	1 1	1	1	4	4
15	5	5	5 5	20	5	5	5	5	20	5	5	5	5	5	20	3	1		3	3	10	3	1	3	3	3 ′	10	1	1	3	3	8	3	1	3	3	1	0 3	,	1	3	3	10	2	1	3	3	9	4	4	4	4	16	4	4	4	4 1	6	4	4	4	4 1	6	4 4	1 4	4	1	6

IT = Inteligibility
IS = Individual Sounds
ST = Stress
IN = Intonation
T = Total

Table 10.6: Pre-test Control Group - Criteria Score: Words 14-25

																												٧	VOR	DL	IST	•																											
N°		14		Т	Т		15				1	6				1	17				1	18					19			Т		20				2	1				2	2				2	3				2	24				25		Т	_
14	IT I	s s	T IN	T	11	IS	ST	IN	Т	ΙT	IS	ST	IN	Т	ΙT	IS	ST	IN	Т	ΙT	IS	ST	IN	Т	ΙT	IS	ST	ΙN	1 T	ΙT	18	ST	IN	Т	ΙT	IS	ST	z	Т	IT	IS	ST	IN	T	IT	S	ST	IN	Т	ΙT	IS	ST	IN	Т	ΙT	IS S	STI	IN	T
1	5	5 5	5 5	2	0 5	5	5	5	20	2	1	4	4	11	2	1	4	4	11	5	5	5	5	20	5	5	5	5	20	1	1	3	3	8	3	2	4	4	13	2	1	3	3	9	2	1	3	3	9	3	3	3	3	12	3	2	3	3 '	11
2	1	1 2	2	6	4	4	4	4	16	2	1	3	3	9	2	1	3	3	9	2	1	3	3	9	4	4	4	4	16	1	1	3	3	8	1	1	3	3	8	1	1	3	3	8	2	1	3	3	9	1	1	3	3	8	1	1	3	3	8
3	5	5 5	5 5	2	0 5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	5	5	5	5	20	2	2	4	4	12
4	2	1 3	3 3	9	3	2	3	3	11	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	3	2	3	3	11	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	2	1	2	2	7	2	1	2	2	7	2	1	2	2	7
5	1	1 2	2 2	6	5	5	5	5	20	3	1	3	3	10	2	1	2	2	7	3	3	3	3	12	4	4	4	4	16	4	4	4	4	16	4	4	4	4	16	1	1	2	2	6	2	1	3	3	9	1	1	3	3	8	1	1	3	3	8
6	4	1 4	4	10	6 1	1	2	2	6	1	1	2	2	6	2	1	3	3	9	2	1	3	3	9	5	5	5	5	20	1	1	3	3	8	1	1	3	3	8	2	1	3	3	9	2	1	3	3	9	4	4	4	4	16	2	1	2	2	7
7	3	3 3	3 3	13	2 3	3	3	3	12	2	1	3	3	9	2	1	3	3	9	1	1	3	3	8	1	1	3	3	8	1	1	3	3	8	1	1	3	3	8	1	1	3	3	8	2	1	3	3	9	4	4	4	4	16	2	1	3	3	9
8	1	1 3	3 3	8	2	2	3	3	10	1	1	3	3	8	2	1	3	3	9	2	1	3	3	9	2	1	3	3	9	1	1	2	2	6	1	1	2	2	6	1	1	2	2	6	2	1	2	2	7	2	1	2	2	7	2	1	2	2	7
9	3 :	2 3	3 3	1	1 5	- 5	5	5	20	2	1	3	3	9	2	1	3	3	9	2	1	3	3	9	3	3	3	3	12	1	1	2	2	6	4	4	4	4	16	2	2	3	3	10	2	1	2	2	7	4	4	4	4	16	1	1	3	3	8
10	1	1 2	2 2	6	1	1	2	2	6	1	1	2	2	6	2	1	3	3	9	1	1	2	2	6	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4
11	1	1 1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4
12	1	1 1	1	4	2	2	2	2	8	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	3	3	3	3	12	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	2	1	1	1	5
13	1	1 1	1	4	4	4	4	4	16	2	1	3	3	9	1	1	1	1	4	1	1	1	1	4	5	5	5	5	20	5	5	5	5	20	1	1	1	1	4	1	1	1	1	4	3	1	3	3	10	3	1	3	3	10	3	1	3	3	10
14	3 :	2 3	3 3	1	1 3	2	3	3	11	1	1	1	1	4	2	1	2	2	7	3	3	3	3	12	3	1	2	2	8	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	2	1	2	2	7	1	1	1	1	4	2	2		2	
15	4 .	1 4	1 4	10	6 4	4	4	4	16	1	1	3	3	8	3	1	3	3	10	1	1	3	3	8	5	5	5	5	20	4	4	4	4	16	3	1	3	3	10	4	4	4	4	16	3	1	3	3	10	4	4	4	4	16	3	2			
				_			_	_			_					_				_													_		•	_					'										_	_	_			_			_
		İπ	= In	olio	ihilis			1																																																			

