UNIVERSITY OF EL SALVADOR
SCHOOL OF ARTS AND SCIENCES
FOREIGN LANGUAGES DEPARTMENT

Universidad de El Salvador
Hacia la libertad por la cultura

"DIFFICULTIES IN THE PRONUNCIATION OF ENGLISH VOWELS BY THE FIFTH-YEAR STUDENTS FROM MODERN LANGUAGES MAJOR AT THE FOREIGN LANGUAGE DEPARTMENT OF THE UNIVERSITY OF EL SALVADOR DURING THE YEAR 2015"

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OCTOBER 23RD /2015

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INTRODUCTION

The present project is a research based on a problem affecting students from the Foreign Language Department. Firstly, it is a study to know in a deeper way what are the: ***Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages major at the Foreign Language Department of the University of El Salvador during the year 2014.***

Secondly, Pronouncing English vowel sounds is one of the most challenging tasks for students. The experience with our native language affects our perception of nonnative speech sounds in a systematic, predictable manner. English uses the same writing system as Spanish a,e,i,o,u but instead of having a one-to-one correspondence between grapheme and pronunciation, the five written vowels, in combination or alone, represent twelve phonemes in stressed syllables /i, ɪ , e, ɛ , æ, a, ɔ , ʌ , o, ʊ , u, ə /. This study pretends to analyze those phonetic difficulties when pronouncing English pair of vowels for example: /i-ɪ / feel-fill, /e-ɛ / chase-chess, /ʊ -u/ full-fool, / a- ɛ / bar-bear, / æ- ʌ /cap-cup, /ɛ - ʌ / bet-butt /o- ɔ / bowl-ball and / æ- a- ʌ / hat-hot-hut, trying to focus in those which are more difficult at the moment of pronouncing them correctly. In addition, this research will focus on the pronunciation of some long and short vowel sounds and the perception of the sound schwa /ə/.

Thirdly, the methodology chosen to be applied in this study will allow the researchers to know the difficulties in the pronunciation of English vowels by students. Exploratory research is characterized by its flexibility in study development, which fits perfectly in this investigation since there is not another study previously established. Indeed, it offers the feasibility of generating a series of hypotheses or questions toward the problem. Also, while a mixed research is taking place, involving the mixing of quantitative and qualitative research methods, approaches, or other paradigm characteristics. A nonexperimental research will be done; the information will not be manipulated.

Nonrandom sampling techniques will be used where purposive sampling is the one selected to be used in the research.

Finally, after having enough information about the problem to be studied, the conclusions and recommendations about the research will be shown which will benefit in the execution of the research project.

I.   STATEMENT OF THE PROBLEM.

A.   HISTORICAL FRAMEWORK

From the past years researchers have studied the vowels and phonemes, the evolution through the time. To give to this investigation the correct analysis, we will present the IPA (International Phonetic Alphabet) and its history to know how these phenomenon occurs.

Vowels are an important feature of the world's languages. Languages, however, differ in the number and the acoustic properties of their vowels. The two main problems of vowel perception needing explanation are vowel categorization (identification) and vowel constancy. Categorization concerns how listeners know which of the different vowels of their language have been spoken. Constancy concerns how listeners do this despite wide variations in the realization of any particular vowel.

I.II International Phonetic Alphabet

The International Phonetic Alphabet (IPA) is an academic standard created by the International Phonetic Association. The International Phonetic Association was founded in Paris in 1888 under the name *Dhi Fonètik Tîcerz' Asóciécon* (The Phonetic Teachers' Association), a development of *L'Association Phonétique des Professeurs d'Anglais* (The English Teachers' Phonetic Association), to create an international phonetic alphabet primarily for English, French, and German. Many of the symbols derived from Sweet's Revised Romic alphabet.IPA is a phonetic notation system that uses a set of symbols to represent each distinct sound that exists in human spoken language. It encompasses all languages spoken on earth.It was last updated in 2005 and it consists of 107 letters, 52 diacritics, and four prosodic marks.

B. DESCRIPTION OF THE PROBLEM

In 2015, it has been noticeable some deficiencies in the pronunciation of English vowel sounds by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador which is worried because a good pronunciation is very important for all students who are learning a second language.

During the learning process students commit differents kind of errors while pronouncing the English vowel sounds. These are the main difficulties that Spanish learners of English have with pronunciation due to total and partial differences between the phonological systems of the first language (L1) and second language (L2).

Teachers are responsible of correcting this problem since the first year of the major but unfortunately this is repeated. Besides that teachers have to take into account that in this level speaking errors are committed frequently since students have not had enough contact with the target language (L2).

In fact, it has been common practice to pay more attention to reading, writing, grammar and vocabulary than to the oral skills, which are listening and speaking while pronunciation is of course an essential part of the latter.

This may seem surprising, since the oral component continues to be the main weakness of Spanish EFL learners and hence is perhaps the language skill that requires most attention in the classroom. Spanish learners of English tend to have serious problems when facing English pronunciation, mainly due to the lack of many similarities between the phonological systems of the two languages.

Another problem commonly ascribed to Spanish EFL learners' pronunciation is the lack of distinction between short and long vowels.

That is the reason why in this research the purpose is to give readers some statistics about the difficulties of English vowel sounds pronunciation by the fifth-year students from Modern Languages Major.

C. OBJECTIVES

General Objective

- To analyze what are the difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador.

Specific Objectives

- To recognize which vowel minimal pair sounds are more difficult to be articulated by fifth-year students.

- To examine the pronunciation of English vowels by fifth-year students.

- To find if long and short vowel sounds and the sound of schwa are pronounced correctly by fifth-year students.

D. RESEARCH QUESTIONS

GENERAL QUESTION:

What are the difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador?

SPECIFIC QUESTIONS:

- ➢ Which vowel minimal pair sounds are more difficult to be articulated by fifth-year students?

- ➢ Do fifth-year students have a good pronunciation of English vowels?

- ➢ Are the fifth-year students capable to identify the long and short vowel sounds and the sound of schwa are pronounced correctly by fifth-year students?

E.JUSTIFICATION

Second language learning is a very complex process in which there are several involved factors. Through the time, Second Language Learning has developed a large number of studies that have carried out the challenge to identify those key aspects to acquire or learn a new language. Currently, there are several barriers preventing proper phonetic vowels pronunciation of English, becoming a problem affecting students from Modern Languages Major.

As a first perspective, one of the main reasons that motivates this research is to know if the fifth-year students from Modern Languages Major at the Foreign Language Department still have some problems with pronunciation vowel sounds when they speak English. Phonetic is the branch that will help to find out the differences and similarities of the phonemes and why it is difficult to articulate them. For English Language Learners (ELLs), the challenge of speaking in front of classrooms, reading out loud, or making a presentation in front of the class can be overwhelming.

To continue, there is lot of information about Phonetics in books showing the study of sounds and there are some resources on internet about the study of phonetic problems at the moment of learning a second language. The absence of pronunciation topics in the Major is evident and pronunciation skills recently have a little space in the syllabus taught. Most classes focus on teaching language aspects such as grammar, vocabulary, and morphology to help learners command the structure of English sentence. However, learning to produce correct pronunciation is not given much care in this syllabus. These differences can go beyond every year and this will affect the development of phonetic skills of new arrivals. New generations have to face the same inconveniences in classrooms even at the moment of starting a new job.

The study of the difficulties in the pronunciation of English vowels is essential whenever students try to communicate with others, by teaching the language or working in other area where it is a must to speak English almost the 100% of the time; this will be useful for all the students of the Modern Language Major to improve not only the speaking skill and to ameliorate the articulation of sounds but also to reach the most similar pronunciation of the Standard English.

Moreover, the study will help in the learning process of students involved.

First, the inquiry will allow knowing in-depth way the main reason that affects students with their English level in the major. This will guide to the second point, which is to assess the findings to generate constructive criticism to help the research. In addition, the academic experience gained by researchers will be one key aspect for the resolution of the concerns raised at the beginning of the research, related significantly with the theoretical framework.

The purpose of the research is to know the difficulties in the pronunciation of English vowels. This main objective will be reached by supporting different theories in learning a second language and the results of the recordings for which a small group of twenty students will be tested. Furthermore, the report could be a manual for teachers and students who are interested in being acquainted with the phenomenon. Conclusively, investigators' identification will help throughout the inquiry to determine final conclusions and results.

F. DELIMITATION OF THE PROBLEM

The students from the Modern Languages Major speak Spanish as native language. This characteristic has the benefit that alphabet of both languages has a Roman origin, so the graphics of vowels and consonants are shared, but the way of how Spanish vowels are pronounced differ from the pronunciation of English vowels since the Spanish language has five vocalic phonemes (/i, e, a, o, u/) terminology for describing vowel sounds in English (e.g. high front to back low) is usually based on their position in the chart (based on ladefoged, 2006) and are closely tied to the graphemes *i, e, a, o, u*. while the English language uses the same writing system as Spanish, the five written vowels, represent twelve phonemes in stressed syllables /i, ɪ, e, ɛ, æ, a, ɔ, ʌ, o, ʊ, u/, and the sound schwa /ə/.

