Error Analysis of EFL Students’ Pronunciation of the Letter “O”: A Comparative Study of First and Third Year Students in the Department of English, Oum El Bouaghi

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master in Language Sciences and Teaching English as a Foreign Language

Submitted by: Fadila MEZIANE

Supervisor: Mr. Farid CHAIRA

Examiner: Dr. Amina Wafa BENZITOUNI

2017 - 2018
Dedication

بسم الله الرحمن الرحيم

In the Name of ALLAH, the most merciful, the most compassionate

I dedicate this work above all else to my dear father, thousand words cannot be enough to describe how much you mean for me daddy.

Also,

My sincere gratitude goes to my beautiful, charming Mother, who leads me through the valley of darkness with light of hope and support.

The same goes for my sisters and brother whom I can’t force myself to stop loving:

LOUBNA, my twin and beloved sister,

Katr-El- NADA, my little special sister whom I can’t stop fighting and laughing together,

Mohamed Nadir, my adorable brother whom I wish all the best and success.

Also,

I would like to dedicate this modest work to:

My teachers of Oum El Bouaghi and Constantine.

A special dedication goes to my teacher Mr. Farid CHAIRA.

To all my friends and teachers in Oran, my classmates, and anyone who helped me, or just wished me luck.
Acknowledgements

First, and foremost, I must acknowledge my limitless thanks to ALLAH, the Ever-Magnificent, the Ever-Thankful, for his help and blessing.

My sincere and deepest gratitude goes to my supervisor Mr. Farid CHAIRA, who has been always generous during all phases of the research, and I highly appreciate his valuable guidance and advice that help me a lot, without you this work has never been achieved.

I would like to thank my examiner for kindly holding the burden of reading and evaluating my dissertation.

Last, but not least I thank all first and third year students who took part in this study.
Abstract

Pronunciation accuracy is a problem faced by most of the students in their learning of foreign languages. The aim of this study is twofold. First, it aims at identifying, analyzing and describing the errors that EFL students at the department of English (Larbi Ben M’hibi University) make when pronouncing the English letter “O” in context. Second, it aims to compare the performance, and hence the rate of errors of first and third year students when pronouncing the letter in question. Our ultimate goal is to raise teachers’ awareness of the errors made by EFL learners when pronouncing this letter, so that they consider remediating them and lay more focus and allocate more time to pronunciation teaching. In this study, it is hypothesized that there is a clear deficit in the pronunciation of both first and third year students of the letter “O”. It is also hypothesized that there is a difference between first and third year students in pronouncing this letter, third year being better in their performance. Through error analysis, a comparative and descriptive method is used as a way to figure out any difference between first and third year students’ pronunciations of the letter in question. The fieldwork is conducted following a descriptive comparative method with the use of a voice recording technique to collect oral data. The study confirmed that there is a lack of mastery in the pronunciation of the letter “O” in both groups, mainly due to interference and overgeneralization. The findings of this research also confirmed that there is a significant difference between the two levels involved in this study in the pronunciation of the targeted letter; third year students performed better than first year students.

Key words:

List of Abbreviations

CA: Contrastive Analysis

CBA: Competency Based Approach

EA: Error Analysis

EFL: English as a Foreign Language

ESL: English as a Second Language

FL: Foreign Language

GA: General American

IPA: International Phonetic Alphabet

L2: Second Language

L.M.D: Licence, Master, Doctorat

M: Mean

O.E.B: Oum El Bouaghi

P: P-value

RP: Received Pronunciation

SL: Second Language

SLA: Second Language Acquisition

SLL: Second Language Learning

T: T-value
TL: Target Language

UK: British Pronunciation

US: American Pronunciation

V.S: Versus

X²: Chi-squared
List of Tables

Table 1. English Triphthongs .................................................................27

Table 2. Targeted Words of Latin Origin .................................................40

Table 3. Targeted Words of Germanic Origin .........................................41

Table 4. Final Scores of Each Participant’s Correct Pronunciations of the Letter “O” ........................................................................................................92
List of Figures

Figure 1. Crystal’s Cardinal Vowel Diagram .................................................................24

Figure 2. Vowel Symbols .................................................................................................25

Figure 3. English Short and Long Vowels in the Cardinal Vowel Diagram ...................25

Figure 4. English Centering and Closing Diphthongs .....................................................27

Figure 5. The Shape of the Lips .......................................................................................29

Figure 6. The Vowel /ʌ/ .................................................................................................30

Figure 7. The Vowel /ɒ/ .................................................................................................30

Figure 8. The Vowel /ʊ/ .................................................................................................31

Figure 9. The Vowel /ɪ/ .................................................................................................31

Figure 10. The Vowel /ɔː/ ...............................................................................................32

Figure 11. The Vowel /ɑː/ ...............................................................................................33

Figure 12. The Vowel /uː/ ...............................................................................................33

Figure 13. The Diphthong /ʊə/ .......................................................................................34

Figure 14. The Diphthong /ɔɪ/ .......................................................................................35

Figure 15. The Diphthong /əʊ/ .......................................................................................35

Figure 16. The Diphthong /aʊ/ .......................................................................................36

Figure 17. Students’ articulations of the Word “Obtain” .................................................44

Figure 18. Students’ articulations of the Word “Democratic” .........................................45
Figure 19. Students’ articulations of the Word “Occasion” .............................. 46

Figure 20. Students’ articulations of the Word “Courage” ............................... 47

Figure 21. Students’ articulations of the Word “Oblige” ................................. 48

Figure 22. Students’ articulations of the Word “Disposition” ........................... 49

Figure 23. Students’ articulations of the Word “Cooperation” ......................... 50

Figure 24. Students’ articulations of the Word “Concede” ............................ 52

Figure 25. Students’ articulations of the Word “Sabotage” ............................ 53

Figure 26. Students’ articulations of the Word “Arrogance” ......................... 54

Figure 27. Students’ articulations of the Word “Official” .............................. 55

Figure 28. Students’ articulations of the Word “Colonel” .............................. 56

Figure 29. Students’ articulations of the Word “Colony” .............................. 57

Figure 30. Students’ articulations of the Word “Comfort” ............................ 59

Figure 31. Students’ articulations of the Word “Vocabulary” ......................... 60

Figure 32. Students’ articulations of the Word “Soar” ................................. 61

Figure 33. Students’ articulations of the Word “Copious” ............................. 63

Figure 34. Students’ articulations of the Word “Consent” ............................. 64

Figure 35. Students’ articulations of the Word “Trophy” ............................... 65

Figure 36. Students’ articulations of the Word “Oboe” ............................... 67

Figure 37. Students’ articulations of the Word “Collide” .............................. 68
Figure 38. Students’ articulations of the Word “Console”........................................70

Figure 39. Students’ articulations of the Word “Conduct”.................................71

Figure 40. Students’ articulations of the Word “Road”........................................73

Figure 41. Students’ articulations of the Word “Tough”.....................................74

Figure 42. Students’ articulations of the Word “Crook”....................................76

Figure 43. Students’ articulations of the Word “Broad”.....................................77

Figure 44. Students’ articulations of the Word “Abroad”.................................78

Figure 45. Students’ articulations of the Word “Bough”..................................80

Figure 46. Students’ articulations of the Word “Spook”..................................81

Figure 47. Students’ articulations of the Word “Cough”..................................82

Figure 48. Students’ articulations of the Word “Oven”....................................84

Figure 49. Students’ articulations of the Word “Foe”.......................................85

Figure 50. Students’ articulations of the Word “Foreshore”..............................87

Figure 51. Students’ articulations of the Word “Whoa”...................................89

Figure 52. Students’ articulations of the Word “Bootle”..................................90
# Table of Contents

## General Introduction

1. Statement of the Problem ................................................................. 1

2. Research Purpose ........................................................................... 2

3. Research Questions and Hypotheses ............................................. 2

4. Research Methodology ................................................................. 3

5. Structure of the Dissertation ....................................................... 3

## Chapter One: Theoretical Background and Literature Review

Introduction ........................................................................................ 5

### 1.1. Error Analysis ........................................................................... 6

1.1.1. Definition of Error Analysis ...................................................... 6

1.1.2. Branches of Error Analysis ....................................................... 7

1.1.2.1. Theoretical Error Analysis .................................................... 7

1.1.2.2. Applied Error Analysis ......................................................... 7

1.1.3. Error Taxonomies ..................................................................... 7

1.1.3.1. Linguistic-based Classification ............................................. 8

1.1.3.2. Process-based Classification ............................................... 9

1.1.4. Sources of Students’ Errors ..................................................... 9

1.1.4.1. Interlingual Transfer ......................................................... 10

1.1.4.2. Intralingual Transfer ......................................................... 10
1.1.4.3. Cultural Interference.................................................................10
1.1.5. Significance of Error Analysis.........................................................12
1.1.6. Models of Error Analysis Process......................................................13
   1.1.6.1. Corder’s Model.................................................................14
   1.1.6.2. Selinker and Grass’s Model.....................................................14
1.1.7. Errors vs. Mistakes..................................................................16
1.1.8. Limitations of Error Analysis..........................................................17

1.2. The Concept of Pronunciation, the English Speech Sounds, and the Letter “O”18
   1.2.1. The Concept of Pronunciation....................................................18
   1.2.2. The Importance of Pronunciation................................................18
   1.2.3. Teaching Pronunciation............................................................19
   1.2.4. British vs. American Pronunciation.............................................20
   1.2.5. Pronunciation Difficulties...........................................................21
   1.2.6. The English Speech Sounds.......................................................23
      1.2.6.1. Consonant Sounds............................................................23
      1.2.6.2. Vowel Sounds.................................................................24
      1.2.6.3. Diphthongs and Triphthongs..............................................26
   1.2.7. Vowels’ Manner of Articulation..................................................28
   1.2.8. The English Letter “O”.............................................................29
1.2.8.1. Short Articulations of the Letter “O” ……………………………………..29

1.2.8.2. Long Articulations of the Letter “O” …………………………………..32

1.2.8.3. Diphthongs Articulated With the Letter “O” …………………………34

Conclusion…………………………………………………………………………………36

Chapter Two: The Fieldwork

Introduction……………………………………………………………………………….38

2.1. Research Methodology……………………………………………………………38

2.1.1. The Choice of Method………………………………………………………38

2.2.2. Participants…………………………………………………………………..39

2.2.3. Research Design and Instrumentation…………………………………39

2.2.4. Research Setting and Procedures………………………………………41

2.2. Data Analysis and Interpretation………………………………………………43

2.2.1. Pronunciation Errors in Latin Words………………………………………43

2.2.2. Pronunciation Errors in Germanic Words ……………………………….71

2.2.3. T-test for Two Independent Samples…………………………………..90

2.2.3.1. T-test Calculations…………………………………………………….93

2.2.3.2. T-value Calculations………………………………………………….93

2.3. Discussion of the Results………………………………………………………94
Conclusion ...........................................................................................................................................97

General Conclusion ...........................................................................................................98

2.4. Limitations of the Study ...............................................................................................98

2.5. Suggestions for Future Research ...............................................................................99

2.6. Pedagogical Implications .........................................................................................100

References ....................................................................................................................................101

Appendix

Résumé

ملخص
1. Statement of the Problem

Pronunciation problems affect not only beginners, but also advanced learners studying at the university. It is noticed that EFL students encounter many difficulties in pronouncing the English consonants and, especially, vowels and it is clear that English vowels are one of the most difficult aspects to learn in English pronunciation. Vowels mispronunciation can alter the meanings of the words. Vowel pronunciation errors occur in students’ speaking due to different reasons. One reason is that pronunciation has been neglected for many years. Brown (2001), in this line of thought, claims that pronunciation is still a marginalized skill in many language programs. In fact, that is the case in the Algerian universities. Students enter university to learn foreign languages with a poor knowledge of how to pronounce words correctly. The teaching of pronunciation was restricted to minimal pair drills with practically no interest in prosodic features. It is until the last decade that more interest was given to pronunciation teaching. Surveys showed an increase of pronunciation literature in language textbooks (Orlando, 2013). However, a lot still has to be done so as to solve pronunciation problems that always occur in the process of learning English as a foreign language. As mentioned earlier, EFL students usually have problems in pronouncing vowels such as the letter and vowel “O” for many reasons. Noticeably, students are not exposed enough to the target language. Therefore, the overgeneralization of some pronunciation rules of English and interference of the French sound system, in particular words of French origin, are more likely to take place. For instance, the words road, broad, and abroad share the “-road” sequence; the letter “O” which is pronounced /əʊ/ in road, and /ɔː/ in broad and abroad. For EFL students, it is usually confusing to recognize those pronunciation differences so they tend to overgeneralize the /əʊ/ sound. Other words like “occasion” and “colonel” are often
mispronounced as /ɒkeɪʒən/ and /kələn/ while in fact they sound like /skeɪʒən/ and /kɜːnəl/. These two last words are of a French origin, and, thus, many EFL learners have a French-like pronunciation.

2. Research Purpose

The present research seeks to identify, analyze and classify the different pronunciation errors made by EFL students in their first and third year at Laarbi Ben M’hibdi University. It also aims at comparing and figuring out any difference in pronunciation between first and third year students and identifying the main sources of EFL students ‘errors of the letter “O” pronunciation. Furthermore, raising EFL teachers’ consciousness about the importance of teaching pronunciation is another highlighted purpose in this study.

3. Research Questions and Hypotheses

The focus of this research will be on four main questions:

1. Do EFL students make errors in pronouncing the letter “O”?  
2. Do third year EFL students master the pronunciation of the letter “O” better than first year students?  
3. Does the interference of the French sound system affect students’ pronunciation of the English letter “O”?  
4. To what extent the overgeneralization of the English phonological rules affect students’ pronunciation?

The study will be grounded on two hypotheses. First, EFL students do not master the pronunciation of the letter “O” due to both interference and overgeneralization. Second, there is a difference in the mastery of the pronunciation of the letter “O” between first year and third year EFL students, third year students being better than first year students.

2
4. Research Methodology

To test the hypotheses stated earlier, a descriptive comparative method is adopted through the use of error analysis as a technique for data analysis. The population is made up of first and third year students at the department of English, Larbi Ben M’hidi University. A sample of 30 participants (8 males and 22 females) of first year (out of a total of 324 students) was randomly selected. The same is applied for third year students; a sample of 30 participants (5 males and 25 females) (out of a total of 216 students) was again randomly selected. For both groups, a voice recorder was used to collect oral data from participants while reading a list of thirty-six (36) English words containing the letter “O” occurring in different contexts. The words in the pronunciation task were chosen on the basis of two criteria. To investigate interference, words of French or Latin origin were chosen. To investigate overgeneralization, words of Germanic origins were selected, some of which were minimal pairs such as “bough” and “cough”, etc.

5. Structure of the Dissertation

This research consists of two main chapters. The theoretical chapter is made up of two sections. The first section deals with the concept of Error analysis and its main branches and taxonomies. It also sheds light on the sources of the errors learners usually make, and the significance of error analysis and the models used in conducting it. Finally, a distinction between errors and mistakes is mentioned in addition to the limitations of error analysis. The second section tackles mainly the concept of pronunciation and highlights the importance of pronunciation and its teaching. Likewise, a difference is made between American and British pronunciation, and finally, care is given to the main pronunciation difficulties. Thereafter, a discussion is devoted to the field of the English sounds, consonants and vowels mainly vowels and their characteristics, the English diphthongs and triphthongs. A general view about the English letter and vowel “O” is given, in addition to
the description of its possible pronunciations: short, long and diphthong vowel sounds. The second chapter is concerned with the fieldwork: it introduces and describes the participants and setting, the method used to collect and analyze data. It also exhibits the results obtained and presents a discussion and interpretation of the finding of the study.
Chapter One: Theoretical Background and Literature Review

Introduction

It is widely argued that English has become the most important and acquired language in the world. Beginner learners of English mostly start learning vocabulary, grammar and some common expressions taught at schools for daily use. As the significance of the English language grows and the need for a certain proficiency level in English is required, students become more aware to achieve accuracy and fluency in their English pronunciation. For that purpose, EFL students need to learn, in addition to grammar and vocabulary, the basics of pronunciation of the English language. Accordingly, it is worth mentioning to admit that like any human learning, language learning is associated with making errors. Thus, making errors when using the language is natural that most if not all students commit. In the field of second language acquisition (SLA), many studies tended to focus on learners’ errors because errors allow teachers and researchers to predict the difficulties that hamper EFL students from acquiring a second or a foreign language. In connection with this, error analysis (EA) is the most influential approach to study learners’ errors. Error analysis emerged in the sixties on account of the shortcomings of the Contrastive analysis (CA) to demonstrate that learners’ errors are not only caused by the native language, but also the inter-language and the target language in addition to the learning strategies that learners employ to discover the target language being learned. In the coming sections of the theoretical framework of the present research, a brief literature review is going to be reviewed. The sections are going to shed light on the concept of “Error Analysis”. Besides, general concepts about pronunciation, its importance and difficulties, in addition to the English speech sounds, the letter “O” and its articulations are going to be covered.
1.1. Error Analysis

1.1.1. Definition of Error Analysis

Error analysis (EA) is the procedure used by both teachers and researchers to determine and predict the causes of errors and their nature in students’ written and spoken language. This procedure involves “collecting samples of learner language, identifying learners’ errors, classifying them according to their nature and causes and finally evaluating their seriousness” (Keshavarz, 2012, p. 168). That is to say, EA is a type of linguistic analysis that seeks to describe and explain the systematic nature of errors made in the learner’s language. In the same line of thought, James (1998) stated that “Error Analysis is the process of determining the incidence, nature, causes and consequences of unsuccessful language” (p. 1). He also added that “error analysis is the study of linguistic ignorance”. According to him, linguistic ignorance in this respect means being ignorant of such-and such structure in the target language, which he refers to as an “overall insufficiency” or “incompleteness” across all areas of learning the target language (p. 63).