IS = Inteligibility
IS = Individual Sounds
ST = Stress
IN = Intonation
T = Total

PRE-TEST EXPERIMENTAL GROUP Tables of frequency and graphics

Table 10.7: China Pre-test (Experimental Group)

			CHINA	-	
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	2	10,5	10,5	10,5
	VERY GOOD	17	89,5	89,5	100,0
	Total	19	100,0	100,0	

Graphic 10.1: China (Pre-test Experimental Group)

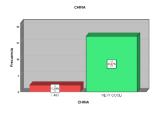


Table 10.8: Shirt (Pre-test Experimental Group)

			SHIRT		
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	10,5	10,5	10,5
	FAIR	10	52,6	52,6	63,2
	GOOD	4	21,1	21,1	84,2
	VERY GOOD	3	15,8	15,8	100,0
	Total	19	100,0	100,0	
	Total	19	100,0	100,0	

Graphic 10.2: Shirt (Pre-test Experimental Group)

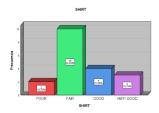


Table 10.9: Shorts (Pre-test Experimental Group)

SHORTS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	7	36,8	36,8	42,1
	GOOD	3	15,8	15,8	57,9
	VERY GOOD	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

Graphic 10.3: Shorts (Pre-test Experimental Group)

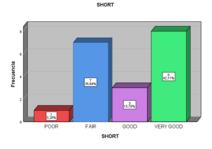


Table 10.10 : Schools (Pre-test Experimental Group)

SCHOOLS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	10,5	10,5	10,5
	FAIR	14	73,7	73,7	84,2
	GOOD	2	10,5	10,5	94,7
	VERY GOOD	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

Graphic 10.4: Schools (Pre-test Experimental Group)

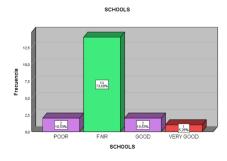


Table 10.11: Speak (Pre-test Experimental Group)

SPEAK

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	15	78,9	78,9	78,9
	GOOD	2	10,5	10,5	89,5
	VERY GOOD	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

Graphic 10.5: Speak (Pre-test Experimental Group)

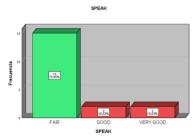


Table 10.12: Thursday (Pre-test Experimental Group)

THURSDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	15	78,9	78,9	94,7
	GOOD	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

Graphic 10.6: Thursday (Pre-test Experimental Group)

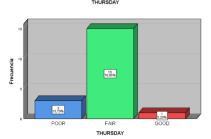


Table 10.13: Study (Pre-test Experimental Group) STUDY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	15	78,9	78,9	84,2
	GOOD	2	10,5	10,5	94,7
	VERY GOOD	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

Graphic 10.7: Sleep (Pre-test Experimental Group)

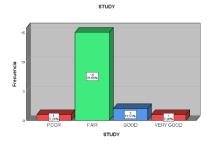


Table 10.14: Sleep (Pre-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	15	78,9	78,9	78,9
	GOOD	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

Graphic 10.8: Sleep (Pre-test Experimental Group)

Leconomic States of States

Table 10.15: Sometimes (Pre-test Experimental Group) SOMETIMES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	10,5	10,5	10,5
	FAIR	6	31,6	31,6	42,1
	GOOD	5	26,3	26,3	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.9: Sometimes (Pre-test Experimental Group)

Line Poor FAR GOOD VERYGOOD

Table 10.16: Three (Pre-test Experimental Group)

THREE

			Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Т	Válido	POOR	3	15,8	15,8	15,8
		FAIR	12	63,2	63,2	78,9
		GOOD	3	15,8	15,8	94,7
		VERY GOOD	1	5,3	5,3	100,0
		Total	19	100,0	100,0	

Graphic 10.10: Three (Pre-test Experimental Group

POOR FAR GOOD VERY GOOD

Table 10.17: Things (Pre-test Experimental Group)
THINGS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	11	57,9	57,9	73,7
	GOOD	1	5,3	5,3	78,9
	VERY GOOD	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

Graphic 10.11: Things (Pre-test Experimental Group)

POOR FAIR GOOD VERY GOOD

Table 10.18: Chef (Pre-test Experimental Group)
CHEF

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	5	26,3	26,3	26,3
	GOOD	2	10,5	10,5	36,8
	VERY GOOD	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

Graphic 10.12: Chef (Pre-test Expeimental Group)

FAIR COOD VERY GOOD CHEF

Table 10.19: Swim (Pre-test Experimental Group) SWIM

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	7	36,8	36,8	57,9
	GOOD	2	10,5	10,5	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.13: Swim (Pre-test Experimental Group)

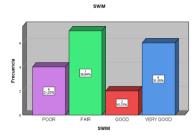


Table 10.20: Shoes (Pre-test Experimental Group) SHOES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	5	26,3	26,3	26,3
	GOOD	4	21,1	21,1	47,4
	VERY GOOD	10	52,6	52,6	100,0
	Total	9	100,0	100,0	