Moreover, the differences between English and Spanish can difficult students to improve their language skills especially in phonetics, which is the study of human speech sounds, and it is the branch that studies the way that oral communication is articulated.

In addition, there exist some parameters that are already established about how to speak and pronounce English vowels in a correct way. Those parameters are expected to be gotten by fifth-year students but some of them have noticeable problems with pronunciation skills. This problematic is presented in the reality of the Foreign Language Department and through this study the level of phonetic knowledge of students about the language will be tested.

For the above reasons, the topic to be investigated is: ***Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador during the year 2015***

II. THEORETICAL FRAMEWORK

The investigation of this project will be based on the theory given by **Best and colleagues** in his model ***"The Speech Learning Model (SLM)***" (1988, 1992, 1995, 1999, 2002), this model relates the ability to accurately perceive speech input and sort a range of segments with common properties into categories, to subsequently relate vocal output to the properties perceived in speech sounds.

Therefore, the main aim of the SLM is to account for the changes in the learning of segmental production and perception across the life span. To that end, the model bases in two main assumptions. Firstly, it assumes that the ability to form categories for sound systems remains intact over the life span (Flege, 1995: 239). If that is true, it might be possible to apply this ability, which is the same used when learning the **first language (L1)** system, to **second language (L2)** acquisition. On the other hand, it assumes that L1 and L2 phonetic subsystems cannot be completely separated since bilinguals' L1 and L2 phonetic vowel subsystems will necessary interact because they both use the same phonological vowel space (Flege, 2003:8-10).

The concepts of "new" and "similar" phones, are also crucial in the construction of the Speech Learning Model since they are interrelated. The model predicts that it is more likely to create a new phonetic category for an L2 sound when this is a "new" sound. Flege (2003:10) argues that the greater is the perceived dissimilarity of an L2 speech sound from the closest L1 sound, the more the possibilities to establish a category for representing a novel sound. Once a new category is created, as predicted by the SLM, bilinguals will produce sounds that are as good as those produced by native speakers. In other words, according to the SLM, adults can retain the capacities used by infants when learning their L1 vowels and consonants, and then apply those to the acquisition of L2 speech. This postulate opposes to the general claim that adults are prevented from producing authentic L2 phonemes. Moreover, the existence of a critical period for speech learning could be challenged.

After reviewing the postulates and hypothesis presented by Flege in his Speech Learning Model of second language sound acquisition, the present investigation raises as a consequence of the interests in continuing testing the hypotheses forming the model. As acknowledged by Flege (1995:239), the SLM generates testable predictions that can serve as a base for planning research.

To that end, this study looks at both perception and production abilities and how they interact in a group of students from the Modern Language Major who have Spanish as their L1. Bearing in mind that learning to produce phonemes from a second language seems to be one of the most difficult tasks in L2 acquisition, it is appealing to continue investigating on how this "assumed" condition can be challenged. Even more, as proposed by the SLM, the thought of adults being prevented from producing authentic L2 realizations remains debatable; as a result, it is worth to continue investigating whether students can in fact learn how to produce new phonemes.

DEFINING VOWELS

Vowels are defined as a category of speech sounds whose production does not imply any obstruction to the outgoing flow of air. Even though the production of a number of vowels requires a contact between the rims of the tongue and the upper molars, the central part of the tongue, composed by the apex, dorsum and root, is always separated from the palate. As a result, a voiced eggressive air-stream flows out without any closure or narrowing and the escape of air is typically completed in an unimpeded way over the middle of the tongue (Gimson, 1994). A vowel is, therefore, "a glottal tone modified by the action of the upper resonators of the mouth, pharyngeal and nasal cavities" and "the movable organs mainly responsible for shaping these resonators are the soft palate, lips and tongue" (Gimson, 1989:37). Consequently, vowels "can be made different from each other (…) by raising a certain part of the tongue to different levels, by modifying the shape of the lips and by raising and lowering the velum" (Finch and Ortiz Lira, 1988:11).

The term vowel has traditionally designated a sound produced with open approximation of the articulators. However, vowel sounds are also syllabic due to the fact

that they are almost always found at the center of a syllable. That is to say, they function as the central or nuclear elements of syllables.

English Vowel Rules.

In English spelling, each vowel letter can be pronounced with different sounds. There are only five vowel letters, but there are many more vowel sounds. The most common pronunciations are the ***alphabet vowel sounds*** and the ***relative vowel sounds.***

Sometimes vowel letters are pronounced like their letter names. These sounds are called the ***alphabet vowel sounds***. The alphabet vowel sounds are pronounced with a small change in the sound at the end. This change is called the off-glide.

Vowel letters are not always pronounced with their alphabet vowel sounds. Often a vowel letter is pronounced with a ***relative vowel sound.*** This sound is related to the alphabet vowel sound, but it has a different sound and there is no off-glide.

Rule number 1. The two vowel rule.

If there are two vowel letters in a one-syllable Word:

1. The first vowel letter is pronounced with its alphabet vowel sound.
2. The second vowel is silent.

For example, the word *mean* /mi:n/ the first vowel *e* is pronounced as /i:/ with its *alphabet vowel sound* and the second vowel is silent.

Rule number 2. The one vowel rule.

If there is only ONE vowel letter in a short word, it is pronounced with its relative vowel sound.

For example, the word *red* is a short word so it must be pronounced as /rɛ d/ with its *relative vowel sound.*

THE PRODUCTION OF VOWELS

Before getting deeper into the study of vowels it is important to understand how and where the sound of each vowel is produced. Vowels in English have some parameters that must be taken into account and these parameters can be used with other languages like Spanish. Vowels are typically voiced, it means that the vocal cords are very close together, the air that comes from the lungs will blow them apart as it forces its way through. Doing so, it will make them vibrate producing the voiced sound.

Even though vowels are voiced, they do not have place of articulation like consonants so it is necessary to set the description of vowels into three patterns: height, the vertical dimension; Backness, horizontal dimension, and roundedness, the position of the lips.

HEIGHT

Vowels produced with the highest point of the hump in the tongue close to the roof of the mouth are said to be HIGH, and those produced with the highest point of the hump in the tongue barely rising above the floor of the mouth are said to be LOW; the intermediate position refers to as MID.

Figure 1

Besides the three distinctions explained before, there is a secondary distinction under the name of TENSE-LAX or CLOSE-OPEN. Tense vowels are higher and often less centralized compared with their lax counterparts. It is used to distinguish pair vowels such as [i] *seed* [sid] vs. [I] *Sid* [sId], [e] *late* [leIt] vs. [ɛ] *let* [lɛ t], [u] *full* [ful] vs. [ʊ] *foot* [fʊ t], and [o] coat [kowt] vs. caught [kɔ t].

Figure 2

	Front		Central		Back	
Tense	i				u	High
Lax	ɪ				ʊ	
Tense	e		ɔ		o	Mid
Lax	ɛ		ʌ		ɔ	
	æ		a			Low

Front unrounded | Central unrounded | Back rounded

BACKNESS

To determine the location of the highest point of the horizontal axis: the highest point of the tongue may be at the FRONT, in the center are said to be CENTRAL, and at the back of the tongue are said to be BACK.

Figure 3
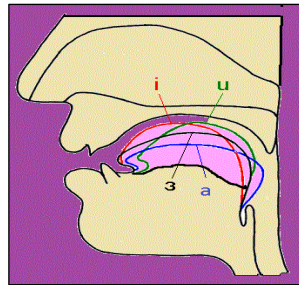
ROUNDEDNESS

Finally, the quality of a vowel is affected by the shape of the lips. Lips can only assume two positions: they are ROUND or UNROUND.

Figure 4

The various articulatory parameters are not entirely independent of each other. It is clear that there is a systematic correlation between lip rounding and tongue height. For a rounded vowel, the higher the tongue is, the greater the degree of lip rounding.