Corder, 2000, who laid the foundations of error analysis advocated that “learners’ errors are significant in that they provide evidence of how language is learned or acquired to the researcher, and what strategies or procedures the learner is employing in the discovery of the language”(p.217). Corder (1980) claimed that error analysis is the process or the technique for dealing with data, to observe, identify, classify, analyze and systematically interpret the deviations of the rules and the errors made by someone while speaking or writing in the second language. Similarly, Richards et al. (1996) presumed that teachers or researchers conduct EA mainly to identify strategies which learners use in learning the language, also to track the main causes of learners’ errors and to obtain information on common difficulties in language learning.
1.1.2. Branches of Error Analysis

According to Keshavarz (2006) error analysis is divided into two branches, which are theoretical error analysis and applied error analysis:

1.1.2.1. Theoretical Error Analysis

Keshavarz (2006) advocated that theoretical error analysis is the branch which tries to find out the processes and the strategies of language learning, and its similarities with the student’s first language acquisition. Moreover, it seeks to figure out the main problems and issues related to these processes. It also tries to decode the strategies used by learners such as: overgeneralization, and simplification. It also investigates the reasons of the errors in the learning process.

1.1.2.2. Applied Error Analysis

This branch deals with designing and organizing appropriate material, and other remedial courses, methodologies and teaching strategies so that to solve the problems which are discovered in the theoretical analysis of errors (Keshavarz, 2006).

1.1.3. Error Taxonomies

In the field of error analysis, taxonomy of errors classifies types of errors according to the language component or linguistic aspects (or both of them) which are affected by the error. Keshavarz and Brown, 2012, classified errors into two categories:
1.1.3.1. Linguistic-based Classification

In this classification Keshavarz (2012, p.90) mentioned four major types: orthographic errors, phonological errors, lexico-semantic errors and morphological-syntactic errors:

1.1.3.1.1. Orthographic Errors:

They include: sound/letter mismatch, same spelling/different pronunciation words, similar pronunciation/different spelling words and ignorance of spelling rules.

1.1.3.1.2. Phonological Errors:

They are likely to be generated in the case of the lack of certain second language (L2) phonemes in the learner’s first language (L1), and some differences in syllable structures in L1 and L2.

1.1.3.1.3. Lexico-semantic Errors:

They are basically related to the semantic properties of lexical items of the language. Here are some examples illustrating this kind of errors (errors are mentioned with*):

- I am working 24 o’clock* each week.
- English is alive *language by* which, everyone can convey his ideas.
- Algeria is my mother *country.

1.1.3.1.4. Morphological-syntactic Errors:

They include learners’ wrong use of plural morpheme, learners’ wrong use of tenses, learners’ wrong word order and learners’ wrong use of prepositions and articles.
1.1.3.2. Process-based Classification

This classification is based on the processes through which EFL learners make errors. Brown, (2000, P.288) cited four main processes:

- **Omission:** In this process the student leaves out some linguistic elements, for example:
  (errors are marked with *).
  - My father is* doctor.
  - I bought three book* yesterday.
  - He speak* German very well.

- **Addition:** Within a sentence students may make use of some redundant forms of certain language elements. Like in:
  - I ordered for* ten copies of the book.
  - They always discuss about* different matters.

- **Substitution:** In this case learners may replace the incorrect forms for the correct ones, for example:
  - I am not afraid from* dogs.
  - His bigger* brother is a doctor.

- **Permutation:** It is about students’ incorrect word order, for example:
  - I do not know why is she* late.
  - My brother is a driver careful*.
  - He last night* went to the cinema.

1.1.4. Sources of Students’ Errors

Richards (1971) identified some sources of competence errors as follows: interlingual transfer, intralingual transfer and cultural interference.
1.1.4.1. Interlingual transfer

Interlingual transfer occurs especially in the first stages of learning a second or a foreign language. In this stage errors come from learners’ transfer from their first language, their native language is the only linguistic system upon which the learner can draw and this kind of errors can be found in all aspects of the second or the foreign language learning process.

1.1.4.2. Intralingual transfer

Intralingual transfer occurs within the target language itself; at this level learners’ previous experiences and existing knowledge begin to have impact on structures within the target language itself. This occurs at an intermediate level of learning, also called “negative intralingual transfer” or “overgeneralization”. This kind of errors is also renowned as “developmental errors”.

1.1.4.3. Cultural interference

This kind of interference can lead to either linguistic errors or inappropriateness in the context. Here is a concrete example of cultural interference in committing errors: An American lady said to a Chinese friend “what a beautiful skirt!” Instead of saying: “thank you, I am so delighted to hear that”, the Chinese’s reply was: “no, no”, this of course will make the American lady feel at loss, thus, language learning must complete the culture learning, because there is no language learning without culture learning.

Other scholars like Brown (1980), mentioned further causes, which were summarized as:
➤ **Overgeneralization**

Learners may originate a deflector structure of the language on the basis of their experience of other structure of the TL. Like in: help / helped – teach / *teached/ dog / dogs – sheep / *sheeps.

➤ **Ignorance of rule restriction**

Usually learners ignore some rules of the language they have learned, this is mostly occurring as a result of failure to observe the restrictions or the existing structures.

➤ **Incomplete application of rules**

This usually occurs when the learner fails to wholly develop a certain structure required, for example to produce acceptable sentences.

➤ **False concepts hypothesized**

Due to the faulty comprehension of uniqueness, and differences in the TL, learners may hypothesize in their mind some false concepts and ideas.

➤ **Weaknesses or the failure of memory**

Gorbet (1979) argued that, the theory of EA is based on the fact that in order to learn a language, the learner creates in his mind a system of “rules” from the language he is exposed and this system allows him to use it.

In the same context, Selinker (1972) counted among the most frequent sources of errors, the following:

- Interference of the learner’s mother tongue.
- Transfer of training, or as Brown (2000), mentioned “the context of learning”, the output is explained in terms of the type of training to learn the language, the learner has had also the setting where the language is learned such as in the classroom or a social situation, and also the teachers’ materials used while explaining the lessons.
• The use of the different strategies of second language learning, the output is explained by the association the learner makes with the material to learn.

• Overgeneralization of the target language linguistic component, this refers to the situations in which one form or structure of the language is overgeneralized over other forms.

• Strategies that learners use, in order to communicate with L2 speakers learners may use different strategies including: avoidance (learners avoid the use of some words, rules or topics), prefabricated patterns (including memorizing certain stock phrases or sentences without internalized knowledge of the components of the phrases), and language switch which generally occurs when all of the previous strategies fail to produce a meaningful sentence.

1.1.5. Significance of Error Analysis

Corder (1981), states the following:

Errors are significant in three different ways. First, to the teacher, in that they tell him, if he undertakes a systematic analysis, how far towards the goal the learner has progressed and, consequently, what remains for him to learn Second, they provide to the researcher evidence of how language is learnt or acquired, what strategies or procedures the learner is employing in his discovery of the language. Thirdly, (and in a sense this is their most important aspect) they are indispensible to the learner himself, because we can regard the making of errors as a device the learner uses in order to learn (p.10).

In other words, errors are significant first to the teacher because; they help to show the students’ progress. Second, to the researcher, errors show how a language is acquired, what
strategies the learner uses, so that he can learn from these errors. In this respect, Carroll (1955) indicated that, when the learner has committed any kind of mistake, the most effective way to teach him the correct form is not by giving it directly to him but rather to let him discover it and test different hypotheses.

According to Corder (1973), errors can tell the teacher how far towards the goal the learner achieved and as a result to have insight about what remains for him to learn. Thus, for teachers students’ errors are useful feedbacks that can help them to do some remedial teaching based on these errors. That is to say, teachers sometimes should tolerate some errors (especially local ones) because making errors is seen to be a tool the learner uses in order to learn. To confirm this, Sharma (1980) pointed out that error analysis can provide a strong support to remedial teaching. In other words, error analysis during the teaching program can detect both the successes and weaknesses of that teaching program.

Similarly, Richards et al. (as cited in Khansi, 2012. p.1029) asserted that error analysis may be used for three purposes. The first purpose is to identify the strategies learners use in language learning. The second purpose is to generate the causes of learners’ errors. The third purpose is to gain information on common difficulties and problems in language learning as an aid to teaching, or in the development of teaching materials.

1.1.6. Models of Error Analysis Process

In the error analysis process, there are two models. The first model was provided by Corder (1974), which consists of five steps. The second model, according to Selinker and Grass (2008), is comprised of six steps.
1.1.6.1. Corder’s 1974 model

Corder (1974) identified a model for EA which consists of five steps. The first step is collecting samples of learner’s language. This process again includes further procedures to be followed by the error analyst and they are identified as follows: to decide on the size of the sample (how many participants are going to be involved). To decide on the means of collecting samples, if it is spoken the use of discussions and interviews is integrated. Otherwise, the analyst may use compositions. Also, to decide about the homogeneity of the sample, this includes the learner’s age, social and educational backgrounds. The second step is to identify the errors by differentiating between mistakes and errors (the mistakes that happen due to the slips of the tongue or slips of thought are not taken into account). For the third step, the analyst should describe the learners’ errors with accordance to their categories, as errors of addition/ omission/ selection and ordering. Like in: *fignisicant for significant and *prular for plural. In these examples, errors generated are related to pronunciation with wrong word order. Explaining the cause of each error is the fourth step, the analyst determines the main cause of each error. Last and not least, evaluating and correcting the error is the final step, at this stage it is worth mentioning that students’ affective factor should be taken into consideration, and the correction of errors should not be face-threatening.

1.1.6.2. Selinker and Grass’s 2008 model

Moreover, Selinker and Grass (2008, p. 103) identified another model for error analysis which consists of six steps. The first step is to collect data about students’ language, Eliss (1994) argued that “there are basically two types of data-collection procedures, spontaneous and elicited” (p.49). For the spontaneous or the unplanned data (both for written and spoken language), unmonitored conversations and interviews, free
compositions and examination papers could be taken as a procedure for data collection. In
the elicited procedures for data collection, oral and written translation from the native
language to the target language (TL), and multiple choice tests which should be free from
the restrictions of the test constructor are seen to be as concrete examples for conducting
this procedure. The second step which the analyst engages in after collecting data is to
identify errors that are made in the gathered data. Accordingly, Corder (1973, p.149)
maintained that the analysis of collected data involves two stages:

➢ The first stage is called “the technical process” of describing the linguistic nature of errors
by detecting and identifying them. It involves the interpretation of the context, and this
seems not to be a simple matter. The difficulty in doing so lies in the fact that what looks a
perfectly acceptable sentence may, nevertheless, contain errors.

➢ The second stage is to interpret what the learner has intended to say, and then restore
his/her sentence in the target language. In case, where the teacher cannot interpret the
learner’s error, Corder distinguished between two types of interpretations: authoritative /
and plausible. If the teacher has access to the learner, he can ask him to express his/her
intention in his/her mother tongue, and then he translates the learner’s sentence into the
TL. This is called the “authoritative interpretation”. If the teacher has no access to the
learner, here he has to do the best he can to infer what the learner intended to say from
his/her utterance. This is called the “plausible interpretation” of the learner’s error. In case
of the ambiguity of the learner’s utterance (there is more than one plausible interpretation);
Corder suggests putting such a case aside, while Keshavarz (2012, p. 85) suggested
relating this to the learner’s mother tongue, if possible. As a third step, the classification of
errors will take place. Errors could be classified as, errors of agreement, errors in irregular
verbs, incorrect sequence of tenses, or wrong verb form errors; also they might be as errors
of singular verb form with plural subjects. Thereafter, the analyst will quantify those
errors; this step has to do with the quantity of errors committed. For example: how many errors of agreement occur? Or how many irregular verb form errors occur? In the fifth step, the researcher will analyze the sources of the errors in which they are classified according to their main causes. Eventually, remediating errors will be the last stage the researcher conducts. This final step depends on the kind and frequency of the error type so that the pedagogical intervention will take place.

1.1.7. Errors vs. Mistakes

Corder (1973) claimed that errors may occur either in competence and they are considered as systematic errors or in performance (either oral or written) and they are considered as mistakes. For the sake of analyzing learners’ errors, it is crucial to make a distinction between an “error” and a “mistake”.

Brown (2000) stated that: “An error refers to the learners’ failure to utilize a known system correctly”. While, “a mistake is a noticeable deviation from the adult grammar of a native speaker.” That is to say, errors are to be considered as failure, and a mistake is noticed to be a deviation in a particular language aspect. Brown (2000) added that, errors are said to be systematic, governed by rules and appear because of the learners’ knowledge of the rules of the target language is incomplete. They are indicative of the learners’ linguistic system at a given stage of language learning. Furthermore, errors generally occur repeatedly, also they are not recognized by the learner, and sometimes only teachers or researchers can locate them. Whereas, “mistakes” are random deviations and they are unrelated to any system. Mistakes can even appear in the speech or writings of native speakers. Slips of the tongue or Freudian slips could be mistakes of native speakers, like in this example: “you have hissed all my mystery lectures.” Instead of “you have missed all my history lectures.” Slips of the ear, are also considered to lead to mistakes, such in “*great ape” instead of “gray tape”. False starts, the lack of subject-verb agreement in long
complicated sentences, and non-linguistic factors such as: fatigue, strong emotion, memory limitations or lapses, and lack of concentration. All these as Corder (1973, p.261) stated, are the factors that are existent in native, and non-native speakers.

For Eliss (1994) “frequency of occurrence” is the distinctive point. That is to say, errors which have a rather low frequency are considered as “mistakes” or “performance errors”, while those with high frequency are said to be “systematic errors”.

1.1.8. Limitations of Error Analysis

It is certain that error analysis has a great importance and significance in a way that helps teachers, and researchers to get an overall knowledge about the students’ errors in their process of learning a FL or a SL. But EA has also its limitations; Schachter (1974) stated that the main claim to be said against it is that it makes no allowance for “avoidance phenomena”. That is to say, the informants may not use certain structures that they think are wrong, and therefore, they might use structures they are certain that they are right. Another reason for weakness of EA is due to what Eliss (2008) mentioned: weaknesses in methodological procedures, theoretical problems and limitations in scope.

Similarly, for Schachter and Murcia (1977) who argued that the analysis of errors itself only focuses the attention of the investigator on errors and thus excludes the other corpus from consideration, in relation to this they added; the classification of errors is also not usually correct and the statements of error-frequency are often deceptive and ambiguous. They added that, the identification of points of difficulty in the target language is usually not very proper. Finally, the biased nature of sampling procedures is another shortcoming of EA, according to Schachter and Murcia this means that, so far the collection of data from a number of informants is considered, the very nature of data collection and selection of informants is biased.
1.2. The Concept of Pronunciation, the English Speech Sounds and the Letter “O”

1.2.1. The Concept of Pronunciation

According to Tennant (2007), the most important thing in teaching English as a second language (ESL) or a foreign language (EFL) is to help students make their speech sounds intelligible to others. That is to say, pronunciation has a great value in communication. Thus, intelligibility of pronunciation is an important aspect to make an effective conversation between people. EFL students are becoming more keen on improving their English pronunciation, their ultimate goal is not only learning grammar and vocabulary but working on their pronunciation in order to feel comfortable when being involved in a given English-speaking environment.

Lado (1964) proclaimed that “pronunciation is the use of a sound system in speaking and listening” (p.70). In fact, by this definition Lado mentioned two language skills which are speaking and listening without mentioning the way how these sounds are produced when speaking or listening to the language. However, Harmer (2001) claimed that pronunciation is about “concentrating on sounds, showing where they are made in the mouth, making students aware of where words should be stressed –all these things give them extra information about spoken English and help them achieve the goal of improved comprehension and intelligibility” (p. 183). All in all, pronunciation is said to be one of the crucial aspects in any language teaching program and students very often feel that learning pronunciation is important to them.