Graphic 10.14: Shoes (Pre-test Experimental Group)

FAR GOOD VERY GOOD SHOES

Table 10.21: Cheese (Pre-test Experimental Group)
CHEESE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	6	31,6	31,6	31,6
	GOOD	1	5,3	5,3	36,8
	VERY GOOD	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

Graphic 10.15: Cheese (Pre-test Experimental Group)

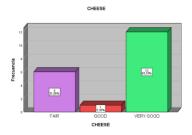


Table 10.22: Zoo (Pre-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	10,5	10,5	10,5
	FAIR	13	68,4	68,4	78,9
	GOOD	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

Graphic 10.16: Zoo (Pre-test Experimental Group)

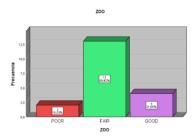


Table 10.23: Score (Pre-test Experimental Group)

	SCORE									
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado					
Válido	FAIR	15	78,9	78,9	78,9					
	GOOD	3	15,8	15,8	94,7					
	VERY GOOD	1	5,3	5,3	100,0					
	Total	19	100,0	100,0						

Graphic 10.17: Score (Pre-test Experimental Group)

FAR GOOD VERYGOOD SCORE

Table 10.24: Zero (Pre-test Experimental Group) ZERO

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	13	68,4	68,4	73,7
	GOOD	3	15,8	15,8	89,5
	VERY GOOD	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

Graphic 10.18: Zoo (Pre-test Experimental Group)

12.5 10.0

Table 10.25: Sunday (Pre-test Experimental Group)

SUNDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	4	21,1	21,1	21,1
	GOOD	3	15,8	15,8	36,8
	VERY GOOD	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

Graphic 10.19: Sunday (Pre-test Experimental Group)

THE PAR GOOD VERY GOOD

Table 10.26: Busy (Pre-test Experimental Group)
BUSY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	12	63,2	63,2	78,9
	GOOD	2	10,5	10,5	89,5
	VERY GOOD	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

Graphic 10.20: Busy (Pre-test Experimental Group)

POOR FAR GOOD VERY GOOD

BUSY

Table 10.27: Changes (Pre-test Experimental Group)

CHANGES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	9	47,4	47,4	68,4
	GOOD	3	15,8	15,8	84,2
	VERY GOOD	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

Graphic 10.21: Changes (Pre-test Experimental Group)

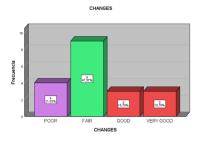


Table 10.28: Think (Pre-test Experimental Group)

			11111417		
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	5	26,3	26,3	26,3
	FAIR	8	42,1	42,1	68,4
	GOOD	1	5,3	5,3	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.22: Think (Pre-test Experimental Group)

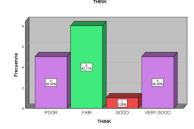


Table 10.29: Street (Pre-test Experimental Group)
STREET

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	12	63,2	63,2	84,2
	GOOD	2	10,5	10,5	94,7
	VERY GOOD	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

Graphic 10.23: Street (Pre-test Experimental Group)

POOR FAIR GOOD VERY GOOD

Table 10.30: Sunglasses (Pre-test Experimental Group)
SUNGLASSES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	2	10,5	10,5	31,6
	GOOD	1	5,3	5,3	36,8
	VERY GOOD	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

Graphic 10.24: Sunglasses (Pre-test Experimental Group)

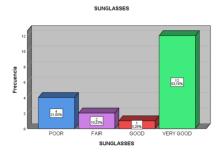
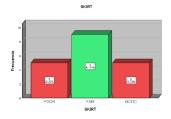


Table 10.31: Skirt (Pre-test Experimental Group)
SKIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	5	26,3	26,3	26,3
	FAIR	9	47,4	47,4	73,7
	GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.25: Skirt (Pre-test Experimental Group)



POST-TEST EXPERIMENTAL GROUP

Tables of frequency and graphics

Table 10.32: China (Post-test Experimental Group)

		——————————————————————————————————————				
		Frecuencia	Porcentaie	Porcentaie válido	Porcentaie acumulado	
Válido	VERY GOOD	19	100,0	100,0	100,0	

Graphic 10.26: China (Post-test Experimental Group)



Table 10.33: Shirt (Post-test Experimental Group)
SHIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	7	36,8	36,8	36,8
	GOOD	4	21,1	21,1	57,9
	VERY GOOD	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

Graphic 10.27: Shirt (Post-test Experimental Group)

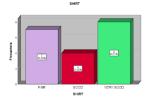


Table 10.34: Shorts (Post-test Experimental Group)
SHORTS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	3	15,8	15,8	15,8
	GOOD	6	31,6	31,6	47,4
	VERY GOOD	10	52,6	52,6	100,0
	Total	19	100,0	100,0	

Graphic 10.28: Shorts (Post-test experimental Group)