Every vowel that is being studied in this research is represented in the diagram below:

SPANISH VOWELS

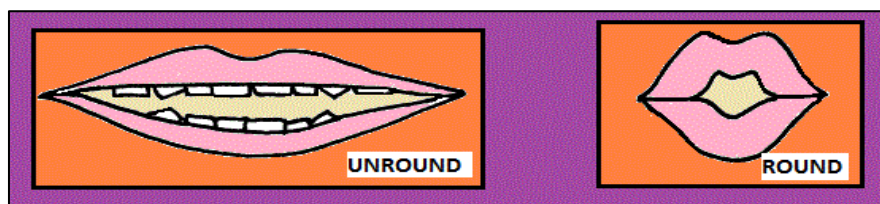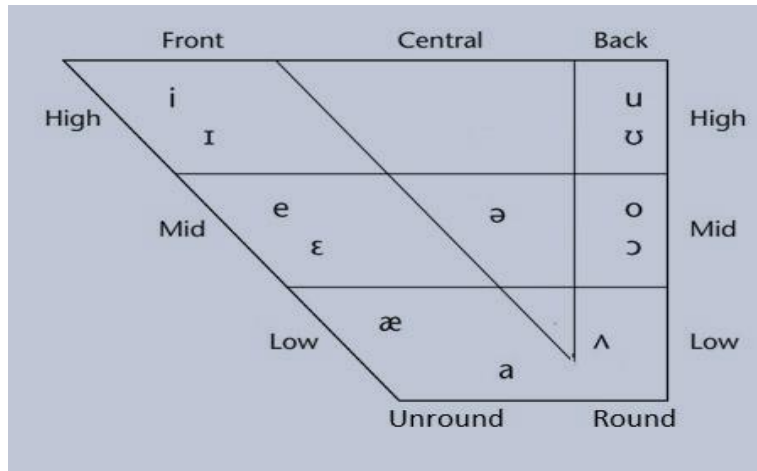Spanish language has five vowels which symbols are /a/, /e/, /i/, /o/, and /u/. They are generally very stable and the variation in their pronunciation is not major. When articulating and producing them, the mouth is held in a tense position. Regarding duration, there is not significant variation between vowels since they all seem to have roughly the same length. Additionally, in Spanish, the stressed vowel in a word is usually longer, however; this duration is still very short in contrast with long vowels existing in other languages. (Barrutiaand Schwegler, 1994:46). Let us now briefly describe each of the Spanish vowels in respect to articulation and quality.
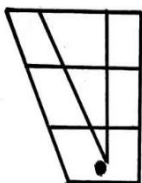
Vowel /a/, as in *paso* [paso], is a low central, unround phoneme articulated with the lips in a neutral position. This vowel is easier to be found in all the position of the word: at the beginning as in *amigo* [amigo], in the middle like
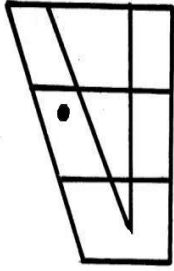
in *caro* [karo] and also at the end as in the word *cosa* [kosa].

The second vowel; /e/, as in *peso* [peso], is a mid-front tense, unround vowel articulated with the lips in a spread position.

/e/ occurs at the beginning as in *egoista* [egoista], in the middle like in *dedo* [dedo] and at the end *cine* [sine].
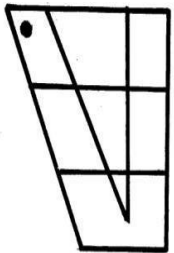
The third vowel, /i/, as in *piso* [piso], is a high front tense unround vowel. It is a tensely articulated vowel with the lips in a tightly spread position.

/i/ occurs at the beginning as in *intenso* [intenso], in the middle like in *misa* [misa], and at the end mostly in the conjugation of verbs for example *cosí* [kosi] from the simple past of verb *cocer* in the first person singular.
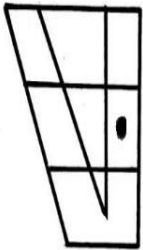
The fourth vowel, /o/, as in *pozo* [pozo], is mid back tense round vowel articulated with lips in a rounded position.

/o/ occurs in all the position. At the beginning as in *optimista* [optimista], in the middle like in *cosa* [kosa], and at the end *pipo* [pipo].
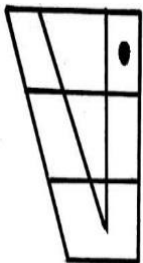
Finally, the vowel /u/, as in *puso /puso/*, is a high back tense rounded vowel that is tensely articulated.

/u/ occurs at the beggininig and middle of words as in *urano /urano/*, cupon /kupon/ and at the end in few words like *bambú /bambu/, impetú /impetu/*.

ENGLISH VOWELS

In standard American English pronunciation twelve monophthongs or pure vowels can be identified. Those are / i, ɪ , e, ɛ , æ, a, ɔ , ʌ , o, ʊ , u, ə/.
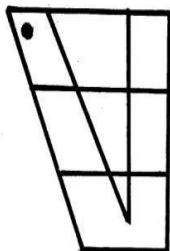
English /i:/ - [i:] can be defined as a high front and close vowel which is nearer to /i/ than to /e/. During the process of resonance, the front of the tongue is raised to a height slightly below and behind the front close position. The velum is up, the lips are relaxed in a neutral position and the tongue is tense. The rims contact firmly with the upper molars. /i:/ is a tense vowel.

/i/ occurs at the beginning, middle, and at the end of words and is commonly spelled *e* in *be* [bi], *ee* in *see* [si], *ea* in *east* [ist], *ei* in *conceit* [konsit], and *ie* in *field* [fild].
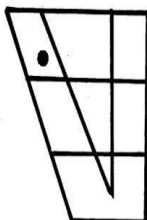
English /ɪ / - [ë] is a front, half-close, centralized vowel. The centralized part of the dorsum is above the half-close position. English /ɪ / is more open compared with /i:/. During the process of resonance, the velum is up and the lips are slightly spread. Besides, /ɪ / is a very lax vowel compared to /i:/. The rims contact lightly with the upper molars.

/I/ occurs at the beginning and middle of words as in *his* [hIs], *pin* [pIn], *dig* [dIg], *fish* [fIʃ]. It is usually spelled *I* or *y*, as in *gift* [gIft] and *myth* [mIϴ].
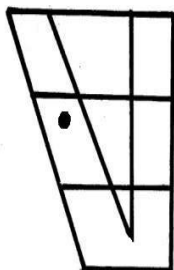
English /e/ - [e] is a mid, front and tense vowel. In other words, the tongue is bunched in the front part of the mouth, and is raised mid high. The tongue muscles are tense, the upper surface of the tongue is slightly convex, and the tension can be felt in the bulge under the chin.

This monophtongal allophone is more likely to occur before voiceless consonants, as in *gate* [geIt], or in weak syllables, such as the first syllables of *vacation* [veIkeI∫ ən] and *chaotic* [keItik].

In contrast to the relatively short vowel in gate [get], a longer allophone, as in *gay*, develops a diphtongal allophone. It is most likely to occur when the vowel is lengthened in the final position, as in *gay* [geI], or before voiced consonants, as in *game* [geIm] and *grade* [greId].
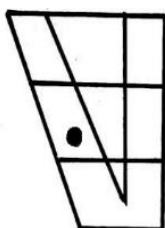
English / ɛ / - [ɛ] is a mid, lax vowel. The position of the speech agents is similar to that /e/, but the muscles are relaxed, the upper surface of the tongue is less convex, and no bulge can be felt in the muscles under the chin.

/ɛ / Occurs at the beginning and in the middle of words, but not at the end, and only when the syllable carries more than minimal stress. It is usually spelled *e*, as in *best* [bɛ st], *men* [mɛ n], *red* [rɛ d] and *well* [wɛ l]. Before a final *r*, as in *fare* [fɛ r], *fair* [feIr] and *pear* [pɛ r].

English /□/ [a] - [□] is a low front vowel which is articulated between the half-open and open position. The velum is up, the lips are neutrally open and the side rims produce a light contact with the back upper molars. In American English, /□/ is a lax vowel. Furthermore, /□/ has been traditionally considered a short vowel.

/□/ occurs at the beginning and middle of words but not ordinary at the end. It is spelled a as in *cat* [k□t], *pan* [p□n], *bat* [b□t]. Before /r/ plus a vowel, as in *carry* [k□ri:], *barren* [b□rən], and *parrot* [p□rət].
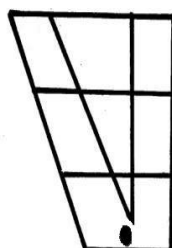
English /ɑ :/ - [ɑ :] is an low, open, back, centralized vowel. The centralized part of the back dorsum is on the fully open position. During its production, the front dorsum is quite lowered and the jaws are noticeably separated. In

addition, the velum is up, the rims do not seem to contact the molars and the lips are neutrally open.

/ɑ :/ occurs at the beginning and middle of words, and is spelled ɑ , as in *arm* [ɑ rm], *calm* [kɑ lm], and *farm* [fɑ rm].
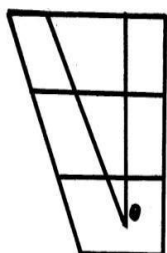
English /□/ - [ʌ] is a back-centralized, half-open vowel. That is to say, the centralized part of the back dorsum is in a position between half-open and open during the process of resonance. In addition, the velum is up, the lips are neutrally open and the rims do not contact the upper molars. English /□/ is a short and lax vowel.

/ʌ / occurs at the beginning and middle of words, but not at the end like in *us, cup* and *love*. It is found only in syllables which carry more than minimal stress. It is spelled *u* in *under* [´ʌ ndər], *o* in *come* [cʌ m], *oo* in *flood* [flʌ d], and *ou* in *rough* [rʌ f].
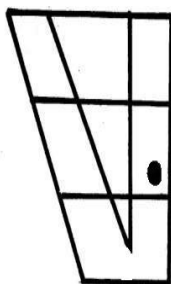
English /ɔ :/ - [ɒ :] is formed with the tongue low. The tongue is bunched in the back part of the mouth, the lips are usually slightly rounded, and the muscles of both tongue and lips are slightly tense.