1.2.2. The Importance of Pronunciation

In today’s increasingly international world, it is not only necessary to understand what other English speakers say but it is also important to make your own speech intelligible for the others. Many English students (as the case in Algeria) still cope with
mispronouncing sounds including vowels, misplacing stress in sentences and misusing intonation patterns. O’connor (1980) explained this problem as “a matter of habits that our native tongue strongly incorporated into our language patterns” (p.1). In fact, in most English courses (which is the case in the Algerian schools); there is usually little or even sometimes no time allocated to teaching pronunciation. In this respect, Kelly (2007) claimed “when planning a timetable of English, teachers naturally neglect to include any pronunciation issues and they put the most emphasis on the organization of grammatical structures and lexical syllabus” (p.13).

Wong (1987) claimed that in a case where a non-native speaker of English has an excellent grammar and vocabulary package, he/she will be unable to communicate effectively if his/her pronunciation is not intelligible to others, i.e. the importance of pronunciation is more distinct and valuable than other language aspects including grammar and vocabulary. So, learning about pronunciation helps students develop their abilities for the comprehension of spoken English, as a result, the lack of knowledge of pronunciation could affect students’ reading and even writing. In the same line of thought, Varonis and Gass (1982) argued that grammar and pronunciation play together a role in the listening comprehension. That is to say, pronunciation is very important and students should pay close attention to their pronunciation because this latter is considered to be as a “standard” for measuring the intelligibility of the English language speech.

1.2.3. Teaching Pronunciation

In any teaching pronunciation program, teachers should give more priority to the aspect of pronunciation. According to Kelly (2007), English teachers should firstly realize that they do not necessarily need to be expert phoneticians, what really matters is a basic knowledge of phonetics and a kind of sensitivity in giving students guidance and hints when necessary. Fraser (2000) stated that ESL/EFL teachers need to be provided with
courses and materials to help them improve their effectiveness in teaching pronunciation. She also adds that teachers need high quality, effective materials, especially computer-based materials with audio demonstrations for the purpose of an effective teaching.

Hewings (2004) claimed that there are three main ways through which teachers can teach pronunciation:

1. To be aware of the likely pronunciation difficulties of students, also to prepare activities that will focus on these problems.
2. To diagnose students’ pronunciation weaknesses, and then plan activities that focus on these weaknesses.
3. To check the syllabus in the students’ course book, and then identifying the parts that need more work on areas of pronunciation (p.20).

1.2.4. British Pronunciation vs. American Pronunciation

Trudgill (1999) claimed that Standard English is usually considered as to be British Standard English or American Standard English. In England and Wales, British English is associated with the term Standard English but in the United States the Standard English spoken is General American English. A great number of discussions have been made to clearly define the term of Standard English. Many linguists argued that Standard English shares its grammar with the majority of Standard English varieties world-wide. It only differs from the majority in some grammatical features; its vocabulary is less fixed, Standard English has its native speakers throughout the world. In connection with this idea, Trudgill (1999) stated that “Standard English is not a style, an accent or even a register but its speakers have the access to a range of informal styles which can be produced by different accents” (p.124). Thus, Standard English is a purely social dialect which is standardized and codified. Hudson (2000) however stated that Standard English is used in
written forms in published works, and spoken situations in which published writing is
influential. That is to say that Standard English is used in formal contexts.

Historically speaking, Trudgill (1999) claimed that Received Pronunciation (RP) is
the accent of BBC announcements, and the accent of prestige which was spoken by those
people of high class. Besides, both accents (RP) and (GA) have some common points and
many differences. For example British people do not pronounce the letter “r” in “car” and
“father”, while the Americans do.

In the field of teaching, Trudgill (2000) pointed out that exposing learners to the
Standard English (RP) is useful because Standard English is the variety which is easy to
teach and learn, and easily understood by all speakers of English including the non-native
ones. However, Farell and Martin (2009) disagreed with this idea and they think that
exposing pupils to only Standard English (RP) could have negative results on them through
restricting them to meet and understand the other English variations.

1.2.5. Pronunciation Difficulties

Difficulties in teaching pronunciation to EFL learners could be internal or external.
Learners who are learning English as a second, foreign or lingua franca face a lot of
problems in learning it due to the difficulties and complications in the English language
system and nature. One of the main problems EFL students encounter is to build a
consistent relationship between spelling and pronunciation, this latter is considered to be
the main reason why students make errors because spelling and pronunciation have a
complicated connection between them. Accordingly, Bose (2005) argued that the English
language has no ideal correspondence between its words spelling (letters), and its
pronunciation (sounds). Hence, students find it difficult to learn because of this mismatch
between the spelling and the sound. Bose (2005), added that learners generally make
errors in case of words which are pronounced the same but their spelling differs like in:
led and lead / bear and bare / two, to and too. Another example is the sound of the letter group “see” which could have many different spellings like in: see / senile / sea / scenic / ceiling / cedar / juicy and glossy. The second case where Bose (2005) pointed out that the learner may find difficulties in pronunciation is where words are spelled the same but have different pronunciation, for example the sound of the orthography “ough” like in: cough / tough / bough / through / though / and thoroughfare. In these words the pronunciation of the orthography “ough” differs among English speakers and has at least six different sounds which are: /ɒf/, /ʌf/, /aʊ/, /uː/, /əʊ/, and /ə/.

Another set of difficulties (external) that could impede EFL learners from learning pronunciation could be as: teachers’ lack of desire and competency to teach pronunciation/learners’ mother tongue or second language interference/and the method used in learners’ textbook (CBA in Algeria).

Some teachers consider teaching pronunciation as “a discouraging factor” because very few learners could achieve native-like pronunciation. Kenworthy (1987) proclaimed that “for the majority of learners a far more reasonable goal is to be comfortably intelligible” (p.3). That is to say, that not all foreign learners of English wish to achieve a native-like pronunciation, they believe that retaining their foreign accent is a part of their identity. However, Harmer (2001) argued that “it is thanks to pronunciation teaching that students not only become aware of different sounds and sound features, but can also improve their speaking immeasurably” (p.183). That is to say that teaching pronunciation is very useful to learners and teachers should allocate much more time to teach pronunciation. Bose again (2005) claimed that the difficulties in learning pronunciation are due to the learners’ mother tongue interference. In other words, students will be affected by their already existing knowledge and as a result in speaking the target language they will unconsciously use some sounds of their first language. In the same context, Falk (1978)
proclaimed that many French words were borrowed into English in their phonological and writing system. Khansir (2012) added that the pronunciation of English changes due to the change of its history; hence many Latin, Indian and Greek words were borrowed into English throughout its history such as: “model” and “genre” (Latin words).

In 2003 the Algerian educational system has adopted the Competency Based Approach (CBA) which is based on teaching learners three aspects which are: attitude, skills and knowledge (Bougandoura, 2012, p. 51). In regard to the teacher who has a supportive role only, he keeps a non-authoritarian presence. So, learners will often focus on assessment rather than completing assignments or achieving a certain goal.

1.2.6. The English Speech Sounds

The English speech sounds are classified into two classes: consonants and vowels. These two segments were established by the International Phonetic Alphabet (IPA). According to Roach (1991), what makes these segments different from an auditory view is that consonants have noise and voice combination while articulating them, while vowels have voice only. However, from the articulatory view consonants are produced with partial or complete obstruction in the air flow. However, vowels have no obstruction or blockage of the air passage. Before moving to further complications about consonants and vowels, it is worth mentioning that “consonant/vowel letters” are not the same as “consonant/vowel sounds”. Letters are used in writing and spelling. However, the sounds are used in speaking and pronunciation.

1.2.6.1. Consonant Sounds

Ogden (2009) claimed that consonants are produced by some constriction in the vocal tract, and they are classified based on where the airflow is being restricted in the vocal tract. However, Collins and Mees (2003) described consonants based on the
existence of a contact between articulators and consonants are produced if there is such a contact.

1.1.6.2. Vowel Sounds

Delahunty and Garvey (2004) claimed that “vowels are produced with a smooth, unobstructed airflow through the oral tract” (p.8). That is to say, vowels are produced with no blockage of the air flow in the oral tract, in this context Roach (2009) explained that unlike consonants, vowels are the speech sound class that are associated with the least blockage of the air flow during production. According to Skandera and Burleigh (2005, p.43), phonetically speaking vowels are produced without any obstruction of air, whereas phonologically speaking, vowels occupy the centre of a syllable. In other words, vowels can be seen the predominant in a way they carry loudness, pitch, and the voice tone.

Crystal (2008), identified sixteen cardinal vowels in a diagram shown in the following figure (8 of them are primary, and 8 are secondary).

![Figure 1. Crystal’s Cardinal Vowel Diagram (2008, p.66).](image-url)
In English the vowel sounds are divided into fourteen, (9 are short, and 5 are long).

Furthermore, there are eight diphthongs (figure 2).

### Vowel symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>i:</td>
<td>see /siː/</td>
<td>cup /kʌp/</td>
</tr>
<tr>
<td>ɪ</td>
<td>sit /sɪt/</td>
<td>ɜː</td>
</tr>
<tr>
<td>i</td>
<td>happy /ˈhæpi/</td>
<td>ə</td>
</tr>
<tr>
<td>e</td>
<td>ten /ten/</td>
<td>əɪ</td>
</tr>
<tr>
<td>æ</td>
<td>cat /kæt/</td>
<td>əʊ</td>
</tr>
<tr>
<td>oː</td>
<td>calm /kælm/</td>
<td>aɪ</td>
</tr>
<tr>
<td>ᴏ</td>
<td>got /ɡɒt/</td>
<td>əʊ</td>
</tr>
<tr>
<td>ɔː</td>
<td>saw /sɔː/</td>
<td>ɔ</td>
</tr>
<tr>
<td>ʊ</td>
<td>put /pʊt/</td>
<td>ə</td>
</tr>
<tr>
<td>uː</td>
<td>too /tuː/</td>
<td>ɛə</td>
</tr>
<tr>
<td>ʌ</td>
<td>situation /ˈʃɪtʃuˈeɪʃn/</td>
<td>ʊ</td>
</tr>
</tbody>
</table>

**Figure 2.** Vowel Symbols (Ashby, 2011).

Skandera and Burleigh (2005) pointed out that English vowels have got short and long pronunciation. Short or long pronunciation of a vowel does not mean it is short or long in length of its articulation because vowels can have quite different lengths which depend on the contexts which are used in, in addition to the presence or absence of stress, and the long vowels are always marked by a length mark (ː). Short and long vowels are displayed in the below figure.

**Figure 3.** English Short and Long Vowels in the Cardinal Vowel Diagram.
Another case of vowels production is where the articulator moves from the articulation of one vowel to the other through a gliding movement of the tongue, this kind of vowels according to Skandera and Burleigh (2005) is termed as “gliding vowels”, “vowel glides” or “diphthongs”. They also claimed in this regard that a diphthong is analyzed as one vowel phoneme as in the words “voice”, and “mouth”, they consist of three phonemes (the diphthong is one phoneme). That is to say, RP and most other English accents have 20 vowels rather than 12, Skandera and Burleigh (2005) pointed out that: “we hardly ever say that English has 20 vowels, we usually say that it has 12 monophthongs and 8 diphthongs” (p.52). English diphthongs are divided into two groups: centering and closing diphthongs. The centering diphthongs move toward /ə/. They are: /eə/, like in: “aired” and “scarce”, /ɜə/ like in: “beard” and “fierce”. And /ʊə/ like in: “moored”, and “tour”. The second group is the closing diphthongs; they move towards a closer vowel either the /ɪ/ or the /ʊ/. Three of them move towards /ɪ/ and they are: /eɪ/, like in: “face”, “pain”, /aʊ/, like in: “mind”, “nice”, and /ɔɪ/, like in: “voice”, and “loin”. The remaining two closing diphthongs move towards /ʊ/, and they are: /aʊ/, like in: “load”, “home”. And /əʊ/ like in: “loud” and “house”. Figure 4 indicates the English diphthongs.
Figure 4. English Centring and Closing Diphthongs (Roach, 1991, p.20).

In English there are also triphthongs, which are the most complex class of vowels. Roach (2009) claimed that “triphthongs are described as being composed of the five closing diphthongs (...) with a schwa added on the end” (p.19). Unlike diphthongs, however, triphthongs are not analyzed as separate vowel phonemes, they are interpreted as closing diphthongs followed by a schwa, for example in here: “royal”: this word according to Skandera and Burleigh (2005) consists of 4 phonemes: /r/, /ɔɪ/, /ɔ/ and /l/. Triphthongs are shown in table 1.

Table 1. English Triphthongs.

<table>
<thead>
<tr>
<th>Triphthong</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/eiɔ/</td>
<td>as in player/ layer</td>
</tr>
<tr>
<td>/aiɔ/</td>
<td>as in fire/ liar</td>
</tr>
<tr>
<td>/ɔiɔ/</td>
<td>as in loyal/ royal</td>
</tr>
<tr>
<td>/əʊə/</td>
<td>as in lower/ mower</td>
</tr>
<tr>
<td>/auə/</td>
<td>as in power/ hour</td>
</tr>
</tbody>
</table>
1.2.7. Vowels’ Manner of Articulation

Skandera and Burleigh (2005) argued that vowels differ in their manner of articulation, and they are described in terms of: closeness/openness of the tongue, frontness/backness of the tongue and the shape of the lips.

- **Closeness/Openness**

  This refers to how far the tongue and the palate are far from each other, like in the word “bee” where the tongue is high in the sound “ee”, so it is close to the palate (close vowel). However, in the word “starling” the tongue is low in the third sound “a”, so in here it is open to the palate (open vowel). In tongue height three intermediate levels exist: mid-close vowels, mid-open vowels and mid-vowels.

- **Fronteness/Backness**

  It refers to the part of the tongue which is raised highest. It has two cases, whether the front of the tongue is the part which is raised highest like in the last sound in “bee”, and it is called a (front vowel). Or the case, where the back of the tongue is the part which is raised highest like in the middle sound of “goose” and it is called a (back vowel).

- **The shape of the lips**

  Vowels differ from each other depending on the rounding and shaping of the lips, thus vowels may be:

1. Rounded, in this shape of lips vowels articulation take a circle or a tube shape, they are: /ɔ/, /uː/, /ɒ/.

2. Vowels may take a spread form of the lips, and they are: /ɜː/, /ɛ/, /iː/, /ɪ/, /æ/.

3. They may also be neutral vowels, that is to say the lips take neither a rounded shape nor a spread form, and they are: /ʌ/, /ɑː/, /ə/. 
1.2.8. The English Letter “O”

As far as this study is concerned with the vowel “O” only, it is essential to shed some light at this vowel. As all the books of phonetics and phonology define it, the English letter and vowel “O” is the fifteenth letter and the fourth vowel in the modern English alphabet. Many EFL learners face a lot of problems in pronouncing this letter because they have a poor knowledge about the English phonetics and phonology, also because of the many problems that exist in the teaching of pronunciation, including time and practice.

The letter “O” has more than one possible pronunciation. Generally speaking the twelve (12) vowel phonemes in RP are divided into five (5) long vowels, and seven (7) short vowels. The vowel which the present study is concerned with, which is the “O”, as any vowel can be short or long. Here are the possible short, long and diphthong sounds pronunciations of the letter “O” stated by Roach (1991).

1.2.8.1. Short Pronunciations of the Letter “O”

1.2.8.1.1. /ʌ/ sound:

In the articulation of this sound, like in the second sound of the word “some” the center of the tongue is raised between mid-open and open position. This vowel /ʌ/ is similar in its articulation to the vowel /a/, except that the latter is more open and front. The
vowel /ʌ/ is labeled a “mid-open-open central” vowel, the lips are neutral, like in “flood”, and “blood”.

**Figure 6**. The Vowel /ʌ/ (Roach, 1991, p. 15).

1.2.8.1.2. /ɒ/ sound:

In the word “olive” the first sound is pronounced as /ɒ/. In a fully open position, the back of the tongue is lowered, and the lips are rounded like in the words “pot”, “gone”, and “cross”. This vowel is called an “open-back” vowel. This vowel does not exist in most of the American English accents; Americans usually use /ɑː/ or /ɔː/ instead.

In this word “trough” for example, British people use the /ɒ/ sound and say: /trɒf/, whereas, Americans use the /ɑː/ or /ɔː/ sounds instead and say: /trɑːf/ or /trɔːf/. In figure 7, the position of the /ɒ/ vowel is shown.

**Figure 7**. The Vowel /ɒ/ (Roach, 1991, p. 15).
1.2.8.1.3. /ʊ/ sound:

This sound is possibly pronounced with the vowel “O” where the tongue is raised between the center and the back, so it is called a “mid-close central-back” vowel with lips in a rounding position, like in “book”, “foot”, and “cook”. This vowel usually occurs in unstressed syllables. In figure 8, its position in the mouth is displayed.