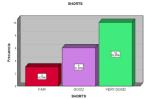


Table 10.35: Schools (Post-test Experimental Group) SCHOOLS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	8	42,1	42,1	42,1
	GOOD	2	10,5	10,5	52,6
	VERY GOOD	9	47,4	47,4	100,0
	Total	19	100,0	100,0	

Graphic 10.29: Schools (Post-test Experimental Group)

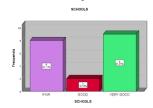


Table 10.36: Speak (Post-test Experimental Group)
SPEAK

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	9	47,4	47,4	47,4
	GOOD	2	10,5	10,5	57,9
	VERY GOOD	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

Graphic 10.30: Speak (Post-test Experimental Group)

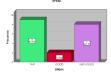


Table 10.37: Thursday (Post-test Experimental Group)

THURSDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	10	52,6	52,6	68,4
	GOOD	2	10,5	10,5	78,9
	VERY GOOD	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

Graphic 10.31: Thursday (Post-test Experimental Group)

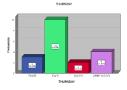


Table 10.38: Study (Post-test Experimental Group) STUDY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	11	57,9	57,9	63,2
	GOOD	1	5,3	5,3	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.32: Study (Post-test Experimental Group)

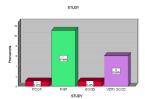


Table 10.39: Sleep (Post-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	12	63,2	63,2	63,2
	GOOD	2	10,5	10,5	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.33: Sleep (Post-test Experimental Group)

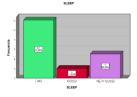


Table 10.40: Sometimes (Post-test Experimental Group)
SOMETIMES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	7	36,8	36,8	36,8
	GOOD	3	15,8	15,8	52,6
	VERY GOOD	9	47,4	47,4	100,0
	Total	19	100,0	100,0	

Graphic 10.34: Sometimes (Post-test Experimental Group)

CONSTRUCTION VALUE COLUMN

Table 10.41: Three (Post-test Experimental Group)

THREE Frecuencia Porcentaje Porcentaje válido Porcentaje acumulado Válido POOR 5.3 5.3 5.3 FAIR 9 47,4 47,4 52,6 GOOD 1 5,3 5,3 57,9 **VERY GOOD** 8 42,1 42,1 100,0 Total 19 100,0 100,0

Graphic 10.35: Three (Post-test Experimental Group)

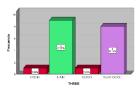


Table 10.42: Things (Post-test Experimental Group)

THINGS

Válido POOR 5,3 5,3 5,3 FAIR 47,4 8 42,1 42,1 GOOD 3 15,8 15,8 63,2 **VERY GOOD** 36,8 36,8 100,0 19 100,0 100,0

Graphic 10.36: Things (Post-test Experimental Group)

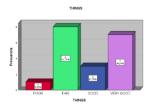


Table 10.43: Chef (Post-test Experimental Group)
CHEF

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	2	10,5	10,5	10,5
	GOOD	3	15,8	15,8	26,3
	VERY GOOD	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

Graphic 10.37: Chef (Post-test Experimental Group)

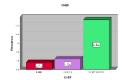


Table 10.44: Swim (Post-test Experimental Group)

			• • • • • • • • • • • • • • • • • • • •		
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	5	26,3	26,3	31,6
	GOOD	2	10,5	10,5	42,1
	VERY GOOD	11	57,9	57,9	100,0
	Total	19	100,0	100,0	

Graphic 10.38: Swim (Post-test Experimental Group)

SAMI

Table 10.45: Shoes (Post-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	1	5,3	5,3	10,5
	GOOD	3	15,8	15,8	26,3
	VERY GOOD	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

Graphic 10.39: Shoes (Post-test Experimental Group)

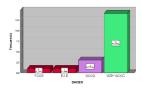


Table 10.46: Cheese (Post-test Experimental Group)
CHEESE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	3	15,8	15,8	15,8
	GOOD	1	5,3	5,3	21,1
	VERY GOOD	15	78,9	78,9	100,0
	Total	19	100,0	100,0	

Graphic 10.40: Cheese (Post-test Experimental Group)



Table 10.47: Zoo (Post-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	10	52,6	52,6	57,9
	GOOD	3	15,8	15,8	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	9	100,0	100,0	

Graphic 10.41: Zoo (Post-test Experimental Group)

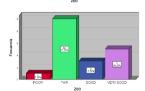


Table 10.48: Score (Post-test Experimental Group) SCORE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	11	57,9	57,9	57,9
	GOOD	2	10,5	10,5	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.42: Score (Post-test Experimental Group)

FAST SECRET

Table 10.49: Zero (Post-test Experimental Group) ZERO

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	5,3	5,3	5,3
	FAIR	10	52,6	52,6	57,9
	GOOD	3	15,8	15,8	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.43: Zero (Post-test Experimental Group)