/ɔ :/ occurs at the beginning, middle, and end of words and is spelled *a* in *all* [ɔ l]; *au* in *caught* [kɔ t]; *aw* in *lawn* [lɔ n]; *o* in *horse* [hɔ rs], and *ou* in *bought* [bɔ t].
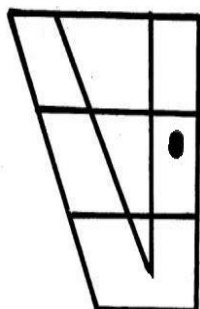
English /o/ - [o] is mid back tense and accompanied by lip rounding.

/o/ occurs in the beginning, middle and end of words and it is spelled *o* in *go* [go]; *oa* in *oak* [ok]; *ou* in *soul* [sol]; *oe* in *toe* [to], and *ow* in *crow* [kro].
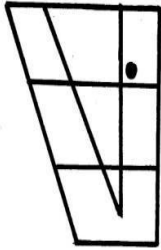
English /ʊ / is a high back lax vowel with less lip rounded than /u/. The centralized part of the dorsum is slightly above the half-close position. In addition, the lips are loosely rounded and the rims contact lightly with the upper molars.

It occurs only in the middle of words, as in *pull* [pʊ l], *wolf* [wʊ lf], *woman* [wʊ mən], *put* [pʊ t], *look* [lʊ k], and *should* [ʃ ʊ d].
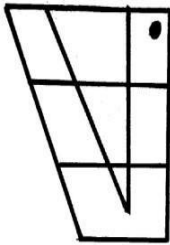
English /u:/ - [ü] is a high back, close vowel with strong lip rounded. The back part of the dorsum is slightly below the fully close position. The articulation of /u:/ is centralized and advanced. During the process of articulation, the lips are closely rounded and might protrude noticeably. The rims produce a light contact with the molars. /u:/ is a tense vowel compared to /ʊ /. It occurs at the beginning, middle, and end of words, as in *ooze* [uz], *soup* [sup] and *do* [du], *blue* [blu], and *school* [skul].
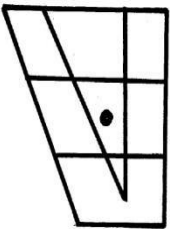
The English /ə/ is a mid-central lax vowel. The tongue is neither forward nor back, but central; neither high nor low, but mid. [ə] occurs at the beginning, middle and end of words, but always in unstressed positions.

/ə/ May be spelled a, as in *about* [əbaʊ t], *geography* [dʒ iagrəfI], and *aroma* [ərɔ ma]; *e*, as in taken and *Nevada* [nəvada]; *i*, as in *April* [eIprəl]; *o* as in *commence* [kəmens] and *bacon* [beIkən]; *u*, as in *circus* [sirkəs], and *column* [koʊ ləm]; *y*, as in *Pennsylvania* [pɛ nsəlvənia].

Exploratory research is very useful when developing a problem for the first time or a social or academic issue that has been poorly studied or has not been investigated yet. In addition, it is very important to notice how familiar people are with such phenomenon relatively unknown for them.

This study used a mixed methods design, which is a procedure for collecting, analyzing and "mixing" both quantitative and qualitative data at some stage of the research process within a single study. Nonexprimental research was done and Purposive Sampling was used where researchers specified the characteristics of the population of interest and located individuals with those characteristics.

To understand a research problem more completely about *Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages major at the Foreign Language Department of the University of El Salvador during the year 2015* it was developed in the following sections:

.

    A. Selection of the Research method

    B. Selection of the Sample

    C. Recollection of the data

    D. Comparison with theory

    E. Analysis and interpretation of the data

    F. Presentation of the results

IV.   HYPOTHESES

There are several factors that affect in a direct way the normal learning process. All those factors have an influence on the time of pronouncing. To understand better the reasons why fifth-year students cannot identify the English vowel sounds some tentative explanation to this phenomenon are being presenting.

"More than half of the students from the Modern Language Major will not identify the English vowel sounds"

It proposes that the percentage of students who cannot identify the English vowel sounds is higher than the students who can immediately pronounce the proper English vowel sounds.

"To greatest similarity between the vowels of the L1 and L2 greater probability of a good pronunciation"

It proposes that if the L1 and L2 vowels are similar, students will find easy to pronounce them.

English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students.

It proposes the group of phonemes that is not included in our first language will be hard to pronounce.

The vowel sound "schwa" is the most difficult sound to be pronounced by fifth-year students.

There is no Spanish equivalent for the schwa sound. On the other hand, in English schwa can replace any vowel.

V. RESEARCH DESIGN

The methodology chosen in this study allowed our research to get to the difficulties in the pronunciation ofEnglish vowelby the fifth year students from Modern Languages Major in the Foreign Language Department. Then, by the use of a well-elaborated design, the research had the validity expected through the reliable results gotten in the analysis of the data.

For this study, an exploratory research was done as the basis for our project. Exploratory research is very useful when developing a problem for the first time or a social or academic issue that has been poorly studied or has not been investigated yet. In addition, it is very important to notice how familiar people are with such phenomenon relatively unknown for them.

This study used a mixed methods design, which is a procedure for collecting, analyzing and "mixing" both quantitative and qualitative data at some stage of the research process within a single study. **Nonexperimental research** was used because there was not manipulation of an independent variable and there was not random assignment to groups. The main purpose was to observe the circumstances involving the phenomenon in their natural environment. Based on the topic all the information obtained was gathered from students who are in fifth year. Research will not modify any of the information presented as the reason of a non-experimental research is to keep the authenticity of the investigation.

As part of the sampling techniques **Purposive Sampling** was used where researchers specify the characteristics of the population of interest and locate individuals with those characteristics.

VI. POPULATION AND SAMPLE

Population

First of all, it is important to define who are the people included in the research; it is necessary to go back to the delimitation. Thus, the population interviewed were *the students of the fifth year of Modern Languages Major from the Foreign Language Department in the University of El Salvador.*

The students who are currently taking the courses which correspond to the subjects that must be taken in the last year of the major took part in the selection process that allowed the researchers to choose the appropriate candidates that helped to develop the research and take it to the next stages. The selection process took place by going to English courses where only subjects from fifth years are taught.

Sample

The selection of the samples used as subjects during the process of the investigation took place on the second semester of 2015. The researchers prepared the selection criteria before beginning the choice; and the samples that best describe these criteria were chosen during the period previously stipulated.

-**Purposive Sampling** was used, specifying the characteristics of the population of interest, for this study Twenty native speakers of Spanish (10 females and 10 males) all of them fifth-year students from the Modern Languages Major will participate in the study. They ranged in age from 20 to 24 and 25 to 29. The goal was to find with those native students, what are *the difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages major at the Foreign Language Department of the University of El Salvador during the year 2015?*

A. Research instruments

Quiz: to students

UNIVERSITY OF EL SALVADOR
SCHOOL OF ARTS AND SCIENCE
FOREIGN LANGUAGE DEPARTMENT

"Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Languages Department of the University of El Salvador during the year 2015"

Researchers: Gabriela María Díaz Rodríguez.
Sandra Carolina Fabián Menjívar.
Kenia Xiomara Urquilla.

Course:　　　　　Thesis (Graduation Process)
Advisor's name:　　Jorge Humberto Aguilar

Gender: Female___Male___　　　　　**Age:** from 20 to 24 ___ from 25 to 29___

Objective: To analyze what are the difficulties in the pronunciation of English vowels by the fifth-year students from Modern Language Major at the Foreign Language Department of the University of El Salvador.

Instructions: This quiz will test your knowledge of English vowel sounds.You will be recorded,please read loudly the following list of words according with your personal knowledge based on your academic performance since the beginning of the major.

NOTE: This quizwill be recorded and it is part of a study of the research for our thesis project. The information collected from this questionnaire will be confidential. It will take you no more than 5 minutes.

Read the following list of words loudly.

1-i/ ɪ pairs   2- e/ ɪ   3- u/ʊ pairs

- Leave/live   - desk/disk   -food/foot
- Sleep/slip   - fell/fill   -pool/pull

4-a/ɛ pairs   5- æ/ʌ pairs   6- ɛ /ʌ
- bar/bear   - cat/ cut   - bet/butt
            -ban/bun   -jest/just

7- o/ɔ pairs   8- æ-ɑ -ʌ   9- ə (schwa)
- bowl/ball   -hat/hot/hut   -problem
- woke/walk   -cap/cop/cup   -about

10- ə (schwa)
Enemy
Sentence

PART 2

Interview: students

<center>

UNIVERSITY OF EL SALVADOR
SCHOOL OF ARTS AND SCIENCE
FOREIGN LANGUAGE DEPARTMENT

</center>

"Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Languages Department of the University of El Salvador during the year 2015"

Researchers: Gabriela María Díaz Rodríguez.
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Course: Thesis (Graduation Process)

Advisor's name: Jorge Humberto Aguilar

Gender: Female___Male___   **Age**: from 20 to 25 ___ from 25 to 29___

Objective: To analyze what are the difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador.