![Figure 8. The Vowel /ʊ/ (Roach, 1991, p, 15).](image)

1.2.8.1.4. /ɪ/ sound:

The short /ɪ/ sound as well can be a possible pronunciation for the letter “O” in many cases as in “women” /wɪmən/. As shown in diagram 9, this short vowel is more open and nearer in to the center, and the lips take a spread shape.

![Figure 9. The Vowel /ɪ/ (Roach, 1991, p 15).](image)
1.2.8.1.5. /ə/ sound:

The schwa sound is another possible pronunciation for the vowel “O” like in words as: “official”, and “occasion”. In here the center of the tongue is raised between mid-close and mid-open position, in this “mid-central” vowel the lips are in a neutral shape.

1.2.8.2. Long Pronunciations of the Letter “O”

1.2.8.2.1. /ɔː/ sound:

This sound of the vowel “O” occurs when the tongue is raised between mid-close and mid-open position. In this “mid-back” vowel, the lips take a rounding shape like in the second sound of the word “horse”, and “board”. In this vowel articulation which is American, there is another similar one which is /ʌ/, both of them can be correctly articulated within the same word like in: “broad”, some pronounce it like /brɔːd/, while others articulate it as: /brɑːd/, both articulations are American and correct, in regard to the sound /ɔ/ Roach (1991) claims that, it is articulated exactly like /ɔː/ but it is shorter as the missing length mark indicates. Figures 10 and 11 show how these two sounds are placed in the mouth.

*Figure 10.* The Vowel /ɔː/ (Roach, 1991, p, 19).
1.2.8.2.2. /uː/ sound:

This is another long possible pronunciation of the vowel “O”. In here, the back of the tongue is raised almost touching the soft palate, it is a “close-back” vowel, in which the lips are moderately rounded like in the middle sound of the words “spook”, “food”, “soon”, and “loose”.

Figure 11. The Vowel /ɑː/ (Roach, 1991, p, 19).

Figure 12. The Vowel /uː/ (Roach, 1991, p, 19).
1.2.8.3. Diphthongs Pronounced with the Letter “O”

In regard to the diphthongs that can be the possible pronunciations for the letter “O”, the following are stated:

1.2.8.3.1. /ʊə/ sound:

Like in: “moored”, and “tour”, in this diphthong articulation the starting point is slightly higher than the position of the monophthong /ʊ/. Skandera and Burleigh (2005) note that the centering diphthong /ʊə/ is not used very much in RP and often replaced by /ɔː/.

![Diagram of /ʊə/ sound](image.png)

*Figure 13.* The Diphthong /ʊə/ (Roach, 1991, p. 21).

1.2.8.3.2. /ɔɪ/ sound:

Like in: “void”, and “voice”. According to Skandera and Burleigh (2005), the symbol of the first element of the closing diphthong /ɔɪ/ is not a monophthong phoneme of RP. In the figure below 14 the gliding of this diphthong is displayed.
1.2.8.3.3 /ɔʊ/ sound:

Like in: “home”, “most”, and “load”. According to Roach (1991), the vowel position for the beginning of this closing diphthong is the same as for the *schwa vowel as found in the first syllable of “about”, for the lips shape may be slightly rounded. In the figure below the gliding of this diphthong is shown.

1.2.8.3.4 /aʊ/ sound:

Like in: “loud”, and “house”. The first element in this closing diphthong /aʊ/ is very similar to /a:/, but slightly close and more front. And since this is an open vowel a glide to
/ʊ/ would necessitate a large movement and there is only slight lip-rounding. The figure below indicates the movement of this diphthong.

*Figure 16.* The Diphthong /æʊ/ (Roach, 1991, p. 22).

**Conclusion**

Although errors sometimes hamper communication, they often help learners in their learning process. They also play a vital role in helping teachers and researchers for their training to identify, and classify their students’ errors as well as helping them to construct correct techniques. It is also worth mentioning to admit that EFL teachers should be aware of what is going on in the field of error analysis, and keep a keen eye on the related theories. Teachers should explore learners’ psychological process in language learning in order to understand and get an overall knowledge about their students’ errors and how to fix them. As a result, teachers can use more flexible strategies in error correction, and make more contributions, and succeed in making some valuable pedagogical implications to the EFL classroom. In few words, it is important to conclude by saying that, it is very useful for EFL learners to have a good knowledge of the English phonology and speech sounds (consonants and vowels). The same thing goes for teachers; they should introduce
for their learners the basics of phonetics and phonology in order to make them properly pronounce the speech sounds.
Chapter two: the Fieldwork

Introduction

In this study, the aim is to identify, analyze, and describe the pronunciation errors of the English letter “O”. Then, the purpose is to figure out any difference at the level of pronouncing this letter between first and third year LMD students of English. Consequently, identifying the main sources of these errors based on the overgeneralization of the English phonetic rules, and the interference of the French sound system in students’ pronunciation of the English “O”. This chapter is divided into two parts. The first one presents the research methodology, the participants, and the research design and instrumentation, the setting and procedures to collect data. The second part is concerned with the description and the analysis of the data gathered from students’ recordings of the word lists (Latin and Germanic). In the end, the study will end up with the discussion and the interpretation of the results, in addition, to the recommendations, pedagogical implications and the limitations that faced the researcher throughout this research.

2.1. Research Methodology

2.1.1. The Choice of Method

In this research a quantitative descriptive method has been conducted to figure out the difference between first and third year students’ pronunciation at the level of the letter “O”. The researcher has chosen such a research method because of the necessity to identify the errors and then to compare between the two targeted levels in this study. In short, the selected method was the most suitable one to the aim of this study.
2.1.2. Participants

The population of this study is made up of 60 EFL students. They are divided into 30 students from first year (8 males and 22 females), and 30 one from third year (5 males and 25 females). The two groups (first and third year) were randomly assigned from a whole population of 324 “first year L.M.D students”, and from a total of 216 for the group of “third year students” at Laarbi Ben M’hidi University, department of English O.E.B. All the participants took part in the study voluntarily and they have been chosen randomly from their name lists. Before taking part in the process of reading the targeted word list and being recorded, students’ approval was necessary. The researcher asked the permission of the subjects to be recorded, some of them refused because they were shy, or just not enthusiastic about the idea. Furthermore, they were unaware of the concept and the aim of the research so that to ensure its validity.

The reason behind choosing two groups of two different levels to be the sample of this research “first and third year L.M.D students”, is to figure out the errors made by these learners in their first year at the university and their last year at university (for some), then to compare between them and to observe and describe any difference between them in pronouncing the letter “O”.

2.1.3. Research Design and Instrumentation

As mentioned earlier, the fieldwork takes place with the help of the researcher’s cell phone voice recorder used in one pronunciation task. Hence, the data collected that was uploaded in the computer to be analyzed is oral, and comprises thirty (30) voice recordings of first year students, and thirty (30) recordings of students of third year, thus the whole represents a total of sixty (60) recordings. In regard to the method used in analyzing the gathered data is mainly descriptive. Macmillan and Cambridge English
pronouncing (16th edition) dictionaries were used in choosing the words and transcribing their pronunciation (including the wrong articulations). Afterward, a list of thirty-six (36) word of Latin and Germanic origins containing different contexts of the letter “O” is distributed to the students of first year then to third year ones. The researcher then provides the details about the interpretations and the analyses of the errors made by both students of the two levels involved in pronouncing the letter “O”. The data is in the form of participants’ voice recordings while reading a list of thirty-six word: twenty-three (23) words are of Latin origin, and thirteen (13) words are of a Germanic origin. The targeted words contain all of them the letter “O” with different contexts mainly: the “o” in the onset position, single “o” (it is combined with consonants), the letter combinations of: “or”, “ou”, “oo”, “com”, “con”, “oa”, “ough”, and “oe”. Most of the contexts are used twice or more in the targeted words in order to confirm any possible errors and then to detect their causes.

Table 2

Targeted Words of Latin Origin.

<table>
<thead>
<tr>
<th>Contexts</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>-“O” in the onset position</td>
<td>Obtain (v), occasion, official, oboe</td>
</tr>
<tr>
<td>-single “O” (with no combination with vowels)</td>
<td>Democratic, disposition, sabotage, arrogance, vocabulary, colonel, co/pious</td>
</tr>
<tr>
<td>-com/con</td>
<td>Com/fort, consent, concede (v), conduct (v), console (v)</td>
</tr>
<tr>
<td>-ou/, or/, oo/, oa/, oe/</td>
<td>Courage, co/pious, com/fort, cooperation, soar, o/boe</td>
</tr>
</tbody>
</table>
Table 3

*Targeted Words of Germanic Origin.*

<table>
<thead>
<tr>
<th>Contexts</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>-“O” in the onset position</td>
<td>Oven</td>
</tr>
<tr>
<td>-oa/, ough/, oo/, oe/, or/</td>
<td>Road, broad, abroad, whoa, tough, bough, cough, crook, spook, Bootle, foe, foreshore</td>
</tr>
</tbody>
</table>

2.1.4. Research Setting and Procedures

After the researcher had access to the administration to get the lists of students’ names and choosing randomly the students who are going to be part of the research procedure, the fieldwork started by distributing clear copies of the word lists for the first group that represents the thirty (30) students assigned from first year, then the other group of third year (again thirty students) were then invited to do the same. Each student was asked to read the words individually and there was no exact time or room for the procedure.

Participants were told that reading the words has nothing to do with assessment; they just were informed that doing so is a matter of reading some single words and it is about speaking in general. Besides, they were made at ease by telling them to take their time and read the words alone, i.e. None of their classmates was present while reading.

After collecting 60 tracks from both first year and third year students’ readings, the recordings were transferred to the computer to be analyzed. Thereafter, by using the headphones the researcher was carefully listening to each track in isolation and after finishing the tracks of the first year students, we ended up by listening again carefully to
each student’s track of third year recordings. All the articulations being played in the tracks were carefully listened to more than one time. It is also worth mentioning that each student’s articulation was encoded to a written transcription by the help of the phonemic transcription using the Cambridge English Pronouncing Dictionary. Besides, and along all the process of the interpretations of all the articulations done by the 60 students, the reason why any context of the letter “O” was mispronounced: for example why the student articulates the word “oven” as /əʊvən/ and not /ʌvən/, or using the /ɒ/ sound instead of /æ/, was the spotlight of this study. Eventually, and as far as, the French sound system interference was in some cases the main reason of students’ errors in pronouncing the English letter “O”, the French phonetic symbols using online Larousse dictionary were adopted to transcribe the French words that represent the origin of the English words used in this study.

For both groups that took part in this study, i.e. first and third year, the description started with a set of 60 tables that show how each student articulated the targeted words. Then, a score is giving to each student out of 42 which refers to the number of the occurrences of the letter “O” within the 36 words, after that, each word’s articulation including the wrong was displayed in a table showing the scores of both students of first and third year for both the wrong and the right articulations together. In the end the tables were interpreted in the forms of graphs, each graph was interpreted separately. For the words of the Latin origin, each word was described in one single graph, i.e. 23 graphs where a comparison between first and third year students’ errors was done. Then, the words of the Germanic origin were described in 13 graphs, where again it ended up by comparing the errors made by both groups of first and third year students by using statistical calculations, the chi-square for goodness of fit to compare the correct and incorrect pronunciations within the same group to figure out any significant difference.
between them, then the chi-square is used to compare the two groups (first and third year) to mention any significant difference between their articulations. Finally a T-test is used to compare between the scores of the whole populations of first and third year students to confirm or reject the hypothesis saying that there is a difference between first and third year students’ pronunciations of the letter “O”.

2.2. Data Analysis and Interpretation

2.2.1. Pronunciation Errors in Latin Words

In here, only those words that are chosen from the Latin origin (mostly French) are going to be analyzed and interpreted for both first and third year students. This data is displayed in the form of graphs for the 23 words of the Latin origin with their different occurrences of the letter “O”. During data interpretations the reference of the factor leading each time to a particular pronunciation error is consistently mentioned.

2.2.1.1. Obtain (v) /əbˈteɪn/

Students’ articulations of the word “to obtain” are displayed in the figure 17 below. Neither all the students of first year nor third year ones pronounced the verb “to obtain” properly which is of a French origin “obtenir”, it experiences mispronunciation from both groups. The majority of first year students (70 %) did not pronounce it correctly; they pronounced it as /obteɪn/ instead of /əbˈteɪn/, whereas the minority (30%) of them pronounced it correctly. The difference between the proportion of the first year subjects who produced the correct pronunciation, and those who produced a wrong pronunciation is significant at p ≤ 0.05, because (χ²= 4, 80, and p= 0.028).

For the students of third year who have not succeeded in pronouncing it correctly represent (43.33 %), while (56, 67 %) of them have properly pronounced it. So, by using again the chi-square calculator for goodness of fit, the result is: (χ²= 0. 533, and p=0.465).
Hence, there is no significant difference between the proportions of correct pronunciation and wrong pronunciation at $p \leq 0.05$.

From a comparison between the two groups using the chi-square, the result is: ($\chi^2 = 4.34$, $p=0.03$), so the difference between the two groups is significant at $p \leq 0.05$.

Consequently, and since the word “obtain” is of a French origin articulated in French as /ɔptənɪk/, causing such kind of error made by the overwhelming majority of first year students is more likely to be considered as an interference of the French sound system.

2.2.1.2. Democratic UK: /ˌdɛməˈkrætɪk/ US, /ˌdem.əˈkrætɪk/

Only few students in their first and third year have correctly pronounced this word. Students’ pronunciations of this word, which is of a French origin “democratique”, are shown in the below figure18. In regard to those first year students who have properly pronounced it as /ˌdɛməˈkrætɪk/ represent only (6, 66%), while (86, 66%) have wrongly pronounced it as /ˌdɛməˈkrætɪk/, and others have said /ˌdeməʊkrætɪk/ and they represent (6, 66%). We used the chi-square calculator and the result was: ($\chi^2 = 22.53$, $P < 0.001$), so the
difference between the proportion of the subjects who produced the correct pronunciation and those who produced a wrong pronunciation is significant at $p \leq 0.05$.

The students of thirds year, have also not succeeded in pronouncing the word “democratic” correctly. The overwhelming majority have pronounced it as /ˌdemoˈkrætɪk/ (73, 33 %), whereas, those who have pronounced it correctly represent (23, 33 %). The chi-square calculator for goodness of fit result was: ($\chi^2 = 8.53, P = 0.003$), so the difference between third year students who produced correct and those who produced incorrect pronunciations is significant at $p \leq 0.05$.

In comparing first and third year pronunciations, the result of the chi-square was: ($\chi^2 = 3.26, p = 0.70$). Then, the result is not significant at $p < 0.05$.

![Figure 18. students' articulations of the word "Democratic"

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>first year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>third year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2.1.3. Occasion /əˈkeɪʒən/

Again in this word, only few students have succeeded in pronouncing it correctly. First and third year students’ articulations are displayed in figure 19. This word is spelled the same as in French “occasion” but has a different pronunciation between French and English. For first year students who produced a correct pronunciation /əˈkeɪʒən/ represent
While, the majority representing (93, 33 %) produced a wrong pronunciation /ɔkərʒən/. The chi-square for goodness of fit result is: (χ²= 22, 53, P < 0.001), the result is significant at p=≤0.05. So the proportion of wrong pronunciation is dominant.

For the subjects of third year, those who produced correct pronunciations represent (30 %). However, (70 %) of them produced wrong pronunciations mainly /ɔkərʒən/, which is near to the French one /ɔkazjɔ̃/. The result was: (χ²= 4, 8, P =0.028), thus the result is significant at p=≤0.05.

By comparing the two groups using the chi-square calculator, the statistic result is: (χ²= 5.45, p= 0.01), which means that the result is significant at p < 0.05.

**Figure 19. Students’ articulations of the word "Occasion".**

2.2.1.4. **Courage UK.** /ˈkærɪdʒ/ US. /ˈkʌrɪdʒ/

This word is purely French “courage” which was borrowed to English “courage”; again they have the same spelling, yet different pronunciations. Students’ articulations are shown in the below figure 20. For first year students only (26, 66 %) of them articulated it the right way /ˈkærɪdʒ/. About (73, 33%) of them got wrong pronunciations like: /kuraʒ/
which is French and very small proportion of them said /kəɔridʒ/. The chi-square results is: (χ² = 6.53, P = 0.011), hence the result is significant at p ≤ 0.05.

In regard to the third year subjects, the number of the students who got the right pronunciation increased, representing (60%). The remaining (40%) recognized the wrong pronunciations. The result of the chi-square is: (χ² = 1.2, P = 0.27), hence it is not significant at p ≤ 0.05.

To compare between the two groups, the chi-square is used: (χ² = 6.78, p = 0.009), which means that the difference between first and third year articulations is significant at p < 0.05.