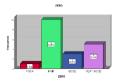


Table 10.50: Sunday (Post-test Experimental Group)
SUNDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	4	21,1	21,1	21,1
	GOOD	2	10,5	10,5	31,6
	VERY GOOD	13	68,4	68,4	100,0
	Total	19	100,0	100,0	

Graphic 10.44: Sunday (Post-test Experimental Group)

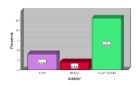


Table 10.51: Busy (Post-test Experimental Group)
BUSY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	10,5	10,5	10,5
	FAIR	11	57,9	57,9	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.45: Busy (Post-test Experimental Group)

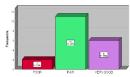


Table 10.52: Changes (Post-test Experimental Group)
CHANGES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	7	36,8	36,8	52,6
	GOOD	4	21,1	21,1	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.46: Changes (Post-test Experimental Group)

POOR ZAR GOOD VAYGOOD

Table 10.53: Think (Post-test Experimental Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	7	36,8	36,8	57,9
	GOOD	3	15,8	15,8	73,7
	VERY GOOD	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

Graphic 10.47: Think (Post-test Experimental Group)

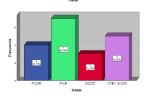


Table 10.54: Street (Post-test Experimental Group)
STREET

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	9	47,4	47,4	68,4
	VERY GOOD	6	31,6	31,6	100,0
	Total	19	100,0	100,0	

Graphic 10.48: Street (Post-test Experimental Group)

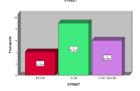


Table 10.55: Sunglasses (Post-test Experimental Group) SUNGLASSES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	15,8	15,8	15,8
	FAIR	2	10,5	10,5	26,3
	GOOD	2	10,5	10,5	36,8
	VERY GOOD	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

Graphic 10.49: Sunglasses (Post-test Experimental Group)

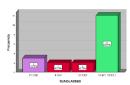
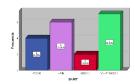


Table 10.56: Skirt (Post-test Experimental Group)
SKIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	21,1	21,1	21,1
	FAIR	6	31,6	31,6	52,6
	GOOD	2	10,5	10,5	63,2
	VERY GOOD	7	36,8	36,8	100,0
	Total	19	100,0	100,0	

Graphic 10.50: Skirt (Post-test Experimental Group)



PRE-TEST CONTROL GROUP Tables of frequency and graphics

Table 10.57: China (Pre-test Control Group)

	CHINA						
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado		
Válido	POOR	2	13,3	13,3	13,3		
	FAIR	1	6,7	6,7	20,0		
	VERY GOOD	12	80,0	80,0	100,0		
	Total	15	100,0	100,0			

Graphic 10.51: China (Pre-test Control Group)

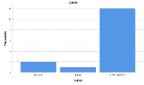


Table 10.58: Shirt (Pre-test Control Group)
SHIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	7	46,7	46,7	60,0
	GOOD	4	26,7	26,7	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.52: Shirt (Pre-test Control Group)

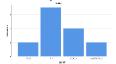


Table 10.59: Shorts (Pre-test Control Group)
SHORTS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	4	26,7	26,7	40,0
	GOOD	7	46,7	46,7	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.53: Shorts (Pre-test Control Group)

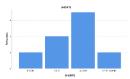


Table 10.60: Schools (Pre-test Control Group) SCHOOLS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	10	66,7	66,7	80,0
	GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.54: Schools (Pre-test Control Group)

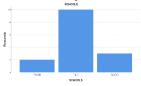


Table 10.61: Speak (Pre-test Control Group)
SPEAK

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	10	66,7	66,7	80,0
	GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.55: Speak (Pre-test Control Group)

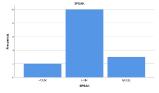


Table 10.62: Thursday (Pre-test Control Group)

THURSDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	9	60,0	60,0	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.56: Thursday (Pre-test Control Group)

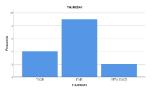


Table 10.63: Study (Pre-test Control Group)
STUDY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	12	80,0	80,0	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.57: Study (Pre-test Control Group)

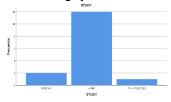


Table 10.64: Sleep (Pre-test Control Group)
SLEEP

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado	
Válido	POOR	1	6,7	6,7	6,7	
	FAIR	13	86,7	86,7	93,3	
	VERY GOOD	1	6,7	6,7	100,0	
	Total	15	100,0	100,0		

Graphic 10.58: Sleep (Pre-test Control Group)

Table 10.65: Sometimes (Pre-test Control Group)
SOMETIMES

		3321					
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado		
Válido	POOR	3	20,0	20,0	20,0		
	FAIR	8	53,3	53,3	73,3		
	GOOD	2	13,3	13,3	86,7		
	VERY GOOD	2	13,3	13,3	100,0		
	Total	15	100.0	100.0			

Graphic 10.59: Sometimes (Pre-test Control Group)

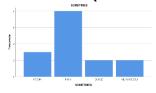


Table 10.66: Three (Pre-test Control Group)