Part 1

Instructions: This quiz will test your English vowels comprehension. Please listen carefully to the following recording and circle the correct words that are pronounced.

1- Beat   -   Bit

2- Hill   -   Hell

3- Look   -   Luke

4- Pot   -   Pet

5- Shatter   -   Shutter

6- Bench   -   Bunch

7- Choke   -   Chalk

8- Lack   -   luck

9- Sew   -   saw

10- Soot   -   suit

Part 2

Instructions: Identify and underline the vowel sound which represents the /ə/ (schwa) in the following words.

1. Assign
2. Taken
3. April
4. Bacon
5. Circus

B. Data gathering plan

The collection of data took place during the period of two weeks of the second semester of 2015. After having selected the samples, researchers began with the administration of the instruments, which are some experimental analysis that were collected from a quiz and a cover recording about presentations of English vowel sounds, which were presented to fifth year students who participated in the research, all the information was collected to continue to the next step.

Place/Space

The research took place inside the University of El Salvador, more specifically in the Foreign Language Department in classes belonging to the career of Modern Languages. The recordings, quizzes and the process of putting the project together, and the documentation took place inside the campus, specifically in the classrooms. In order to have a better understanding of the distribution of task, there are four classifications:

A. Participants

Twenty native speakers of Spanish (10 females and 10 males) all of them fifth-year students from the Modern Languages Major will participate in the study. They ranged in age from 20 to 24 and 25 to 29. The recordings with students were recorded in their classrooms or before their classes. Quizzes were resolved by fifth year students in classrooms inside the building before their classes of morphology and literature in English I.

B. Methods (stimuli)

Recordings were made on a laptop computer. Students sat in a quiet room with their lips a few centimeters away from a head-mounted close-talking micro-phone. They were asked to read a list of monosyllabic English words which includes all the English vowels to be analyzed. The words were grouped by vowel sound:

1. **First group:** /i-ɪ / feel-fill
2. **Second group:** / e- ɪ / desk-disk
3. **Third group:** /ʊ -u/ fool-full
4. **Fourth group:** / a- ɛ / bar-bear
5. **Fifth group:** / æ- ʌ / cap-cup
6. **Sixth group:** /ɛ - ʌ / bet-butt
7. **Seventh group:** /o- ɔ / bowl-ball
8. **Eight group:** / æ- ɑ - ʌ / hat-hot-hut
9. **Ninth group:** /ə / probl<u>e</u>m

Also, the students were given a printed material a quiz, with clear instructions. The students' task is to identify the word which they hear from a recording by circling the appropriate word. The participants were presented with the stimuli just once.

Documentation

The material and literature needed for the framework and the information about the theory, techniques and analysis were investigated in the central library of the Schools of Arts and Sciencesand the library for the Foreign Language Department.

In the following page we can observe the **data gathering plan**.

ACTIVITY	DATE	TIME	PLACE	INSTRUMENT	RESEARCHER TEAM
Documentation collection	10/08/2015 to 17/08/2015	From 10:00 am to 4:00 pm	University of El Salvador School of Arts and Sciences Foreign Language Department.	■Chosen selection documentation. All information related to create instruments is related. ■ Criteria. This part consists on the requirements to gather the material, tools and information collected from the framework to create the instruments.	➢ Gabriela MaríaDíaz Rodriguez ➢ Sandra Carolina Fabián Menjivar ➢ Kenia Xiomara Urquilla
Sample Selection	24/08/2015 to 28/08/2015	From 9 :00 am to 4:00 pm	University of El Salvador School of Arts and Sciences Foreign Language Department.	■Chosen selection questionnaire. It will contain right questions linked with criteria terms. ■ Criteria. This part consists on the requirements that the sample must have to fit with the investigation objectives.	

Information meeting with sample	31/ 8/2015 to 02/09/2015	From 10 :00 to 4:00 pm	University of El Salvador School of Arts and Sciences Foreign Language Department.	■ Quiz and interview for students. They consist of some English vowels pronunciation sounds to know what the difficulties students have when pronouncing English vowels sounds.	
Quiz and interview sessions with the sample	14/09/2015 to 18/09/2015	From 11:00 am to 6:oo pm	Morphology and Phonology I Literature in English I (students were not interrupted during their classes)	■Quiz and interview Quiz. This instrument encloses questions (minimal pairs) where the task is to identify the word which they hear from a recording. Interview. Students were asked to read a list of monosyllabic English words to evaluate the pronunciation of English Vowels. ■Recording. It will let to record the data in a proficient manner. .	

VIII. DATA ANALYSIS

A. Qualitative Analysis.

Part 1

In this analysis it will be used a Discourse analysis, a method of naturally occurring talk (spoken interaction) and all types of written texts from the fifth-year students from Modern Languages Major.

To measure the knowledge level of rules of vowel sounds, students were given a survey in which they were asked if they knew some rules in order to pronounce the words.

Open-ended question:

Do you know the general rules for vowel sound?

Unfortunately, no one could say yes. All the students were not able to write any rule for vowel sounds. The majority of them answered they often practice English and most of the time will be at the University and at work. It must take into consideration the fact most of them started studying English in high school. So they had already a previous knowledge.

Moreover, students were asked to read a list of words loudly to evaluate their pronunciation and the results were the followings:

Leave /i/ - live /I/ Annex 1.

According to the rule number 1, the word *leave* has to be pronounced with the phoneme / i/ (alphabet vowel sound) but some students pronounced it with the phoneme /I/. Same happened with the word *live*, it has to be pronounced with the phoneme /I/ (relative vowel sound) but some students pronounced it with the phoneme /i/.

Sleep /i/ - slip /I/ Annex 2.

According to the rule number 1, the word *sleep* has to be pronounced with the phoneme /i/ (alphabet vowel sound) but some students pronounced it with the phoneme /I/. Same

happened with the word *slip,* it has to be pronounced with the phoneme /I/ and only one student pronounced it with the phoneme /e/.

Desk /□/ - Disk /I/ Annex 3.

According to the rule number 2, the word *desk* has to be pronounced with the phoneme /□/ (relative vowel sound) and all the students pronounced it correctly. In this case, the second hypothesis can be proved.

"To greatest similarity between the vowels of the L1 and L2 greater probability of a good pronunciation"

Same happened with the word *disk,* only one student pronounced it with the phoneme /e/ instead of pronounced with the phoneme /I/ (relative vowel sound).

Fell /□/ - fill /I/ Annex 4.

According to the rule number 2, the word *fell* has to be pronounced with the phoneme /e/ (relative vowel sound) and almost all the students were capable to pronounce it correctly. Again the second hypothesis can be proved.

On the contrary, the word *fill* was not pronounced well by the students. They pronounced with the phoneme /i/ (alphabet vowel sound).

*Food /u/ - foot /ʊ/ Annex 5.

According to the rule number 1, the word *food* has to be pronounced with the phoneme /u/ (alphabet vowel sound) almost the majority of students pronounced it well.

On the contrary, the word *foot*, which has to be pronounced with the phoneme / ʊ/ (alphabet vowel sound) was not identified by the majority of students. They pronounced it with the phoneme /u/.

In this case, the hypothesis number 3 can be proved:

English vowel sounds that are not included in the L1 alphabet are more difficult to be pronounced by the fifth- year students.

Pool /u/ - Pull /ʊ/ Annex number 6.

According to the rule number 1, the word *pool* has to be pronounced with the phoneme /ɔ / (alphabet vowel sound), but it is an exception of the rule number 1, and even if they don't know these rules and exceptions, more than half of students pronounced it well. They pronounced it with the phoneme /u/ and this is the correct form.

In this case, the hypotheses number 3 cannot be applied:

English vowel sounds that are not included in the L1 alphabet are more difficult to be pronounced by the fifth- year students.

On the contrary, the word *pull*, which has to be pronounced with the phoneme / ʊ/ (relative vowel sound) was not identified by the majority of students. They pronounced it with the phoneme /u/.

In this case, the hypothesis number 3 can be proved as well:

English vowel sounds that are not included in the L1 alphabet are more difficult to be pronounced by the fifth- year students.

Bar /a/ - bear /□/ Annex 7.

According to the rule number 2, the word *bar*has to be pronounced with the phoneme /ɑ / (relative vowel sound) and all the students were capable to pronounce it correctly.

The rule number 2 can be proved in this case.

"To greatest similarity between the vowels of the L1 and L2 greater probability of a good pronunciation"

On the contrary, the word *bear,* which has to be pronounced with the phoneme /e/, because it is an exception of the rule number 1, it presents some difficulties to students because they are not aware of these rules at all.

Students pronounced it with the phoneme /i/ (alphabet vowel sound) but this is not the correct form.

Cat /æ/ - cut /□/ Annex 8.

According to the rule number 2, the word *cat* must be pronounced with the phoneme /æ/ (relative vowel sound) and the majority of students pronounced it correctly but some of them pronounced it with the phoneme /ɑ /.