![Figure 20. Students'articulations of the word "Courage"](image)

2.2.1.5. Oblige (v) /əˈblaɪdʒ/

None of the two groups have all recognized the correct pronunciation for the verb “to oblige”. The participants of first year who got it correctly /əˈblaɪdʒ/ represent the half of their total which means (50%), while the remaining (50%) got it wrong /ɔblaɪdʒ/ which is a purely French pronunciation (“obliger”: /ɔblɪʒe/). The result of the chi-square
is: \( \chi^2 = 0, \ P = 1 \), so the difference between right and wrong pronunciations is not significant at \( p \leq 0.05 \).

Third year students representing (83, 33 \%) got the right pronunciation. Whereas, only (16, 66 \%) got it wrong, and this shows a great increase between first and third year students’ articulations. Using the chi-square we deduce that there is a significant difference between the proportions of correct pronunciations and wrong pronunciations: \( \chi^2 = 13, 33, \) and \( P < 0.001 \).

Coming to the comparison between first and third year, the result is: \( \chi^2 = 7, 5, \ p = 0, 06 \). Thus, the difference between first and third year subjects who produced the correct pronunciation and those who produced a wrong one is not significant at \( p < 0, 05 \).

![Figure 21. Students'articulations of the word ''Oblige''(v)](image)

### 2.2.1.6. Disposition /ˌdɪspəˈzɪʃən/

Students ‘articulations of this word, which is of a French origin “disposition” are displayed in figure 22. For first year participants only (10 \%) of them articulated the word in the right way: /ˌdɪspəˈzɪʃən/ and the remaining (90 \%) have not succeeded in pronouncing it as it should be, more precisely they got the pronunciation of /ˌdispəˈzɪʃən/
which is again purely French /dispozisjɔ̃/. There is a significant difference between the proportions of correct pronunciations and wrong pronunciations at \( p = 0.05 \), \( \chi^2 = 19.2 \) and \( P < 0.001 \).

For the second group of third year participants, students who recognized the correct pronunciation represent 50% of them, and the remaining 50% did not succeed in their pronunciations. The same as the first group, the students who were mistaken in their pronunciations have experienced the interference of the French pronunciation /dispozizɔ̃n/. So the difference between right and wrong pronunciations is not significant: \( \chi^2 = 0, P = 1 \).

For both first and third year groups, by using the chi-square we deduce that the difference between them is significant at \( p < 0.05 \), because \( \chi^2 = 11.42, P = 0.007 \).

![Figure 22. Students' articulations of the word "Disposition"](image)

**2.2.1.7. Cooperation**

**UK,** /kəʊˌpəˈreɪʃən/, **US,** /kəʊˌpəˈreɪʃən/

The figure 23 shows the different articulations made by the two groups of participants; this word is another one which was borrowed from French into English. It consists of one diphthong /əʊ/ and one short “o”/ɔ/, yet they do not share the same pronunciation. For the students of first year, the overwhelming majority (76, 66%) have
not recognized the correct pronunciation which is: /ˈkəʊˌɔpəˌreɪʃən/ and they have produced /ˈkəʊˌɔpəˌreɪʃən/ (as in French). For those who got the correct pronunciation represent only (20 %), in addition to (3, 33 %) of them produced further wrong pronunciation which is: /ˈkəʊˌɔpəˌreɪʃən/. by using the chi-square statistic the result is: ($\chi^2 = 10, 8$, and $P < 0.001$), consequently, the difference between those who produced right pronunciation and those subjects who produced wrong pronunciation is significant at $p=\leq0.05$.

In regard to third year group, the participants who recognized the correct pronunciation are around (56, 66 %), while (43, 33 %) of them were mistaken. As the chi-square shows the result is: ($\chi^2 = 0, 53, 3$ and $P = 0.465$), hence, there is no significant difference between the proportion of correct pronunciations and wrong pronunciations at $p=\leq0.05$.

Finally, by comparing first and third year groups, it is clear from the chi-square statistic and since the result is ($\chi^2 = 8, 5311$, $p = 0, 034$) that there is a significant difference between the two groups at $p < 0, 05$.

Figure 23. Students'articulations of the word "Cooperation"
2.2.1.8. Concede (v) /kənˈsiːd/

/kənˈsiːd/ and */kənˈsiːd/ are the two articulations that were used by first year and third year participants during the recordings as figure 24 demonstrates. The first one, which is the correct one, was recognized by only (33, 33%) of first year group, and the remaining (66, 66%) were mistaken. The verb “concede” is an English modification of the French verb “concéder /kɔ̃sɛdə/”, which is actually its origin. By using chi-square for goodness of fit: ($\chi^2$ = 3, 33, and $P = 0.068$), which means that the difference between correct and wrong pronunciations articulated by first year subjects is not significant at $p = \leq 0.05$.

For the second group which represents third year participants, (80%) of them recognized the correct pronunciation, while only (20%) of them have not. So the result was: ($\chi^2$ = 10, 8, and $P = 0.001$), thus, the difference in here is obviously significant at $p = \leq 0.05$.

Coming now to the comparison between the two groups by using the chi-square, we ended up by the following result: ($\chi^2$ = 13, 30, $p = 0.0265$). Hence, the difference between the proportions of correct and incorrect articulations is significant at $p < 0.05$. Consequently, it is worth mentioning that the automatic use of */kənˈsiːd/ by the majority of first year group reflects a French effect.
**2.2.1.9. Sabotage */ˈsæbəˌtɑːʒ/*.

For both groups as displayed in figure 25, only few students have correctly pronounced this word as: */ˈsæbəˌtɑːʒ/*. The majority of them have used other pronunciations, which are incorrect such as: */səbaˈtɑːʒ/* and */səbuˈtɑːʒ/*. The first incorrect pronunciation is purely French. During the recordings of the first year subjects’ pronunciations, only (26, 66 %) recognized the correct pronunciation, whereas, the majority of them failed in pronouncing it correctly, (56, 66 %) of them used the French one */səbaˈtɑːʒ/* and the remaining (16, 66 %) used this one: */səbuˈtɑːʒ/*, for this latter one possible explanation of mispronunciation is due to the slip of the tongue. The result is: ($\chi^2= 6, 53$, and $P = 0.011$), so, the difference between those students who produced a correct pronunciation and those who produced a wrong one is significant at $p=\leq0.05$.

In the second group of third year students, only (23, 33 %) of them produced the correct pronunciation */ˈsæbəˌtɑːʒ/* (and, this is less than the first group percentage), for those who produced a French pronunciation/səbəˈtɑːʒ/* represent (63, 33 %), while */səbuˈtɑːʒ/* pronunciation was also used by (13, 33 %) of them. The chi-square for goodness of fit
result is: ($\chi^2$ = 8.53, and $P = 0.003$), thus, the difference between them is significant at $p \leq 0.05$.

By comparing the two groups, the result is: ($\chi^2$ = 0.0889, $p = 0.76$) and the difference is not significant at $p < 0.05$.

![Figure 25. Students'articulations of the word "Sabotage"

2.2.1.10. Arrogance /ˈærəɡəns/

In this word which is originated from the French word “arrogance /aʁəɡɑ̃s/”, as shown in figure 26 only few students from both groups have correctly pronounced it. First year participants representing only (10 %) recognized the correct pronunciation which is /ˈærəɡəns/, while (60 %) of them used the French pronunciation and others representing (10 %) produced a wrong pronunciation by using the diphthong /əʊ/ in pronouncing the “O” of this word: /ˈærəɡəns/, the remaining of the students (20 %) produced no pronunciation. From the chi-square calculation it is deduced that: ($\chi^2$ = 19.2, and $P < 0.001$), so, the result or the difference between the proportions of correct and wrong articulations is significant at $p \leq 0.05$. 
During the recordings of the second group, (26, 66 %) of the subjects recognized the correct articulation, while (60 %) of them produced a French pronunciation, and (6, 66 %) used the diphthong /əʊ/, whereas (6, 66 %) again articulated no pronunciation. To figure out the significance of the difference between correct and incorrect pronunciations, the chi-square for goodness of fit is used: ($\chi^2 = 6, 53$, and $P = 0, 01$), as a result the difference is significant at $p = \leq 0.05$.

From the comparison between first and third year articulations then, the chi-square result is: ($\chi^2 = 2, 78$, $p = 0, 95$). So, the difference between them is not significant at $p < 0.05$.

**Figure 26. Students'articulations of the word "Arrogance"**

*2.2.1.11. Official “/əˈfɪʃəl/”.*

For this word which is actually from the French origin “officiel” pronounced in French as /ɔfisjɛl/, very few students recognized the correct English pronunciation in both groups: /əˈfɪʃəl/. First year students who produced a correct pronunciation represent only (3, 33 %), which means that only one participant got it right from a population of 30 students. Almost all the students (96, 66 %) used a French pronunciation with /ɔ/ instead of
By using statistical calculator for the significance of errors, the chi-square result is: ($\chi^2=26, 13,$ and $P < 0.001$), thus, the difference is significant at $p \leq 0.05$.

In third year group analysis, the students who got the correct pronunciation represent only (16, 66 %), while others got it wrong (83, 33 %). The result is: ($\chi^2=13, 33,$ and $P < 0.001$), the difference then between the subjects who produced correct pronunciation and those who did not is significant at $p \leq 0.05$.

While comparing between the two groups, it is noticed that: ($\chi^2=2, 96,$ $p = 0, 85$). Consequently, the difference between them is not significant at $p < 0.05$.

Two possible explanations of the mispronunciation of the vowel “O” in this context are deduced, the first one is the interference of the French sound system in the students’ pronunciations, while the second is being unaware of the difference between pronouncing a noun and an adjective in English, so an overgeneralization may occur; students know that the noun “office” is pronounced like: /ˈɒfɪs/, which may mislead them and pronounce its adjective “official” the same as its noun.

![Figure 27. Students'articulations of the word "Official"](image-url)
2.2.1.12. Colonel, UK, */kə:nəl/, US, */kɜːnəl/

As figure 28 below demonstrates, none of the students from both groups succeeded in pronouncing “colonel”, which is of a French origin. */kə:nəl/ was the only pronunciation produced by all the subjects. This pronunciation is French, so the main thing to be deduced from students’ mispronunciation of the English word “colonel” is that students are significantly influenced by the French pronunciation, while the correct pronunciation of this word in English is: */kə:nəl/*. So, the result of the chi-square for goodness of fit is the same for both groups: (χ²= 30, p < 0.001). Hence, the difference between correct and wrong pronunciations for both first and third year students is significant at p=≤0.05.

![Figure 28. Students'articulations of the word "Colonel"](image)

2.2.1.13. Colony, UK */kəˈləni/, US, */kəˌləni/

What is immediately noticeable in the below figure 29 is that the two pronunciations of the word “colony” */kəˈləni/ and */kəlɔnɪ/ were used by the participants of both groups. In the first pronunciation, which is appropriate, the second “O” is pronounced as schwa */ə/ in which most of the students pronounced it as in French */ɔ/. For first year students, (40 %) got it right, while (60 %) of them used the French pronunciation */kəlɔnɪ/.
The result of the chi-square is: ($\chi^2=1.2$, $p = 0.27$), that is to say that there is no significant difference between the proportions of correct pronunciations and wrong pronunciations at $p=\leq0.05$.

In regard to third year participants, (63, 33 %) of them knew how to properly articulate it. Meanwhile, (36, 66 %) of the students produced a French pronunciation. It is noticed then, that there is no significant difference between those who were right and those who were mistaken when $p=\leq0.05$, because ($\chi^2=2.13$, $p = 0.14$).

To know now if the difference between the two groups is significant at $p < 0.05$ or not, we used the chi-square which mentions that: ($\chi^2= 3.27$, $p = 0.7$), eventually, the difference is not significant.

**2.2.1.14. Comfort, UK, /ˈkʌmfət/ US, /ˈkæm.fət/**

This word is going to be analyzed in two parts: the first syllable “com”, then the second syllable “fort” was analyzed separately. The reason behind dividing this word into two syllables and analyzing each syllable separately, is because the pronunciation of “comfort” was a problem for the majority of the students from both groups, there was three
cases in pronouncing it: some students produced a correct pronunciation for its first part “com”, whereas, they failed in articulating its second part “fort” properly, and vice versa, for others they did not recognized the correct pronunciations neither for the first part nor the second. Actually, the correct pronunciation for the English word “comfort” is: /ˈkʌmfər/ and it is similar to the French word “confort /kɔʁfɔʁ/”, which leads some students to be affected by its French pronunciation.

First year students produced two pronunciations for the first syllable “com”, they are: /kɔm/ and /kʌm/, the first one is French while the second is English and it is the correct one, (66, 66 %) of the students used the French pronunciation, and (33, 33 %) produced the correct one. The difference between the two pronunciations produced (correct and wrong) is not significant. For the second syllable “fort”, there were again two pronunciations produced by first year students: /fɔrt/ with (73, 33 %), and /fɔt/ with students representing only (26, 66 %), the first is purely French, while the second is the appropriate. Unlike in the first syllable, in this syllable the difference between the proportions of correct and incorrect pronunciations is significant.

For third year subjects, starting with the first syllable “com”, (53, 33 %) of the students produced the French pronunciation, while the remaining (46, 66 %) knew how to produce an English pronunciation: /kʌm/, there was no significance at the level of the difference between the two pronunciations produced. In the second part “fort”, students who produced a French pronunciation are around (66, 66 %), and those who articulated it right represent (33, 33 %). Again by using the chi-square, there is no significant difference between the proportions of correct and incorrect pronunciations.

Ending up by comparing the two groups by means of the chi-square, the first syllable “com” result was: ($\chi^2=1, 11$, $p =0, 29$), hence, there is no significant difference at $p < 0, 05$ between correct and incorrect articulations. Concerning the second syllable
“fort”, the result is: ($\chi^2=0$, 31, $p = 0.57$), so the difference again is not significant between them at $p < 0.05$.

2.2.1.15. Vocabulary, UK, /vəˈkæb.jə.lər.i/, US, /vouˈkæb.jə.lər.i/

In the first syllable of this word, the pronunciation of the letter “O” experienced three articulations: the correct one /vəˈkæbjʊlərɪ/ or /vˈəʊkæbjʊlərɪ/ (both are correct), also the wrong pronunciation: /vˈəʊkæbjʊlərɪ/ was produced. The word “vocabulary” exists in French “vocabulaire” /vɔkabylɛ/, so the explanation why students articulated it with a short /ɔ/ is directly due to the French sound system interference. In the first group, (60 %) of the participants recognized a French pronunciation, while (40 %) of them knew how to pronounce it correctly. The difference between right and wrong pronunciations is not significant at $p=\leq0.05$ because, ($\chi^2=1.2$, $p = 0.27$).

In the second group, (56, 66 %) of the subjects used a French pronunciation, and those who used the English pronunciation represent (43, 33 %). The result of the chi-square statistic is: ($\chi^2=0$, 53, $p = 0.46$), which means that the proportion of wrong pronunciations is dominant.
Finally, we end up by saying that there is no significant difference between the first and the second group at $p < 0.05$ since: ($\chi^2=0.06$, $p = 0.79$).

![Figure 31. Students'articulations of the word "Vocabulary"

2.2.1.16. Soar (v) /sər/

In this word, the letter “o” is combined with another vowel “a”, the letter combination of “oa” occurs in many English words, and it has many pronunciations and exceptions exist. The verb “soar” is from an old French origin “essorer”, the correct articulation for this verb is: /sə(r)/. However, other incorrect pronunciations were articulated by many students from both groups, among these pronunciations we got: /səər/, and very few of them articulated it as: /səːr/, which is most probably explained as being a slip of the tongue. For the first pronunciation: /səər/, one possible explanation is supposed to be, which is the overgeneralization of the English rules (overgeneralization error), that students follow over this word, so they produced the vowel sound /əʊ/ in “soar” as they used to pronounce it in words like: “goal /gəʊl/”, “coast /kəʊst/”, and “soap /səʊp/”.

![Figure 31. Students'articulations of the word "Vocabulary"
For the students of first year, (46, 66 %) committed an overgeneralization error, whereas, only (13, 33 %) produced the pronunciation /s3ːr/, and the remaining (40 %) knew how to correctly pronounce it. The difference between correct and incorrect articulations is not significant at p=≤0.05 because: ($\chi^2=1, 2, p = 0, 27$).

During the recordings of the second group (third year), it is found that (56, 66 %) of the participants make the error of overgeneralization, and (43, 33 %) got the right pronunciation. From this result: ($\chi^2=0, 53, p = 0, 46$), the difference between them is not significant at p=≤0.05.

Finally, the result of the comparison between first and third year students’ pronunciations using the chi-square statistic is: ($\chi^2=0, 06, p = 0, 79$), thus, there is no significant difference between the students’ correct and incorrect articulations at p < 0, 05.