	ITINEE							
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado			
Válido	POOR	3	20,0	20,0	20,0			
	FAIR	10	66,7	66,7	86,7			
	VERY GOOD	2	13,3	13,3	100,0			
	Total	15	100,0	100,0				

Graphic 10.60: Three (Pre-test Control Group)

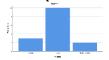


Table 10.67: Things (Pre-test Control Group)
THINGS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	9	60,0	60,0	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.61: Things (Pre-test Control Group)



Table 10.68: Chef (Pre-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	3	20,0	20,0	20,0
	GOOD	4	26,7	26,7	46,7
	VERY GOOD	8	53,3	53,3	100,0
	Total	15	100,0	100,0	

Graphic 10.62: Chef (Pre-test Control Group)



Table 10.69: Swim (Pre-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	5	33,3	33,3	46,7
	GOOD	2	13,3	13,3	60,0
	VERY GOOD	6	40,0	40,0	100,0
	Total	15	100,0	100,0	

Graphic 10.63: Swim (Pre-test Control Group)

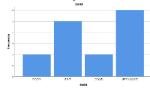


Table 10.70: Shoes (Pre-test Control Group) SHOES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	5	33,3	33,3	53,3
	GOOD	3	20,0	20,0	73,3
	VERY GOOD	4	26,7	26,7	100,0
	Total	15	100,0	100,0	

Graphic 10.64: Shoes (Pre-test Control Group)

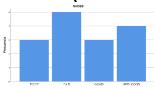


Table 10.71: Cheese (Pre-test Control Group)
CHEESE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	4	26,7	26,7	33,3
	GOOD	3	20,0	20,0	53,3
	VERY GOOD	7	46,7	46,7	100,0
	Total	15	100,0	100,0	

Graphic 10.65: Cheese (Pre-test Control Group)

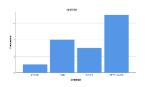


Table 10.72: Zoo (Pre-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	9	60,0	60,0	86,7
	GOOD	1	6,7	6,7	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.66: Zoo (Pre-test Control Group)

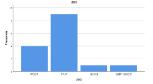


Table 10.73: Score (Pre-test Control Group) SCORE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	9	60,0	60,0	86,7
	GOOD	1	6,7	6,7	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.67: Score (Pre-test Control Group)

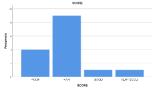


Table 10.74: Zero (Pre-test Control Group)
ZERO

					I .
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	7	46,7	46,7	73,3
	GOOD	2	13,3	13,3	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.68: Zero (Pre-test Control Group)

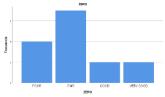


Table 10.75: Sunday (Pre-test Control Group)
SUNDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	3	20,0	20,0	33,3
	GOOD	3	20,0	20,0	53,3
	VERY GOOD	7	46,7	46,7	100,0
	Total	15	100,0	100,0	

Graphic 10.69: Sunday (Pre-test Control Group)

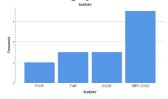


Table 10.76: Busy (Pre-test Control Group)
BUSY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	5	33,3	33,3	33,3
	FAIR	6	40,0	40,0	73,3
	VERY GOOD	4	26,7	26,7	100,0
	Total	15	100,0	100,0	

Graphic 10.70: Busy (Pre-test Control Group)

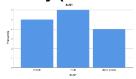


Table 10.77: Changes (Pre-test Control Group)
CHANGES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	6	40,0	40,0	40,0
	FAIR	5	33,3	33,3	73,3
	GOOD	1	6,7	6,7	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.71: Changes (Pre-test Control Group)

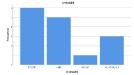


Table 10.78: Think (Pre-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	6	40,0	40,0	40,0
	FAIR	7	46,7	46,7	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100.0	100.0	

Graphic 10.72: Think (Pre-test Control Group)

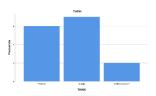


Table 10.79: Street (Pre-test Control Group)
STREET

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	11	73,3	73,3	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.73: Street (Pre-test Control Group)

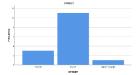


Table 10.80: Sunglasses (Pre-test Control Group)
SUNGLASSES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	5	33,3	33,3	60,0
	GOOD	1	6,7	6,7	66,7
	VERY GOOD	5	33,3	33,3	100,0
	Total	15	100,0	100,0	

Graphic 10.74: Sunglasses (Pre-test Control Group)

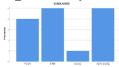
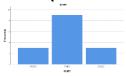


Table 10.81: Skirt (Pre-test Control Group)
SKIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	9	60,0	60,0	80,0
	GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.75: Skirt (Pre-test Control Group)



POST-TEST CONTROL GROUP

Tables of frequencies and graphics

Table 10.82: China (Post-test Control Group)

	VIII.V.						
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado		
Válido	POOR	2	13,3	13,3	13,3		
	FAIR	1	6,7	6,7	20,0		
	VERY GOOD	12	80,0	80,0	100,0		
	Total	15	100,0	100,0			