In this case, the hypothesis number 3 cannot be proved:

English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students.

Same happened with the word *cut* must be pronounced with the phoneme / □/ (relative vowel sound) and the majority of students we able to pronounce it well. In both cases, the theory of Flege (1995) which exposes "**sounds that are not included in the L1 are more difficult to pronounce**" does not apply because students pronounced it well.

Ban / æ / - bun /□/ Annex 9.

According to the rule number 2, the word *ban* must be pronounced with the phoneme / æ/ (relative vowel sound) and the majority of students pronounced it correctly but some of them pronounced it with the phoneme /ɑ /.

On the other hand, the word *bun* must be pronounced with the phoneme / □/ (relative vowel sound) gave difficulties to students. They were not able to pronounce it well. Even though, it is similar to the previous example, students did not pronounce it well. They pronounced it with the phoneme / o/ or /ɑ /. Flege's theory cannot be applied neither.

Bet /□/ - butt / □/ Annex 10.

According to the rule number 2, the word *bet* must be pronounced with the phoneme / □/ (relative vowel sound). The majority of students pronounced it correctly.

But with the word *butt*, which must be pronounced with the phoneme / □/ gave students some difficulties when pronouncing; they pronounced it with the phonemes /ɑ /.
This case proves the hypothesis number 3:

English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students.

Jest / □/ - just / □/ Annex 11.

According to the rule number 2, the word jest must be pronounced with the phoneme / □/ (relative vowel sound). Fortunately, all the students were capable to pronounce it well. In this case the hypothesis number 2 can be proved:
"To greatest similarity between the vowels of the L1 and L2 greater probability of a good pronunciation"

On the other hand, the word just that must be pronounced with the phoneme / □ / gave some difficulties to some students when pronouncing. Some of them pronounced it with the phoneme /ɑ / or /o/ but the majority pronounced it well.

Bowl /o/ - ball / ɔ / Annex 12.

According to the rule number 2, the word *bowl* must be pronounced with the phoneme / o/ (relative vowel sound) but students pronounced it /au/. In this case Flege's theory can be applied because more than the half of students were not capable to pronounce it well.

On the contrary, the word *ball* that must be pronounced with the phoneme/ ɔ / (relative vowel sound) because this is an exception of the rule number 1,gave some difficulties to students because they are not aware of these exceptions of the rule 1.

Students pronounced it with the phoneme /ɑ / (alphabet vowel sound) but this is not the correct form.
Hypothesis number 3 can be applied.

"**English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students".**

Hat /æ/ - hot /a/ - hut /□/ Annex 13.

According to the rule number 2, the word *hat* must be pronounced with the phoneme /æ/ (relative vowel sound) and the majority of the students pronounced it correctly. In this case Flege's theory cannot be applied because more than the half of students werecapable to pronounce it well.

According to the rule number 2, the word *hot* must be pronounced with the phoneme /ɑ / (relative vowel sound) and also the majority of the students were able to pronounce it correctly. In this case Flege's theory cannot be applied neither because more than the half of students werecapable to pronounce it well.

According to the rule number 2, the word *hut* must be pronounced with the phoneme /□/ (relative vowel sound) but in this particular example more than the half f students were not able to pronounce it well. They pronounced phonemes such as /ʊ/ /ɑ / and /ɔ /.
In this case, the hypothesis number 3 can be applied:

"**English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students".**

And Flege's theory can be applied too because more than the half of students were not capable to pronounce it well.

Cap /æ/- cop /ɑ/ cup /□/ Annex 14.

According to the rule number 2, the word *cap* must be pronounced with the phoneme /æ/ (relative vowel sound) and the majority of the students pronounced it correctly. In this case Flege's theory cannot be applied because more than the half of students werecapable to pronounce it well.

According to the rule number 2, the word *cop* must be pronounced with the phoneme /ɑ / (relative vowel sound) and also the majority of the students were able to pronounce it correctly. In this case Flege's theory cannot be applied neither because more than the half of students werecapable to pronounce it well.

According to the rule number 2, the word *cup* must be pronounced with the phoneme /□/ (relative vowel sound) but in this particular example more than the half f students were not able to pronounce it well. They pronounced phonemes such as /ʊ/ /ɑ / and /ɔ /.
In this case, the hypothesis number 3 can be applied:

"**English vowel sounds that are not included in the L1 alphabet are more difficult to pronounce by the fifth- year students".**
And Flege's theory can be applied too because more than the half of students were not capable to pronounce it well.

 Problem /ə/- about /ə/ Annex 15.

The phoneme /ə/ schwa is not included in the L1, and according to the hypothesis number 4, students find difficulties when pronouncing it but in this case,less than half of students were not able to pronounce it correctly. Then the hypothesis cannot be applied.

Enemy /ə/- sentence /ə/ Annex 16.

The phoneme /ə/ schwa is not included in the L1, and according to the hypothesis number 4, students find difficulties when pronouncing it but in this case,less than half of students were not able to pronounce it correctly. Then the hypothesis cannot be applied.

B. Quantitative analysis

Part 2

1- beat - bit
/bit/ - /bɪt/
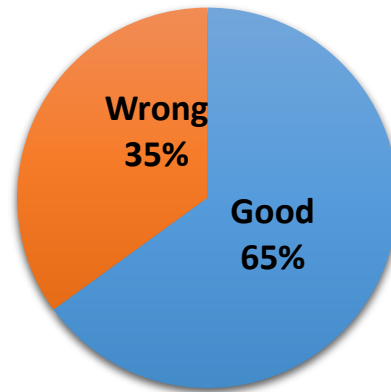
65% recognized the **high tense front unround vowel /i/,** and the rest, the 35% of them was not capable of identifying it.

2- hill - hell
/hɪl/- /hɛl/
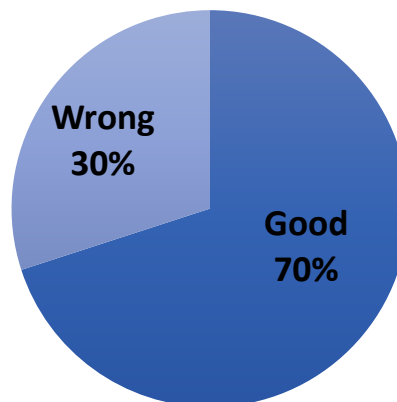
The 70% percent of them were capable of recognizing the **high lax front unround vowel /ɪ/,** the other 30% could not identify it.

3- look - Luke
/lʊk/ - /luk/

According to the results obtained, the 70% of the students could identify the **high lax back round vowel /ʊ/**, but the other 30% could not recognized the correct pronunciation.

4- pot - pet
/pat/ - /pɛt/
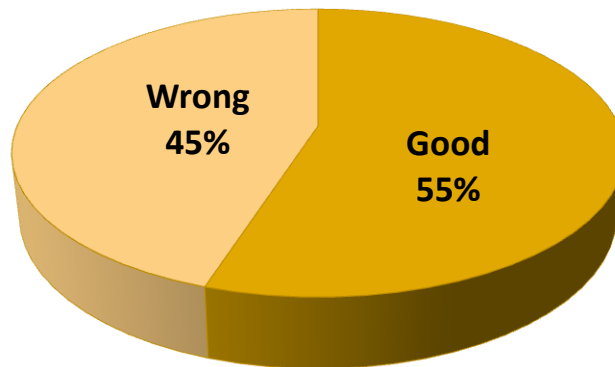
According to the results there was a minimal difference in the percentages of right identification, just the 55% of the students could recognize the **low central unround vowel /ɑ /,** and the 45% of them could not.

5- **shatter -** shutter
/ʃætər/ - /ʃ☐tər/
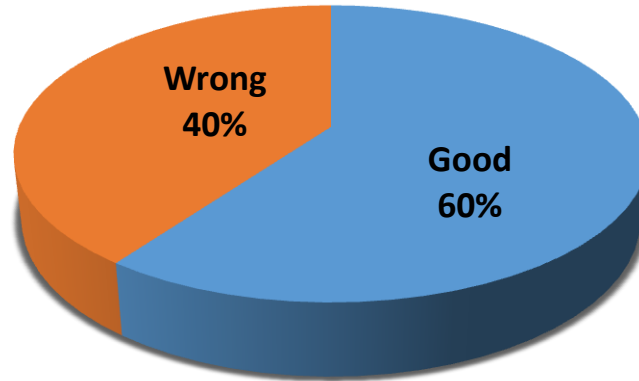
According to the results gotten, 60% of the students interviewed were capable of recognizing the **low front unround vowel /æ/,** but the 40% did not recognize it.