![Figure 32. Students'articulations of the word "Soar"](image)

2.2.1.17. Copious, UK, /ˈkəʊ.pi.əs/, US, /ˈkoʊ.pi.əs/

As the below figure 33 demonstrates, the word “copious” is going to be analyzed in two parts: the first syllable “cop” and the second one “ious” separately because both parts contain the letter “O”. This word has got a Latin origin “copiosus”. The appropriate
pronunciation for this word is /ˈkɔʊptɪəʊs/, the first “o” is pronounced as a diphthong sound /ʊə/ and the second “o” is pronounced as a schwa /ə/. Yet this word experienced many different pronunciations from both groups.

None of the first year students recognized the correct pronunciation for the first part “cop”. The vast majority (83, 33 %) of the participants articulated it as: /kɒp/, while the correct one is /ˈkʊəp/, presumably this part “copi” has seemingly baffled those who said /kɒpi/ making it sound exactly like “copy” /ˈkɒpi/, accordingly overgeneralization appears, the remaining of the participants (16, 66 %) produced another pronunciation /kʌp/, in which they were probably falling in overgeneralization or simply was a slip of the tongue. The difference between the proportions of correct pronunciations and wrong pronunciation is significant: (χ²=30, p < 0.001).

For the second part “ious”, which is pronounced as /ɪəʊs/, first year students produced different pronunciations: /əʊs/ with (53, 33 %) of the students, also as /iːs/ (16, 66 %), while those who produced the correct pronunciation represent (30 %). The difference between the subjects who produced the correct pronunciation and those who produced the wrong one is significant at p=≤0.05 since: (χ²=4, 8, p =0, 028).

The same thing goes for third year students; they produced different pronunciations for both parts of the word “copious”. In the first part “copi”, the overwhelming majority (80 %) of them recognized it as /ˈkʊpi/ instead of /ˈkʊəp/, whereas (20 %) of them used another pronunciation /kʌp/, the difference between correct and incorrect articulations is significant at p=≤0.05: (χ²=10, 8, p =0, 001).

In the second part “ious”, the vast majority of third year students (80 %) recognized the correct pronunciation, while the minority (20 %) did not produce it the right way: (13, 33 %) articulate it as /əʊs/, and the remaining (6, 66 %) said /iːs/. the difference between right and wrong pronunciations is significant (χ²=10, 8, p =0, 001).
Eventually, by comparing the two groups by means of the chi-square, the first syllable “copi” shows no difference between the two groups, because all of the participants from both groups produced it the wrong way. Concerning the second syllable “ious”, the result is: ($\chi^2=15.15, \ p = 0.000099$), so the difference between both groups in pronouncing the second part is significant at $p < 0.05$.

2.2.1.18. Consent /kənˈsɛnt/

The word “consent” is originated from the old French word “consente, from consenter /kɔ̃səˈti/”. The appropriate pronunciation of the English “consent” is /kənˈsɛnt/. As displayed in the below figure 34, the participants produced two pronunciations: /knaˈsɛnt/ and /kənˈsɛnt/. The majority of first year students (80 %) pronounce it using the /s/ sound instead of the /ʃ/. While, (20 %) of them recognized the right pronunciation. The difference between the proportions of correct and wrong pronunciations is significant: ($\chi^2=10.8, \ p = 0.001$).

Also, third year students produced two pronunciations, those who pronounce it correctly represent (43, 33 %), while those who produced wrong pronunciation are about
(56, 66 %). Consequently, there is no significant difference between them at $p < 0.05$: ($\chi^2=0.53, p=0.46$).

Finally, it is worth mentioning that there is no significant difference between first and third year groups ‘correct and wrong articulations at $p < 0.05$: ($\chi^2=3.77, p=0.52$).

2.2.1.19. Trophy, UK, /ˈtrəʊ. fi/, US, /ˈtroʊ. fi/

The exact origin of this Latin word is from middle French word “trophée”. The students ‘articulations are displayed in figure 35. Two different pronunciations were observed during the recordings, the first one is /ˈtrəʊfi/, which is actually the correct pronunciation, in the second one students got a wrong pronunciation; they articulated it as /ˈtrɔfi/, by making the sound /n/ instead of the diphthong sound /əʊ/.

The subjects of first year who got it right represent (26, 66 %), while the majority (73, 33 %) of them produced the wrong pronunciation. Hence, the difference between the proportion of first year students who produced the correct pronunciation and those who produced a wrong pronunciation is significant at $p < 0.05$: ($\chi^2=6.53, p=0.011$).
However, the most noticeable thing to mention here is that the participants of third year were worse than the first year students in pronouncing wrongly the word “trophy”. The participants who recognized the correct articulation were less than those of first year, only (20%) of them knew how to pronounce it, while (80%) of them did not know how to correctly articulate the word. The difference then between those who produced correct and wrong pronunciations is significant at \( p < 0.05 \): \( \chi^2 = 10.8, p = 0.001 \).

In regard to the comparison between both first and third year students who recognized the correct pronunciation and those who did not, the difference between them is not significant: \( \chi^2 = 0.37, p = 0.54 \).

Since the word “trophy” is originated from French, which is pronounced in French as “trophée”, \(/\text{τροφέ}/\), so most probably the mispronunciation occurs due to the interference of the French pronunciation.

![Figure 35. Students' articulations of the word "Trophy"](image)

2.2.1.20. Oboe, UK, \('/\ddot{a}o.\ddot{b}o/\), US, \('/\ddot{o}.b\ddot{ou}/\)

The origin of the word “oboe” is Italian; students’ pronunciations are shown in figure 36 below. This word is going to be analyzed in two parts; the first syllable is the “o”
in its onset position which is pronounced as the sound diphthong /əʊ/, while the second syllable “boe” the letter “o” is articulated also as a diphthong /əʊ/. The correct pronunciation for the whole word is /ˈəʊbəʊ/.

In the first group recordings, this word was a problem for the majority of the participants. The first part experienced different pronunciations mainly: the /ɔ/ sound, (60%), another sound was produced for the first syllable, it is the schwa /ˈə/ with (36, 66%) of the students, and only (3, 33%) of them got the correct pronunciation. The difference between correct and wrong pronunciation is significant: ($\chi^2=26, 13, p < 0.001$).

The second part of this word is “boe”, first year students produced different sounds for this part. The subjects who did not face any problem in pronouncing it represent (63, 33%), whereas, those who produced the sound /eɪ/ are about (13, 33%), for others (23, 33%) the sound /iː/ was produced. The difference between those pronunciations is not significant at $p < 0.05$, because ($\chi^2=2, 13, p < 0.14$).

In analyzing the second group of third year students articulations, the students who produced wrong pronunciations: /ɔ/ and /ˈə/ for the first part of the word represent the majority of the sample (80%), while the correct pronunciation was recognized by (20%) of the students only. As similarly done for the first group, the difference between the two produced articulations is significant, ($\chi^2=10, 8, p < 0.001$).

The second part “boe” was correctly produced by (66, 66%) of the participants, while (33, 33%) of them articulated wrong sounds: /eɪ/ and /iː/. The difference between correct and wrong pronunciations is not significant, ($\chi^2=3, 33, p < 0.06$).

Eventually, the difference between the pronunciations of first and third year students of the first syllable “o” of the targeted word is significant at $p < 0.05$: ($\chi^2=4, 04, p < 0.44$). For the second syllable “boe”, the difference between its pronunciations of the two groups is not significant since the result was: ($\chi^2=0, 07, p < 0.78$).
The explanation why the participants mispronounce the first part of the word “o” is probably that they are not aware or do not have enough background about the different pronunciations of the letter “o” especially in the onset position. For the second syllable “boe”, a clear overgeneralization error occurs in students’ pronunciations, and most probably the word “oboe” seems for them to be like the word “obey”, otherwise the participants were not concentrating or they made slips of the tongue.

**Figure 36. Students' articulations of the word "Oboe"**

<table>
<thead>
<tr>
<th>Pronunciation</th>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>/əʊ/</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>/əʊ/</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>/æʊ/</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>/æʊ/</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>/iːə/</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>/æʊ/</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

### 2.2.1.21. Collide (v) /kəˈlaid/

The Latin origin of this verb “to collide” is “collidere”, the exact pronunciation of this verb is /kəˈlaid/. As shown in the figure 37 below the participants recognized further pronunciation which is /kəlaid/, the reason for this error is the assumption that students are not aware about how to pronounce the letter “o” in verbs, which is most of the time pronounced as /ə/.

The first group of participants, only few (33, 33%) produced the appropriate pronunciation, meanwhile the majority (66, 66%) uttered a wrong pronunciation. The
difference between correct and wrong pronunciations, using the chi-square, is not
significant, ($\chi^2 = 3.33, p < 0.06$).

The second group, the sample that represents (43, 33%) knew how to pronounce “to
collide” the right way as it should be, while (56, 66%) of the participants produced wrong
pronunciations. So, the proportion of wrong pronunciations is dominant: ($\chi^2 = 0.53, p <
0.46$).

By comparing the correct and incorrect pronunciations of the first and second
group, we deduce that the difference between them is not significant at $p < 0.05$ because:
($\chi^2 = 0.63, p = 0.42$).

![Figure 37. Students'articulations of the word "Collide"(v)](image)

2.2.1.22. **Console** (v), **UK**, /ˈkɑnˈsoʊl/, **US**, /ˈkɑnˈsoʊl/

The origin of this verb “to console” is French: “consoler”. It consists of two
syllables and each one contains the letter “o”. Each syllable is going to be tackled
separately, the first syllable “con” and the second is “sole”. As mentioned in figure 38 each
part was pronounced by participants in two different ways, the appropriate pronunciation
for this verb is: /kənˈsɔːl/, yet the two sounds of the letter “o” in this verb were not always pronounced the right way.

Starting by the first group, students pronounced the first syllable “con” in two different ways: either the correct one / kən/ with (50%) of them or as /kɔn/ as it is produced in French: /kɔsɔle/ and they represent again (50%) of them. The difference between the students who produced right and those who used wrong pronunciation for the first syllable is not significant: (χ²=0, p =1).

Concerning the second syllable “sole”, only (23, 33%) of participants got it correctly /səʊl/ while the rest got it as /sɔle/ (76, 66%). Clearly, the error displayed as /sɔle/ is undeniably similar to how its equivalent is pronounced in French. The difference between English (correct) and French (inappropriate) pronunciations is significant at p < 0, 05, because: (χ²=8, 53, p =0, 003).

The same goes for the second group, the first syllable “con” experienced two pronunciations: the correct one / kən/ (83, 33%) while the second pronunciation which is purely French /kɔn/ was recognized by (16, 66%) of participants. So, the difference between them is highly significant: (χ²=13, 33, p < 0.001).

With regard to the second syllable “sole”, (36, 66%) of subjects recognized the correct pronunciation /səʊl/, whereas the rest of them (63, 33%) got the French pronunciation /sɔle/. Consequently, the difference between the proportions of subjects who produced correct and those who produced wrong pronunciation is not significant: (χ²=2, 13, p =0, 14).

While comparing between first and third year students ‘pronunciations of the verb “to console” (chi-square), the difference between correct and wrong pronunciations of the first syllable “con” was significant at p < 0, 05 since: (χ²=7, 5, p =0, 0617). In regard to the
second syllable “sole”, the difference between the correct and wrong pronunciations of first and third year groups is not significant: \( \chi^2 = 1.26, p = 0.25 \).

2.2.1.23. **Conduct** (v) /kənˈdʌkt/

The verb “to conduct” is from Medieval Latin word “conductus”, the appropriate pronunciation of this verb is: /kənˈdʌkt/. Yet students produced another pronunciation which is /ˈkɒndʌkt/, actually this latter is a correct pronunciation but it is not the correct one for the verb; it is the correct pronunciation of its noun “conduct”, students are not aware of the difference between pronouncing a noun and a verb in English, generally the /ɒ/ sound produced in a particular noun, returns into a schwa /ə/ when pronouncing its verb, such as the noun control is pronounced with the sound /ɒ/ /kənˈtrəʊl/, however the verb “to control” is pronounced with /ə/ /kənˈtrəʊl/. Eventually, a clear overgeneralization of the pronunciation of its noun appears in students’ articulations of the verb “to conduct”.

First year students who produced the appropriate pronunciation for the verb “to conduct” represent (43, 33%), while those who used a noun pronunciation represent (56,
66%). The difference between appropriate and inappropriate pronunciations (chi-square for goodness of fit) is not significant: ($\chi^2=0.53, p < 0.46$).

With regard to third year participants, (86%, 66%) recognized the correct pronunciation, whereas (13%, 33%) have been confused in pronouncing the verb and pronounced the noun instead. Hence, the difference between the proportion of correct pronunciations and wrong pronunciations is significant, ($\chi^2=16, 13, p < 0.001$).

Eventually by comparing between the two groups, there is a significant difference between the proportions of correct pronunciation and wrong pronunciation. ($\chi^2=12, 38, p =0.004$).

![Figure 39. Students' articulations of the word "Conduct" (v)](image)

2.2.2. Pronunciation Errors in Germanic Words

In here, only those words that are chosen from Germanic origin are going to be analyzed and interpreted for both first and third year students. This data is displayed in the form of graphs for the 13 words of the Germanic origin with their different occurrences of the letter “O”. During data interpretations the reference of the factor leading each time to a particular pronunciation error is consistently mentioned.
2.2.2.1. Road, UK, /rəʊd/, US, /roʊd/

Proto-Germanic “raido” is the origin of the English word “road”; three pronunciations were produced during the recordings of students’ articulations: /rəʊd/, which is the correct one for this word, in addition to /reɪd/ and /rid/.

First year participants representing the majority of their total (83, 33%) recognized the correct pronunciation /rəʊd/, while the remaining of them (16, 66%) produced different sounds instead of the diphthong /əʊ/. The difference between the proportions of correct and incorrect pronunciations (chi-square for goodness of fit) is significant at p≤ 0.05: ($\chi^2=13, 33, p < 0.001$).

Concerning the second group, the participants of third year who knew how correctly pronounce the word “road” represent (93, 33%), whereas the rest (6, 66%) produced the diphthong /əʊ/ as: /ei/ or /i/. as the result, there is a significant difference between correct and incorrect pronunciation. ($\chi^2=22, 53, p < 0.001$).

In comparing between first year and third year students’ pronunciations by means of chi-square, it is deduced that there is no significant difference at p≤0.05 between the correct and wrong pronunciations of first and third year participants. ($\chi^2=1, 45, p < 0, 22$).

The possible explanation that contributes to the commitment of errors made by the minority of participants from both groups is due to the slips of the tongue or the lack of concentration.
Actually, this word is originated from the proto-Germanic word “tanhu”, and from old English “toh”. The correct pronunciation for this word is: /tʌf/, nevertheless many different pronunciations were produced by participants like: /tɒf/, /taʊf/, and /ðəʊ/ in which the participants completely changed the root of “tough” and pronounced the word “though” instead.

First year subjects who recognized the correct pronunciation are about (46, 66%), while those who produced the pronunciation of the word “though” instead of “tough” represent (10 %), in regard to those who used the sounds /ɒ/ or /əʊ/ instead of the sound /ʌ/ are about (43, 33%). The difference between the proportions of correct and incorrect pronunciations for this group is not significant at \( p \leq 0.05 \) (\( \chi^2 = 0 \), 13, \( p = 0.71 \)).

During the analysis of the second group pronunciations, half of the participants (50%) knew how to properly pronounce the word “tough”, meanwhile the rest (50%) did not succeed in recognizing the appropriate articulation, and they used /ðəʊ/ (13, 33%), for others /tɒf/ and /taʊf/ were the pronunciations produced for “tough” and they represent (36,
Thus, there is no significant difference between right and wrong pronunciations produced by the students of this group, ($\chi^2 = 0.06$, p = 0.79), so the difference between them is not significant at p < 0.05.

By means of chi-square, now we compare between the two groups’ pronunciations: ($\chi^2 = 0$, p = 1), so the difference between them is not significant at p < 0.05.

Two possible explanations can be drawn from the errors made at the level of pronouncing the word “tough”, for the two errors: /tɒf/ and /taʊf/ a clear overgeneralization has occurred in students’ pronunciation, the letter combination “ough” can be pronounced in different ways and the two sounds /ɒ/ and /aʊ/ are among these possible pronunciations, as a result these sounds baffled students in pronouncing the correct sound: /ʌ/. For the second mispronunciation: /ðəʊ/ it is obvious that students were not concentrating on the spelling of the word “tough”, so it seems to them as “though”, eventually a lack of concentration in this case is the logical reason for mispronouncing the word “tough”.

![Figure 41. Students' articulations of the word "Tough"](image)
2.2.2.3. Crook /kɾɒk/

As shown in figure 42 below, students’ pronunciations of this Germanic word were articulated in different ways. /kɾɒk/ is the correct pronunciation for this word, yet students produced other pronunciations like: /kɾək/, and /kruːk/.