Graphic 10.76: China (Post-test Control Group)

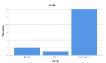


Table 10.83: Shirt (Post-test Control Group)
SHIRT

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	7	46,7	46,7	60,0
	GOOD	3	20,0	20,0	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.77: Shirt (Post-test Control Group)

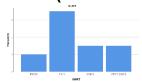


Table 10.84: Shorts (Post-test Control Group)
SHORTS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	8	53,3	53,3	60,0
	GOOD	3	20,0	20,0	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.78: Shorts (Post-test Control Group)



Table 10.85: Schools (Post-test Control Group) SCHOOLS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	9	60,0	60,0	73,3
	GOOD	3	20,0	20,0	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.79: Schools (Post-test Control Group)

784 10000 447777

Table 10.86: Speak (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	9	60,0	60,0	73,3
	GOOD	3	20,0	20,0	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100.0	100.0	

Graphic 10.80: Speak (Post-test Control Group)

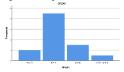


Table 10.87: Thursday (Post-test Control Group)

THURSDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	9	60,0	60,0	86,7
	GOOD	1	6,7	6,7	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.81: Thursday (Post-test Control Group)

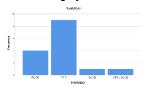


Table 10.88: Study (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	9	60,0	60,0	66,7
	GOOD	2	13,3	13,3	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.82: Study (Post-test Control Group)

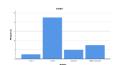


Table 10.89: Sleep (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	9	60,0	60,0	66,7
	GOOD	3	20,0	20,0	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.83: Sleep (Post-test Control Group)

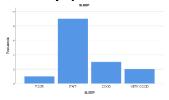


Table 10.90: Sometimes (Post-test Control Group)
SOMETIMES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	4	26,7	26,7	40,0
	GOOD	5	33,3	33,3	73,3
	VERY GOOD	4	26,7	26,7	100,0
	Total	15	100.0	100.0	

Graphic 10.84: Sometimes (Post-test Control Group)

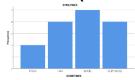


Table 10.91: Three (Post-test Control Group)

THREE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	11	73,3	73,3	86,7
	GOOD	1	6,7	6,7	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.85: Three (Post-test Control Group)

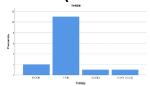


Table 10.92: Things (Post-test Control Group)
THINGS

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	10	66,7	66,7	80,0
	GOOD	2	13,3	13,3	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.86: Things (Post-test Control Group)

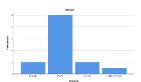


Table 10.93: Chef (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	4	26,7	26,7	26,7
	GOOD	2	13,3	13,3	40,0
	VERY GOOD	9	60,0	60,0	100,0
	Total	15	100.0	100.0	

Graphic 10.87: Chef (Post-test Control Group)



Table 10.94: Swim (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	7	46,7	46,7	53,3
	GOOD	4	26,7	26,7	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.88: Swim (Post-test Control Group)

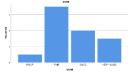


Table 10.95: Shoes (Post-test Control Group)
SHOES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	5	33,3	33,3	40,0
	GOOD	4	26,7	26,7	66,7
	VERY GOOD	5	33,3	33,3	100,0
	Total	15	100,0	100,0	

Graphic 10.89: Shoes (Post-test Control Group)

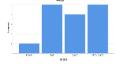


Table 10.96: Cheese (Post-test Control Group)
CHEESE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	2	13,3	13,3	13,3
	GOOD	4	26,7	26,7	40,0
	VERY GOOD	9	60,0	60,0	100,0
	Total	15	100,0	100,0	

Graphic 10.90: Cheese (Post-test Control Group)

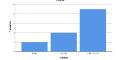


Table 10.97: Zoo (Post-test Control Group)

					I .
		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	9	60,0	60,0	80,0
	GOOD	1	6,7	6,7	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.91: Zoo (Post-test Control Group)

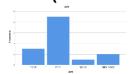


Table 10.98: Score (Post-test Control Group)
SCORE

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	FAIR	12	80,0	80,0	80,0
	GOOD	1	6,7	6,7	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100.0	100.0	

Graphic 10.92: Score (Post-test Control Group)

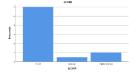


Table 10.99: Zero (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	3	20,0	20,0	20,0
	FAIR	9	60,0	60,0	80,0
	GOOD	2	13,3	13,3	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100.0	100.0	

Graphic 10.93: Zero (Post-test Control Group)

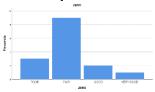


Table 10.100: Sunday (Post-test Control Group)
SUNDAY

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	4	26,7	26,7	53,3
	GOOD	2	13,3	13,3	66,7
	VERY GOOD	5	33,3	33,3	100,0
	Total	15	100,0	100,0	

Graphic 10.94: Sunday (Post-test Control Group)