6- **bench** - bunch
/bɛntʃ/ - /b☐ntʃ/
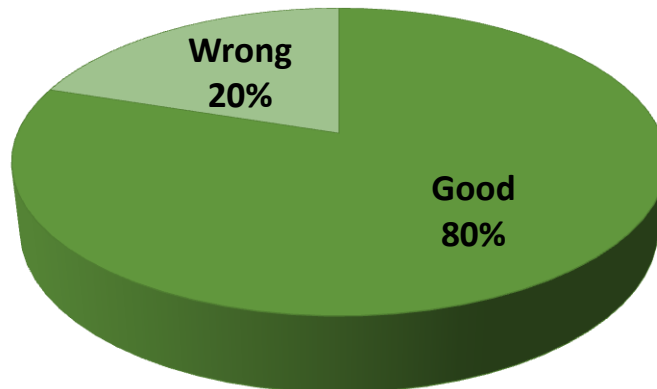
According to the results, the majority of the students, 80% of them could recognize the **mid lax front unround vowel /ɛ /,** just the 20% could not identify it.

7- choke **- chalk**
/tʃok/ **- /tʃɔk/**

Good
30%

Wrong
70%

According to the results, a big percentage of the students did not distinguish the **mid lax back round vowel /ɔ /,** since the 70% of them chose the wrong answer and only the 30% could determine which the correct one was.

8- lack **- luck**
/læk/ **- /lːk/**

Good
10%

Wrong
90%
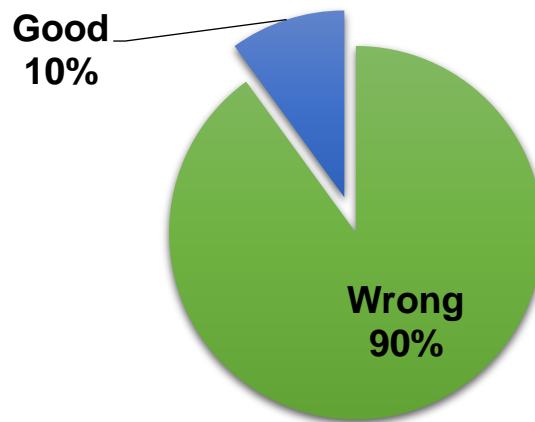
According to the data collected, only the 10% of the students distinguished the pronunciation of the **back front unround vowel /æ/,** and the 90% of the students did not recognize the phoneme.

9- sew - saw
/so/ - /sɔ/
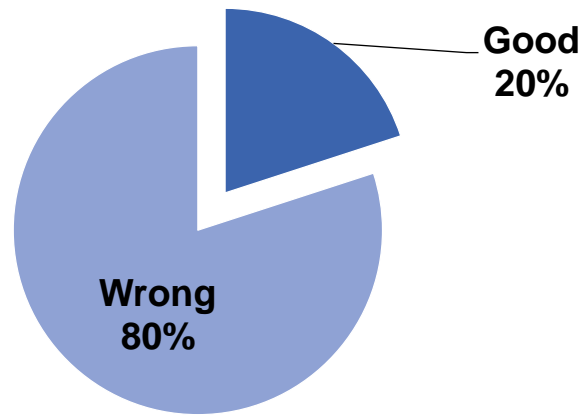
According to the results obtained, just the 20% of the students was capable of identifying the **mid tense back round vowel /o/,** and the majority, the 80% could not distinguish it.

10- soot **- suit**
/sʊt/ **- /sut/**
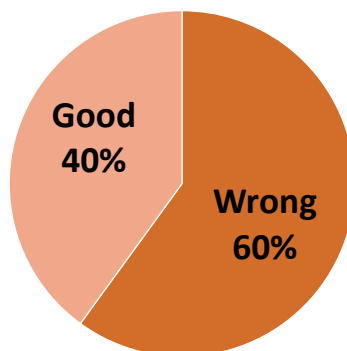
According to the information gotten, the majority of the students could not determine the right pronunciation of the high tense back round vowel /u/ since the 60% of them got a wrong answer; just the 40% could distinguish the phoneme.

Schwa /ə/

	[a] Assign /əsaln/	[e] Taken /telkən/	[i] April /elprəl/	[o]Bacon /belkən/	[u]Circus /sɛrkəs/
■ Good	75%	90%	65%	90%	90%
■ Wrong	25%	10%	35%	10%	10%
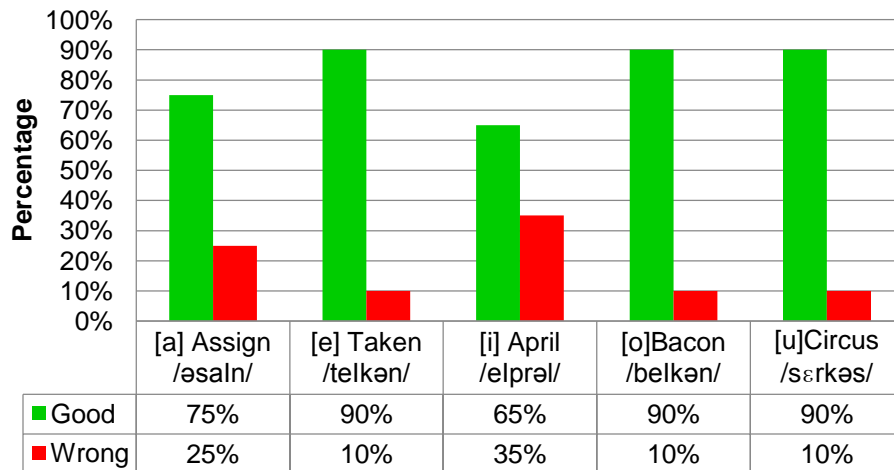
The **mid-central lax vowel schwa /ə/** can replace any vowel. In this case /ə/ represents a different vowel in every word.

In the first case, the schwa /ə/ was identified by the 75% of the students and the 25% of them was not capable of recognizing it.

In the second case, the schwa /ə/ was distinguished by the 90% of the students; the majority of these students could easily recognize the phoneme /ə/, just the 10% could not do it.

In the third case, the schwa /ə/ was recognized by the 65% of the students and the 35% resting did not distinguish it.

In the fourth case, the schwa /ə/ was noticed by the 90% of the students who represent the majority of the sample, only the 10% of the sample did not identify the phoneme /ə/.

In the last case, the schwa /ə/ was identified by the 90% of the students interviewed and just the 10% of them was not capable of distinguish it.

Quantitative analysis (graphics)

Figure 1. Flege exposes L2 learners are more easily to pronounce the vowel sounds that are similar in their L1. In this minimal pair the phoneme /i/ is clearly identified by the majority of students interviewed. Whereas the 35% got confused and identified the vowel sound /ɪ/ which is not similar to any of the L1 vowels sounds.

Figure 2. In the second minimal pair, the phoneme /ɪ/ is clearly identified by the majority of students interviewed. In this case the theory cannot be proven because L2 learners easily perceivedthe vowel sound /ɪ/ which is not similar to their L1.

Figure 3. In the third minimal pair, the phoneme /ʊ/ is clearly identified by the 70% of students who answered correctly, Flege's theory is proven because L2 learners were more easily perceived the vowel sound that is similar to their L1. On the contrary, 30% of students got confused with the sound /u/ which is not part of their L1.

Figure 4. In these minimal pair, there was confusion between the two phonemes /ɑ/ /□/ which were presented to students, 55% of students accomplished with the theory exposed by Flege. L2 learners recognized the phoneme /ɑ/ which is similar in their L1. Whereas 45% of students got confused with the phoneme /o/.

Figure 5. According with Flege theory, L2 learners are more easily to pronounce the vowel sounds that are similar in their L1, however in these minimal pairs the theory is not proven because any of the two phonemes /æ/ /ʌ / is similar to the vowel sound in their L1. Even though theory is not accomplished, 60% of students perceived the vowel sound correctly.

Figure 6. In this minimal pair, the phoneme /e/ is clearly identified by the 80% of students who answered correctly. Flege's theory is proven because L2 learners were more easily to identify the vowel sound that is similar in their L1. Whereas, 20% of students got confused with the sound /ʌ /.

Figure 7. In this minimal pair there was a big confusion because the difference between the two sounds is minimal. 70% of students answered incorrectly, perceiving the sound /o/ instead of sound /ɔ /. Here the theory exposed by Flege is not proven because the vowel sound presented in the recording is not similar in their L1.

Figure 8. According with Flege theory, L2 learners are more easily to pronounce the vowel sounds that are similar in their L1, however in these minimal pairs the theory is not proven because any of the two phonemes /æ/ /ʌ / is similar to the vowel sound in their L1. Contrarily as in **figure 5,** 90% of students failed identifying the minimal pair that was presented, only 10% of students answered correctly.

Figure 9. In these minimal pair the confusion was evident as in the example presented in figure 7. In this case, 80% of students answered incorrectly, perceiving the sound /ɔ / instead of the sound /o/. The theory exposed by Flege is not proven, even though the sound presented in the recorder is similar to the L1, students were not able to recognize it.

Figure 10. In these minimal pair, 60% of students got confused and answered incorrectly. The phoneme /u/ presented in the recording does not prove the theory exposed by Flege because it is not similar to the vowel sound in L1. Whereas 40% identified the phoneme /o/ which is similar to L1 vowel sound however was not the one that was presented in the recording.