During the recordings of first year group, students who recognized the best pronunciation represent the minority (30%), while the majority (70%) of them produced /kɾək/, and /kruːk/. the difference between the proportion of the first year subjects who produced the correct pronunciation, and those who produced a wrong pronunciation is significant ($\chi^2=4.8$, $p=0.028$).

The same goes for the second group, during the recordings students who produced the correct pronunciation represent (56, 66 %), while those who used /kɾək/, and /kruːk/ instead of /kɾɒk/ are about (43, 33%). As a result, the difference between correct and wrong articulations is not significant, ($\chi^2=0.53$, $p=0.46$).

Ending up with comparing between the two groups’ pronunciations, the difference between them is significant at $p < 0.05$, ($\chi^2=4.34$, $p=0.37$).

Actually, the word “crook” which is formed of the letter group “ook”, is pronounced the same way as the word “book” /bʊk/, with a short “u”. However, sometimes it is pronounced with a long “u” like in “snooker” /ˈsnʊkə/ which is the exception, and exceptions never make a rule. As a result students may fall in an overgeneralization error and produce it as /kruːk/. Concerning the second error /kɾək/, a best explanation may be drawn for it, which is the lack of concentration and being confused between different similar spellings like in “crook” and “croc” /kɾɒk/, (this explanation is not really absolute and consistent, yet it seems to be the best one).
2.2.2.4. **Broad, UK, /brɔːd/, US, /braːd/**

/brɔːd/ and /braːd/ are the two pronunciations produced during the recordings of the two groups for this Proto-Germanic word “braithaz”. As shown in figure 43 below only few students got the correct pronunciation /brɔːd/, while the vast majority of them produced a wrong articulation /brɔːd/.

The first group subjects representing (93, 33%) of them produced a wrong pronunciation, while very few of them (6, 66%) pronounced it the way it should be. So, by using the chi-square for goodness of fit the difference between first group participants who produced a correct pronunciation and those who produced a wrong one is significant at p=≤0.05, (χ²=22, 53, p < 0.001).

With regard to the participants of the second group, (90%) of them used a wrong pronunciation, whereas only (10%) got it correct. Thus, the proportion of wrong pronunciations is dominant, (χ²=19, 2, p < 0.001).
While comparing between the two groups (chi-square), we arrive at saying that the difference between the proportion of correct pronunciations and incorrect pronunciations is not significant since the result is: \( \chi^2 = 0.21, p = 0.64 \).

Overgeneralization is the source of the students’ mispronunciation of the word “broad”, generally the letter combination “oa” is pronounced with the diphthong sound /əʊ/ like in “foal” /fəʊl/ and “load” /ləʊd/. Consequently, pronouncing “broad” as /brəʊd/ is due to the occurrence of the overgeneralization error of the sound /əʊ/.

![Figure 43. Students' articulations of the word "Broad"](image)

**2.2.2.5. Abroad, UK, /əˈbrɔːd/, US, /əˈbrʌd/**

The analysis of this word was quite similar to that of the former word “broad”, students almost pronounced “abroad” and “broad” the same way, in the below figure 44 two pronunciations as well were delivered either the correct one /əˈbrɔːd/ or the wrong one /əˈbrʌʊd/.

The majority of first year students (93, 33 %) did not know how to pronounce “abroad”, but only (6, 66%) of them got the right pronunciation of “abroad”. A significant
difference is mentioned between those subjects who recognized the accurate articulation and those who did not, ($\chi^2=22, 53, p < 0.001$).

Concerning the second group, a large number of its subjects (83, 33%) articulated “abroad” wrongly, howbeit only (16, 66%) of them recognized the correct articulation. Hence, the difference between wrong and correct pronunciations is significant: ($\chi^2=13, 33, p < 0.001$).

Accordingly, by comparing between the two groups, there is no significant difference between their accurate and inaccurate pronunciations at the level of the targeted word “abroad”: ($\chi^2=1, 45, p =0, 22$). Lastly, the same explanation why participants mispronounced the word “broad” goes for “abroad”.

![Figure 44. Students' articulations of the word "Abroad"](image)

**2.2.2.6. Bough /baʊ/**

As displayed in figure 45 below, the old English, Proto-Germanic word “bough” experienced many different pronunciations by first and third year participants; the accurate articulation of the former word is /baʊ/. However, three other pronunciations were delivered during the recordings including, /bəʊ/, /bɒf/, and /bʌf/.
None of the first year students recognized the correct pronunciation for the word “bough”. The sound /əʊ/ was used for “bough” by (26, 66%) of the participants, while (63, 33%) of them articulated it as /bɒf/, and very few of them (10 %) produced /bʌf/. So, the difference between correct and incorrect pronunciations in this case is highly significant. ($\chi^2$=30, p < 0.001).

The same thing for third year students, no one of them knew how to correctly pronounce “bough”. Yet, the sound /əʊ/ was used instead by (30%) of them, meanwhile those who produced the articulation /bɒf/ represent (33, 33%), and the rest (36, 66%) of participants articulated it as /bʌf/. As a result, the difference between the subjects who produced right and wrong pronunciations is again highly significant. ($\chi^2$=30, p < 0.001).

In case of pronouncing “bough” as /bəʊ/ instead of /boʊ/, it is assumed that students were not aware about how the part “ough” is pronounced in different words, so the error generated in here is may be due to a slip of the tongue, or the poor knowledge about pronouncing the part “ough” in different words in English that students have. With regard to the pronunciations produced /bɒf/ and /bʌf/, an overgeneralization is most possibly assumed as the source of errors students produced, they were falling into an overgeneralization of the sound /ɒ/ like in “trough” /trɒf/ and the sound /ʌ/ like in “tough” /tʌf/ on the word “bough” which is spelled the same as they are, yet it is pronounced differently.
2.2.2.7. Spook /spuːk/

It is from a common Germanic source, “spuk” which means “ghost”. As shown in the below figure 46 the word “spook” got many pronunciations, the accurate articulation is /spuːk/ with a long “u”. Howbeit, students produced sounds like: /ʊ/, /ʌ/ and the diphthong /əʊ/ instead.

In the first year group, a large number of students (56, 66%) were producing the correct pronunciation, while (23, 33%) produced the sound /ʊ/ for the letter sequence “ook”, it is also noticed that (13, 33%) of them produced the diphthong /əʊ/ and very few subjects (6, 66%) used the sound /ʌ/ instead of a long “u”. The difference between correct and incorrect pronunciations is not significant, ($\chi^2=0.53, p=0.46$).

During the second group recordings, students who got the right pronunciation represent (60%), while the rest (40%) produced different sounds instead of the long “u”. Accordingly, the difference between the proportions of correct pronunciation and wrong pronunciation is not significant, ($\chi^2=1.2, p=0.27$).
In comparing between the two groups, it is deduced that the difference between them is not significant at \( p < 0.05 \), \( (\chi^2 = 0.06, p = 0.79) \).

The word “spook” is considered as an exception, the sound sequence “ook” is generally articulated as /ʊ/, yet in here it is pronounced as /uː/, so the overgeneralization in “spook” contributes as the main source of errors because students are not aware of the exceptions that exist in pronunciation.

![Figure 46. Students' articulations of the word "Spook"](image)

### 2.2.2.8. Cough, UK, /kɒf/, US, /kɑːf/

This word is originated from the Proto-Germanic word “kohk”. As displayed in the below figure 47, first and third year participants produced for the word “cough” three different pronunciations. The accurate articulation is /kɒf/, whereas two other different pronunciations were produced by participants at the level of pronouncing the letter sequence “ough” which are, /kəʊf/, and /kʌf/.

The correct pronunciation for “cough” was used by (56, 66%) students of first year; American accents /kəːf/ and /kɑːf/ were also accepted, while (33, 33%) of them pronounced it as /kəʊf/, and the rest representing (10%) articulated it as /kʌf/. The
difference between those who produced correct pronunciation and those who used a wrong pronunciations is not significant at \( p \leq 0.05 \), \( (\chi^2=0.53, p =0.46) \).

With regard to third year group recordings, students who got the right pronunciation represent (63, 33%), however, (33, 33%) of them produced /kəʊf/, and a small number of them (3, 33%) used the sound /ʌ/. Consequently, the difference between right and wrong pronunciations is not significant, \( (\chi^2=2, 13, p =0, 14) \). Finally, the difference between group 1 and group 2 in their pronunciations of the word “cough” is not significant at \( p < 0.05 \). \( (\chi^2=0, 27, p =0, 59) \).

Overgeneralization again in this word seems to be the cause that contributes to the commitment of errors, and students overgeneralize the sound /ʌ/ which is produced in the word “tough” on the word “cough”.

![Figure 47. Students' articulations of the word "Cough"](image)

2.2.2.9. Oven /ʌvən/

In figure 48 below students’ articulations of the Proto-Germanic word “oven” are demonstrated. The appropriate pronunciation of “oven” is /ʌvən/, yet students from both
groups produced different sounds instead of /ʌ/, some of them produced the sound /ɒ/, while others used the diphthong sound /əʊ/.

First year students who recognized the correct pronunciation represent (40%), the sound /əʊ/ was used by (43, 33%) of them and a small number of participants (16, 66%) articulated the sound /ɒ/ for the word “oven”. So, the difference between the proportion of first year subjects who produced a correct pronunciation, and those who used a wrong pronunciation is not significant. (χ²=1, 2, p =0, 27).

Concerning third year participants, only (33, 33%) knew how to pronounce “oven” correctly, whereas, the majority of them (60%) produced the diphthong sound /əʊ/, the rest of them (6, 66%) used the sound /ɒ/. Hence, it is worth mentioning that the difference between correct and incorrect pronunciations produced by third year participants is not significant at p=≤0.05. (χ²=3, 33, p =0, 06).

Comparing between first and third year groups, there is no significant difference between the correct and incorrect pronunciations of both groups. (χ²=0, 28, p =0, 59).

A clear overgeneralization occurs in students’ pronunciations from both groups. The diphthong sound /əʊ/ which was largely produced by participants is due to students’
overgeneralization of the sound /əʊ/ used in the word “over” /ˈəʊvər/ on the word “oven.

2.2.2.10. Foe, UK, /fəʊ/, US, /foʊ/

As figure 49 below shows, the majority of first and third year students knew how to correctly pronounce the Proto-Germanic word “foe” /fəʊ/. However, for some students the word “foe” was a problem, they produced other sounds for the letter combination “oe” which is generally articulated with the diphthong /əʊ/ like in: “hoe” /həʊ/, “doe” /dəʊ/, and “toe” /təʊ/.

First year students who recognized the correct pronunciation represent the majority (76, 66%). Howbeit, some of them (16, 66%) used the diphthong sound /əʊ/, and the rest of them (6, 66%) used the sound /uː/, those proportions of correct and incorrect sounds produced by first year students have a significant difference between them, in other words, the proportion of correct pronunciations is dominant. (χ²=8, 53, p =0.003).

For the second group, a vast number of third year students (90%) knew how to pronounce “foe” correctly, whereas, the remaining (10%) produced a long “u” /uː/, instead. The difference between correct and incorrect pronunciations in this case is highly significant. (χ²=19,2, p<0.001).
Consequently, comparing between the two groups shows no difference between their pronunciations, and the correct articulation is mostly frequent. ($\chi^2=1.92, p=1.65$).

The main source which contributes to the commitment of errors in the word “foe”, and more precisely at the level of the letter combination “oe” is the overgeneralization. Students were overgeneralizing how the word “foe” is pronounced, because the two sounds /əʊ/ and /u:/ like in: “shoe” /ʃu:/ and “canoe” /kəˈnuː/ are both correct for the pronunciation of the letter sequence “oe”. Moreover, students’ unawareness and poor knowledge about how the letter combination “oe” is articulated in different contexts and the lack of concentration on the word spelling are further explanations for the errors produced for the word “foe”.

![Figure 49. Students' articulations of the word 'Foe'](
![image]

**2.2.2.11. Foreshore, UK, /ˈfɔːr.ʃɔr/, US, /ˈfɔːr.ʃɔr/**

As displayed in the figure 50 below, this word is going to be analyzed in two parts, the first syllable “fore”, then the second syllable “shore” separately. The correct pronunciation for this word is /ˈfɔːr.ʃɔr/, yet the two parts of this word which contain both the letter “o” were produced differently.
The first group participants articulated the first syllable in three ways, those who knew how to produce it correctly represent the majority (73, 33%), while, the minority articulated the first part “fore” either as /ˈfɔː/ (20%) or as /ˈfɔː/ that is used only by (6, 66%) of them. The difference between the subjects who produced correct pronunciation for the first part of the word “foreshore”, and those who produced wrong pronunciations is significant. ($\chi^2=6, 53, p =0, 011$).

With regard to the second part “shore”, first year students representing (56, 66%) of them recognized the correct pronunciation /ʃɔː/, while the sound /uː/ was used instead by (13, 33%) of participants, and others (30%) used the sound /ə/. So, it is worth mentioning that the difference in here between correct and incorrect pronunciations is not significant, ($\chi^2=0, 53, p =0, 46$).

Third year students as well produced three pronunciations for the first part of the word “foreshore”, the majority of them (76, 66%) used a correct pronunciation, whereas (20 %) produced the sound /ə/ and very little (3, 33%) used the sound /ɔː/ instead of /ɔː/. The difference between first year subjects who recognized the correct pronunciation and those who did not is significant at $p=\leq0.05$, ($\chi^2=8, 53, p =0, 003$).

In the second part “shore”, third year students who knew how to pronounce it correctly are around (66, 66%), for the sound /uː/ it was produced by (10%) of participants, and (23, 33%) of them produced the sound /ə/. Thus, the difference between them (correct and wrong articulations) is not significant at $p=\leq0.05$, ($\chi^2=3, 33, p =0, 06$).

Eventually, by comparing between the two groups in pronouncing the two parts of the word “foreshore” we deduce that, the difference between first and third year participants in producing the first part “fore” is not significant at $p=\leq0.05$, ($\chi^2=0, 08, p =0,76$). For the second part “shore” the difference again between first and third year students’ articulations is not significant, at $p=\leq0.05$, ($\chi^2=0, 63, p =0, 42$).
A possible explanation for the students’ commitment of errors at the level of pronouncing the letter “O” in the word “foreshore” is may be due to the students’ poor vocabulary, in other words few (if not all) students do not know the word “foreshore”, which is not familiar to them.

**Figure 50. Students' articulations of the word "Foreshore"**

2.2.2.12. *Whoa*, UK, /wəʊ/, US, /waʊ/

This word which most of the students do not know its meaning has got two different ones. The first meaning is the command to ask someone, or something to stop or to slow down. Its second meaning is the interjection “wow” which is used as an expression of delight or surprise. As shown in figure 51 below, this word experienced different pronunciations. The accurate articulations for the word “whoa” are: /wəʊ/ for the first meaning, however, in the second context the pronunciation /waʊ/ is accepted. So, both of them are correct pronunciations.

During the first year students recordings, only few of them (20%) recognized the appropriate articulation, while (46, 66%) of them articulated “whoa” as /huː/, meanwhile (20%) of participants pronounced it as /waː/, while (13, 33%) of them represent the number
of those students who produced no pronunciation. The difference between the subjects who produced right pronunciation and those who used a wrong pronunciation or no pronunciation is significant, that is to say the proportion of wrong pronunciations is dominant, ($\chi^2=10.8, p=0.001$).

Concerning third year group, the participants who produced the correct pronunciation represent (30%), while some of them (36.66%) used the pronunciation /hu:/, and the articulation /wa:/ was produced by (16.66%) and also (16.66%) of them produced no pronunciation. As a result, the difference between third year subjects who produced correct pronunciation, and those who produced wrong or no pronunciation is significant. ($\chi^2=4.8, p=0.028$).

In comparing between first and third year group’s articulations of the word “whoa”, there is no significant difference between them. ($\chi^2=0.8, p=0.37$).

Eventually, it is important to mention that, the errors that first and third year students produced at the level of pronouncing the word “whoa” are due to the overgeneralization factor. Students pronounced “whoa” as /hu:/ because they overgeneralized how “who” is produced on the word “whoa”. A lack of concentration is also assumed to be a possible explanation why students pronounced “whoa” as “who”, so they do not concentrate on the spelling of “whoa” and it seems to them as the pronoun “who”.

88
2.2.2.13. Bootle /ˈbuːtəl/

This word which is pronounced as /ˈbuːtəl/ is the proper noun for the Metropolitan Borough of Sefton town, Merseyside in England. As displayed in figure 52, students of both groups articulated “Bootle” in three different ways.

With regard to first year participants, only few (20%) of them knew the appropriate pronunciation, while two other sounds were used by participants instead of /uː/. A vast number of them (66, 66%) articulated it as /ˈbɒtəl/, and (13, 33%) of them used the sound /əʊ/ and said /ˈbəʊtəl/. Hence, there is a significant difference between correct and incorrect pronunciations produced by this group. ($\chi^2=10, 8, p=0, 001$).