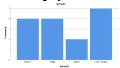


Table 10.101: Busy (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	6	40,0	40,0	66,7
	GOOD	1	6,7	6,7	73,3
	VERY GOOD	4	26,7	26,7	100,0
	Total	15	100,0	100,0	

Graphic 10.95: Busy (Post-test Control Group)

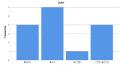


Table 10.102: Changes (Post-test Control Group)
CHANGES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	5	33,3	33,3	33,3
	FAIR	6	40,0	40,0	73,3
	GOOD	1	6,7	6,7	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.96: Changes (Post-test Control Group)

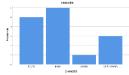


Table 10.103: Think (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	9	60,0	60,0	86,7
	VERY GOOD	2	13,3	13,3	100,0
	Total	15	100,0	100,0	

Graphic 10.97: Think (Post-test Control Group)

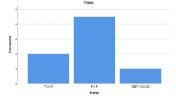


Table 10.104: Street (Post-test Control Group)
STREET

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	2	13,3	13,3	13,3
	FAIR	10	66,7	66,7	80,0
	GOOD	2	13,3	13,3	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.98: Street (Post-test Control Group)

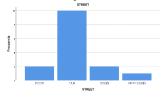


Table 10.105: Sunglasses (Post-test Control Group)
SUNGLASSES

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	4	26,7	26,7	26,7
	FAIR	6	40,0	40,0	66,7
	GOOD	2	13,3	13,3	80,0
	VERY GOOD	3	20,0	20,0	100,0
	Total	15	100,0	100,0	

Graphic 10.99: Sunglasses (Post-test Control Group)

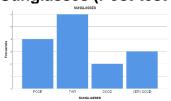
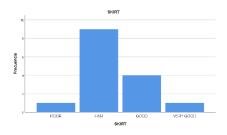


Table 10.106: Skirt (Post-test Control Group)

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válido	POOR	1	6,7	6,7	6,7
	FAIR	9	60,0	60,0	66,7
	GOOD	4	26,7	26,7	93,3
	VERY GOOD	1	6,7	6,7	100,0
	Total	15	100,0	100,0	

Graphic 10.100: Skirt (Post-test Control Group)



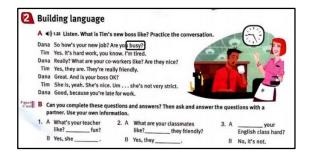


Figure 10.1: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.2: Touchstone 1 Student's Book. Cambridge University Press (2015)

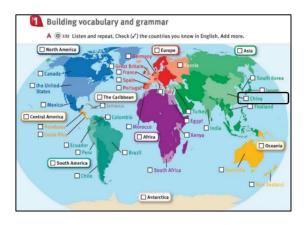


Figure 10.3: Touchstone 1 Student's Book. Cambridge University Press (2015)

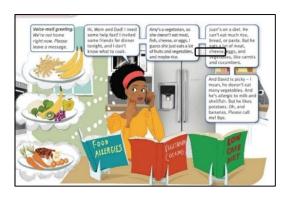


Figure 10.4: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.5: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.6: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.7: Touchstone 1 Student's Book. Cambridge University Press (2015)

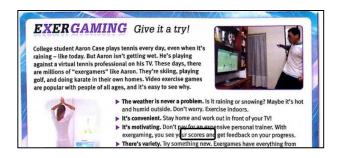


Figure 10.8: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.9: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.10: Touchstone 1 Student's Book. Cambridge University Press (2015)

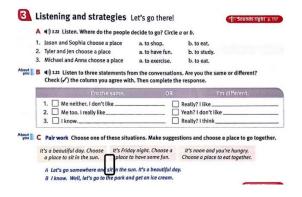


Figure 10.11: Touchstone 1 Student's Book. Cambridge University Press (2015)

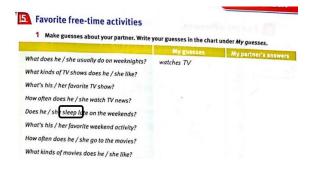


Figure 10.11: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.12: Touchstone 1 Student's Book. Cambridge University Press (2015)

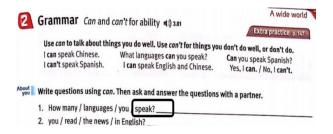


Figure 10.13: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.14: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.15: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.16: Touchstone 1 Student's Book. Cambridge University Press (2015)

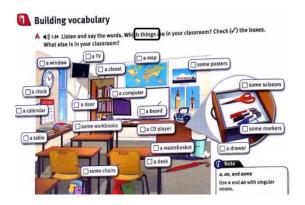


Figure 10.17: Touchstone 1 Student's Book. Cambridge University Press (2015)

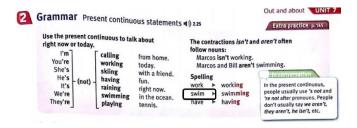


Figure 10.18: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.19: Touchstone 1 Student's Book. Cambridge University Press (2015)



Figure 10.20: Touchstone 1 Student's Book. Cambridge University Press (2015)