Figure 11. According with Flege theory, L2 learners are more easily to pronounce the vowel sounds that are similar in their L1. However, the majority of students were able to identify the sound schwa /ə / presented in the recordings, theory is not proven because the vowel sound is not similar to the vowel sounds in their L1.

IX. CONCLUSIONS

Difficulties in the pronunciation of English vowels sounds, as has been evidenced in this research, are affecting fifth-year students from Modern Languages Major at the Foreign Language Department. According to "The speech Learning Model (SLM) postulated by Flege in his book "Second Language Learning: Theories, Findings and Problems" supports the idea that there is a clear interaction between L1 and L2. L2 sounds or segments which are similar to L1 sounds will be assimilated to native categories.

In this research a sample of twenty students submitted themselves to a quiz and an interview which measured the difficulties students are facing when pronouncing English vowels sounds. The information gathered from the results allowed researchers to establish if there was an accuracy with the theory. After analyzing all the information, we can conclude:

1- Students were more easily to pronounce and perceive the phonemes /ɑ /, /□/, /i/ and /ʊ/ which are sounds that are similar in their L1. On the contrary, there was a difficulty recognizing the phoneme /o/, even though students were able to pronounce it well, they failed when listening the example of these minimal pair /o/ /ɔ / due to both of them have the same characteristics, they are mid and back round vowels with the minimal difference that one is tense /o/ and the other one is lax /ɔ /. In addition, students have difficulties when pronouncing the phoneme /u/ 60% of them pronounced the high tense back round vowel /ʊ/ instead.Flege Theory is proven with the results obtained, because there was a clear interaction between L1 and L2.

2- Students were able to identify and pronounced the schwa sound /ə /, in this case hypothesis is not accurate because it is not the most difficult sound to be pronounced, 70% of them pronounced it correctly. On the contrary, the most difficult to be pronounced was the sound /ʌ /, students failed in a 85%, instead they pronounced the sound /o/ and the sound /u/ as in Spanish.

3- In the qualitative analysis researchers found that any student interviewed know the general rules of vowels sounds. They we not capable to write any rule about the topic.

4- Students are not aware of the exceptions of the two vowel rule. They don't know when they have to pronounce the relative vowel sound in a one-syllable Word. E.g: foot and pool.

5- Students from the fifty-year Major are no capable to pronounce well some basic words in English due to the fact this sounds are not included in their L1.The theory and hypotheses applied only in some examples but it doesn't work for the rest of examples. It has been proved that for students is easily to pronounce English phonemes that are similar to the L1 phonemes.

X. RECOMMENDATIONS

STUDENTS.

- They should practice all the time English, not only at the university but also at home and students should watch American TV programs and movies so they can practice comprehension.

- Students have to learn by heart the rules for English vowels with the aim of pronouncing and writing English vowels sounds without difficulties.

TEACHERS.

- Teachers from pronunciation and linguistics should make sure every student participate in the class and make sure to correct student's mistakes when pronouncing English vowels.

INVESTIGATORS.

- To carry out interviews, researchers should consider the time available for both the interviewer and the interviewee; in that way, they might extend the time at their disposal to develop those interviews on time.

- They should make sure that they have the equipment in good condition in order that the interview can be recorded with a high quality. Also, researchers must choose a very quiet place to avoid future problems in the audio.

DEPARTMENT.

- Authorities in the department should add in the pensum two more subjects such as *Linguistics II* and *Phonology and Morphology II*for students from Modern Languages Major with the aim of beneficiating them in their learning process.

- In the department, there may be some resources available anytime like some conversation or reading clubs, recorders, projectors, speakers and that will help students to learn in better conditions.

- Authorities in the department should provide the best environment possible for a classroom, such as good desks, painted walls, fans, and some visual material for teachers in order to motivate students in their learning process.

ANNEX

-Transcriptions obtained from the instruments part 1.

Represents that students pronounced well.

ANNEXES 1 | ANNEXES 2 | ANNEXE 3 | ANNEXE 4

#	leave /i:/	live /ɪ/		#	sleep /i:/	slip /ɪ/		#	desk /ə/	disk /ɪ/		#	fell /ə/	fill /ɪ/
1				1				1				1		
2				2				2				2		i
3	l	l		3	l	l		3				3		
4				4				4				4		
5	i	i		5				5				5		
6				6	l	l		6				6		
7				7				7				7		
8				8				8				8		
9				9				9				9		
10	l	l		10		e		10	e	e		10		
11	i	i		11				11				11		
12	i	i		12	l	l		12				12		i
13				13	l	l		13				13		
14				14				14				14		l, esp
15				15				15				15		i
16				16				16				16		
17				17				17				17		i
18				18				18				18	e	e
19				19				19				19		
20	i	ai		20	i	i		20				20		l, esp

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ANNEXES 5 **ANNEXE 6 ANNEXES 7**

1	food	foot
	/u:/	/ʊ/
1	ʊ	
2		u
3		
4		
5	u	u
6		
7		
8	u	u
9	u	u
10	u	u
11		
12		
13	u	u
14	u	u
15	u	u
16		
17	u	u
18		
19	u	u
20	u	u

	pool	pull
	/u:/	/ʊ/
1		
2		
3		
4	u	u
5	u	u
6		
7		
8	u	u
9	u	u
10		
11		
12		
13	u	u
14		
15	u	u
16		
17	u	u
18		
19	u	u
20		

	bar	bear
	/a/	/ɛ/
1		i
2		i
3		i
4		
5		æ
6		i
7		æ
8		ə
9		ə
10		
11		
12		i
13		
14		
15		
16		ə
17		i
18		
19		
20		

ANNEXE 8 **ANNEXE 9** **ANNEXE 10** **ANNEXE 11**

	cat	cut			ban	bun			bet	butt			jest	just
	/æ/	/ʌ/			/æ/	/ʌ/			/ɘ/	/ʌ/			/ɘ/	/ʌ/
1	a			1				1				1		
2				2				2	e	a		2		
3		u		3	a	o		3				3		
4				4				4		u		4		
5				5		media o		5				5		
6				6				6				6		
7				7				7		media o		7		
8		medio o		8		media o		8				8		
9		o		9		a		9	/ɘ/	/ɘ/		9		a
10				10				10				10		
11		medio o		11		o		11				11		
12		o		12		o		12		a		12		o
13		a		13	a	a		13		/æ/		13		
14				14				14		a		14		
15				15				15				15		
16				16				16				16		
17	a			17				17		a		17		media o
18				18				18				18		
19	a	a		19	a	a		19				19		o
20				20	a	media o		20		a		20		a

ANNEXE 12

	bowl	ball
	ow	o
1	o esp	o esp
2	au	
3		
4	a	a
5		
6	a	
7	au	
8		a
9	a	a
10		o esp
11		
12	ouu	
13		o corta
14	au	
15		o corta
16		o esp
17		a
18		
19	au	
20	au	

ANNEXE 13

	woke	walk
	ow	o
1	o esp	o esp
2		a
3		
4		
5		a
6		
7		
8		a esp
9		
10	o	o
11	o	o
12	o	o
13	o	o
14		
15		
16	ow	ow
17		
18		
19		
20		

	hat	hot	hut
	ae	o	v
1	a	o	o
2			
3			u
4			
5			u
6		o	o
7			
8			a
9			a
10			
11	a	o	o
12		o	o
13			ae
14			
15	a		
16			
17			u
18			ooooo
19	a	o	o
20			

ANNEXE 14

	cap	cop	cup
	ae	o	v
1	a	o	o
2			
3			u
4		o esp	
5			u
6			
7		o	o
8			
9			
10			a esp
11			
12			
13	a	o	o
14			
15			
16		o	o
17	a	o	u
18			ooooo
19			o
20	a esp	o esp	o

	problem /ə/	about /ə/			enemy /ə/	sentence /ə/
1	E			1	e esp	
2	E			2	e esp	e
3	e	a		3	a	a
4				4		
5	E			5	e	e
6				6		
7				7		
8	e	e		8	e	e
9				9		
10				10	e	e
11				11		
12	e enrollada	a		12	e	e
13				13		
14				14		
15				15		
16				16		
17				17		
18				18		e
19				19		
20				20	e	

"Difficulties in the pronunciation of English vowels by the fifth-year students from Modern Languages Major at the Foreign Language Department of the University of El Salvador during the year 2015"

Researchers: Gabriela María Díaz Rodríguez.
Sandra Carolina Fabián Menjívar.
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Course: Thesis (Graduation Process)

Advisor's name: Jorge Humberto Aguilar

Gender: Female___ Male___   **Age:** from 20 to 24 ___ from 25 to 29___

Instruction: answer with your information the following questions.

1- Do you know the general rules for vowel sounds?   Yes_____ No_____

  If your answer is yes, write them.

   _____
   _____
   _____

2- How often do you practice English?
    _always
    _very often
    _often
    _rarely

3- Where do you practice English?
    _at the university
    _at home
    _at work
    _with friends

4- At which academical level did you start studying English?
    _at the university
    _in high school
    _in secondary school
    _in elementary school

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