Concerning the second group, third year participants as well produced three pronunciations for “Bootle”, those ones who recognized a correct pronunciation represent (36, 66%), whereas, (53, 33%) articulated it as /ˈbɒtəl/, and the rest (10 %) of participants used the pronunciation /ˈbəʊtəl/. Finally, the difference between correct and incorrect pronunciations produced by third year subjects is not significant. ($\chi^2=2, 13, p=0, 14$).
In regard to the last step, by comparing between the correct and incorrect pronunciations which are produced by subjects from both groups, it is noticed that there is no significant difference between their pronunciations. ($\chi^2=2.05$, $p=0.15$).

The commitment of the errors made at the level of pronouncing the letter combination “oo” in the proper noun “Bootle” is referred to some extent to the overgeneralization factor. In other words, students were overgeneralizing how the word “bottle” is pronounced /ˈbɒtl/ on the way in which the proper noun “Bootle” is actually articulated. Further explanations for these errors may be assumed, it is about the lack of concentration on the spelling of the word, because both words “bottle” and “Bootle” are somehow similar to each other, or may be because the participants do not know this word, that is to say they have never heard about it.

![Figure 52. Students'articulations of the word "Bootle"](image)

2.2.3. T-test for Two Independent Samples

To compare the pronunciation performance of the two samples of first year and third year students on all of the 36 words, the T-test for two independent samples will be
used. Table 4 below shows the final scores for each participant in each sample. It is important to explain here the scoring system used in this study.

For example in the word “Obtain”/əˈbˈteɪn/, the scoring for the correct pronunciation is going to be as follows:

- /əˈbˈteɪn/: 1/1
- /əˈbˈteɪn/*: 0/1

For the word “Comfort” /ˈkʌmfət/, the scoring for the correct pronunciation is going to be as follows:

- /ˈkʌmfət/: 1+1 = 2/2
- /kʌmfət/*: 0 + 1 = 1/2
- /kʌmfət/*: 0 + 0 = 0/2

After following this scoring system with each student of the two samples in the 36 words, each student got a score out of 42 which is the number of the occurrences of the letter “O” in the 36 words.
Table 4

*Final Scores of each Participant’s Correct Pronunciations of the Letter “O”.*

<table>
<thead>
<tr>
<th>First Year Participants</th>
<th>Score/42</th>
<th>Third Year Participants</th>
<th>Score/42</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>11</td>
<td>17</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>12</td>
<td>22</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>13</td>
<td>10</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>14</td>
<td>9</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>12</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>16</td>
<td>13</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>19</td>
<td>17</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>20</td>
<td>17</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>21</td>
<td>12</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>22</td>
<td>10</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>23</td>
<td>13</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>24</td>
<td>16</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>25</td>
<td>24</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>26</td>
<td>15</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>27</td>
<td>11</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>28</td>
<td>24</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>29</td>
<td>20</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>30</td>
<td>29</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>407</strong></td>
<td><strong>Total</strong></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

The table 4 above demonstrates the scores of both groups’ students. There is an observable difference between first and third year students’ final scores, the first year participants got a total of 407 points, while those participants of third year got 600 points which shows a difference of 193 points between them. Hence, third year students were
better than first year subjects in the pronunciation of the letter “O” in its 42 occurrences within 36 targeted words.

2.2.3.1. T-test Calculations:

An independent-samples t-test was conducted to compare correct pronunciations of the letter “O” produced by first year students, and those produced by third year students.

First Year:
N1: 30
df1 = N - 1 = 30 - 1 = 29
M1: 13.57
SS1: 1029.37
S²1 = SS1/ (N - 1) = 1029.37/ (30-1) = 35.5

Third Year:
N2: 30
df2 = N - 1 = 30 - 1 = 29
M2: 20
SS2: 1308
S²2 = SS2/ (N - 1) = 1308/ (30-1) = 45.1

2.2.3.2. T-value Calculations:

S²p = ((df1/ (df1 + df2)) * S21) + ((df2/(df2 + df2)) * S22) = ((29/58) * 35.5) + ((29/58) * 45.1) = 40.3
S²M1 = S²p/N1 = 40.3/30 = 1.34
S²M2 = S²p/N2 = 40.3/30 = 1.34
t = (M1 - M2)/\sqrt{(S²M1 + S²M2)} = -6.43/\sqrt{2.69} = -3.92
From the findings, there was a significant difference in the scores of first year subjects’ correct pronunciations ($M_{1st} = 13.57$) and third year subjects’ scores ($M_{3rd} = 20$). These results show that there is a significant difference between the two groups, ($t = -3.92$, $p = 0.000233$).

### 2.3. Discussion of the Results

It is widely acknowledged that, the English language has a complicated pronunciation, the rules of pronunciation in English are not really consistent and do not apply always the same in all the words. Exceptions exist, yet “exceptions do not make a rule”.

The twenty-three graphs in the first section about the Latin words pronunciation show how the sixty (60) students from both groups articulated the letter “O” in these words in different ways, correct and incorrect pronunciations were displayed in each word’s graph. It was assumed from the beginning of the research that the errors that participants will make in pronouncing the Latin words category with different contexts of the letter “o”, including letter combinations, “o” in the onset position and single “o” or combined with other consonants and vowels, an interference of the sounds of the French language system will be a logical source for learners’ errors, like in the words where a clear interference of the French sound system appears: “comfort”, “occasion”, “courage”, “sabotage”, “colonel”, “colony” and so on. The attempt to consider French interference as a source seems a best way to explain the errors that students generate in pronouncing the letter “o”, because along the process of analyzing the words and detecting their source of the mispronounced ones was not something absolute to be identified.

The mispronounced targeted words of Latin origin that were done because of the interference of the French sound system represent approximately (73, 91%) of the words. However, the overgeneralization of the English pronunciation rules that participants
already have as a background was observed as a further source why students mispronounced some Latin words such as: the verb “soar”, in which students make an overgeneralization of the letter-combination “oa” on this word, so they pronounced it as they used to articulate words like “goal”, and “soap”, also the verbs “console”, “conduct” and “collide” clearly experienced an overgeneralization, i.e. students pronounced them as exactly the pronunciation of their nouns considering that they share the same pronunciation, these words that were mispronounced because of the overgeneralization represent (26, 08%). However, it is worth mentioning that students in some cases were falling in errors that they seem to be as slips of the tongue, or they were not really concentrating on them because unfortunately some of the participants were just in hurry to finish reading the words.

The interpretation of the first section “Latin words” is done in the practical part. The purpose of the research was first of all to identify, analyze and classify the different pronunciation errors made by first and third year students at Larbi Ben Mhidi University. These errors were identified and analyzed to figure out any difference between first and third year students in pronouncing the letter “O”, although third year students seem to be better than first year students in their accuracy of pronunciation, yet a T-test will be used later on to statistically help the researcher detect any difference between the two levels involved in the research, then to answer the question set at the beginning of the research “Do third year EFL students master the pronunciation of the letter “O” better than first year students?”, the answer to this question will be done as a final stage of the research, of course after having analyzed and discussed the two categories of the words used in the study (Latin and Germanic).

Concerning the question: “Does the interference of the French sound system affect students’ pronunciation of the English letter “O”? is already answered in the above
explanation, students are highly influenced by the French pronunciation (73, 91%) of the Latin words that were mispronounced because of this interference, yet overgeneralization contributes as a further factor of the commitment of errors in the first category of words (26, 08%).

From the 13 graphs that demonstrate the words that are chosen from a Germanic origin, first and third year students produced many pronunciations for the letter “O”. This latter, is used in many contexts mainly, the letter combinations: “oa”, “ough”, “oo”, “oe” and “o” in the onset position, these letter combinations were repeated in more than one word, which leads students to the commitment of the overgeneralization errors like in the words: “road”, “broad”, and “abroad” in which the sequence letter “oa” was pronounced the same in the three words. A clear overgeneralization also occurs in the words: “tough”, “bough” and “cough” which all of them share the letter sequence “ough”, however, they are not pronounced the same way. Also the two words “crook” and “spook” which both contain the part “ook”, which is generally pronounced as /ʊk/, yet the word “spook” in here is the exception which is pronounced with a long /uː/ sound instead of the sound /ʊ/. Moreover, a large number of students from both groups: (43, 33%) for the first group, and (60%) for the second group articulated the word “oven” /ˈʌvən/, the same way as “over” /ˈəʊvə/ is pronounced, and this again shows that overgeneralization was the main factor why students produced errors at the level of the pronunciation of the word “oven”.

The interpretation of the second section “Germanic words” is done in the practical part. All in all, it is worth mentioning that the majority (76, 92%) of mispronunciations of the Germanic words were due to students’ overgeneralization of certain rules over the other. Howbeit, few of these words (23, 07%) mainly: “foreshore”, “whoa” and “Bootle” were mispronounced because of the lack of concentration on the word’s spelling or because some of them were not familiar to most of the students. Eventually, we end up by
answering the question: “To what extent the overgeneralization of the already existing English phonological rules affect students’ pronunciation?” and confirm that overgeneralization was the main reason why first and third year students mispronounced the majority (76, 92%) of the Germanic words.

Using the T test for two independent means we also confirmed the second hypothesis, i.e. third year students performed better than first year students in pronouncing the letter “O” in the different contexts studied. This makes us assume that, in general, there seem to be a progress from first year to third year in pronunciation ability. This of course needs a separate study that traces the same students from first year to third year, or even master levels.

Conclusion

This chapter was devoted to the fieldwork of this study. As it has been mentioned earlier, a descriptive and comparative method was adopted to carry out this research, which aims at identifying, and classifying the errors made by first and third year students at the department of English, Larbi Ben M’hidi University, then comparing between both groups to figure out any difference between them in pronouncing the letter “O” was the main issue to be analyzed in this research. The analysis of the data gathered from the recordings of both groups’ readings of the word list covers and answers the questions set earlier, and validates the research’s hypotheses. In other words, it has been confirmed that the interference of French, and the overgeneralization of the English pronunciation rules are the main factors of students’ mispronunciations of the letter “O”, in addition, by using the T-test it has been figured out that there is a significant difference between first and third year students’ articulations of the targeted letter (third year participants were better than first year participants).
General Conclusion

The general aims of this study were to identify and classify the errors of pronunciation at the level of the letter “O”, and to see if there is a difference in pronunciation performance between first and third year students in the department of English at Larbi Ben M’hidi University. The whole dissertation was made up of two main chapters. The first one was theoretical in which a section was devoted to the field of error analysis, and another to the issues of pronunciation, English speech sounds and the letter “O”. The second chapter covered the practical part and its detailed procedures in this study through the use of audio recordings. The data was then analyzed through comparative and descriptive analysis.

Results from the errors’ analysis showed a significant difference between first and third year participants in pronouncing the letter in question. Moreover, it was confirmed that interference of the French sound system and overgeneralization were the two main factors leading students to mispronunciation and played a role in influencing learners’ speaking accuracy. Finally, the information that was obtained from this study was used to inform EFL teachers of the sources of the errors produced in pronunciation so as to allocate more time for pronunciation teaching and provide some useful pedagogical implications and suggestions for further research in the same field.

2.4. Limitations of the Study

Like any other research, some difficulties were encountered at some points in this study. First of all, using the term “error” which was referred to the most of the students’ mispronunciations was not always true, because the occurrence of errors in some words is not enough to be sure that learners are actually making errors and not mistakes. Another factor to consider is the attempt to point out the sources of errors in this research. The
identification of those errors was based on the origin of the targeted words in this study (Latin or Germanic). The identification of their sources was based on the two factors set earlier: interference regarding words of French or Latin origin, and overgeneralization regarding Germanic words. Yet, there are other sources of errors, or more accurately, mistakes which were scarce in their occurrence, mainly slips of the tongue, and lack of concentration on the words’ spellings.

Other secondary problems faced in this research were: the noise that was in the corridors, thus, some recordings were very difficult to listen to. Furthermore, some students were reading the words in a very weak voice, and others were just in hurry to finish uttering them. Other students did not pronounce some words that seemed difficult to them, while others did not have the desire to be part of the study and they refused to collaborate.

2.5. Suggestions for Future Research

What might be suggested for future research about the same topic “pronunciation” is that having more time will allow for the selection of more and larger list of words, because the identification and analysis of pronunciation errors need a large quantity of words to be used in more than one or two occurrences, so that the identification of their sources will be valid and reasonable. In addition, the researcher should vary the ways in which the vowels or consonants he/she will choose to be pronounced, i.e., to put the words in short passages, or sentences, or to use poems so that students will not be aware of the subject matter under investigation. Likewise, the use of interviews with students is a very important tool to be used in a research pursuing a topic of pronunciation accuracy.
2.6. Pedagogical Implications

Actually, pronunciation accuracy is still a marginalized aspect of learners’ knowledge in academic settings. Generally, EFL teachers focus more on fluency and listening skills, and most importantly how to successfully use the best techniques of comprehension in the EFL classes. Phonetics classes are not well handled in our teaching programs, teachers are more focusing on grammar and vocabulary rather than paying attention to the pronunciation aspect in teaching, and thus pronunciation is only taught at universities no more than one or two years.

The findings of this research can act as a valid standpoint from which teachers can think to start adjusting their teaching materials to deal with errors at such an advanced stage or at least look for better techniques and strategies to remediate or minimize these errors occurrences especially at first year university level. Eventually, it would be very important to inform teachers of the errors resulting from French language interference and overgeneralization, so that they pay a close attention to make learners aware of their errors and their main sources so that learners will be more aware of their pronunciation accuracy.
List of References


Fraser, H. (2000). *Literacy Vs oral communication skills for ESL learners*. In Literacy Link, Newsletter of the Australian Council for Adult Literacy.


http://www.cambridge.org/servlet/file/EPP_PED_Glossary.pdf?ITEM_ENT_ID=2491706&ITEM_VERSION=1&COLLSPEC_ENT_ID.


# Appendix one: The 36-Word List

<table>
<thead>
<tr>
<th>Obtain (v)</th>
<th>Colonel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>Road</td>
</tr>
<tr>
<td>Democratic</td>
<td>Tough</td>
</tr>
<tr>
<td>Occasion</td>
<td>Crook</td>
</tr>
<tr>
<td>Courage</td>
<td>Broad</td>
</tr>
<tr>
<td>To oblige</td>
<td>Abroad</td>
</tr>
<tr>
<td>Disposition</td>
<td>Bough</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Spook</td>
</tr>
<tr>
<td>Concede (v)</td>
<td>Cough</td>
</tr>
<tr>
<td>Sabotage</td>
<td>Whoa</td>
</tr>
<tr>
<td>Arrogance</td>
<td>Copious</td>
</tr>
<tr>
<td>Colony</td>
<td>Consent</td>
</tr>
<tr>
<td>Official</td>
<td>Soar</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Oven</td>
</tr>
<tr>
<td>Trophy</td>
<td>Foreshore</td>
</tr>
<tr>
<td>Oboe</td>
<td>Collide (v)</td>
</tr>
<tr>
<td>Bootle</td>
<td>Console (v)</td>
</tr>
<tr>
<td>Foe</td>
<td>Conduct (v)</td>
</tr>
</tbody>
</table>
Résumé

L’exactitude de la prononciation est un problème rencontré par la plupart des étudiants dans leur apprentissage des langues étrangères. Cette étude a été effectuée pour deux buts. Elle vise à identifier, analyser et décrire les erreurs que les étudiants de la langue anglaise produisent lors de la prononciation de la lettre “O”. Deuxième objectif : comparer entre la performance, et puis le taux d’erreurs des étudiants de première et de troisième année dans la prononciation de cette lettre. Notre but ultime est d’évoquer la conscience des enseignants aux erreurs commises par les étudiants de la langue anglaise en prononçant cette lettre, afin qu’ils envisagent de remédier à ces erreurs et mettent plus de focus et plus de temps pour enseigner la prononciation. Dans cette étude il est émis l’hypothèse qu’il existe un déficit dans la prononciation des étudiants de première et de troisième année de la lettre “O”. Il est également supposé qu’il y a une différence entre les étudiants d’anglais de première et de troisième année en prononçant cette lettre, supposant que celles de troisième année étant mieux dans leur performance. A travers une analyse d’erreur une méthode descriptive et comparative est utilisée pour savoir toute différence entre les prononciations des étudiants de première et de troisième année de la lettre en question. Le travail de terrain est effectué suivant une méthode descriptive et comparative avec l’utilisation d’une technique d’enregistrement vocal pour collecter les données. L’étude a confirmé qu’il y a un manque de maîtrise dans la prononciation de la lettre “O” dans les deux groupes, principalement en raison de l’interférence et de la sur-généralisation. Les résultats ont aussi confirmé qu’il y a une différence significative entre les deux niveaux impliqués dans cette étude dans la prononciation de la lettre ciblée, les étudiants de troisième année ont mieux réussi que les étudiants de première année.

Mots clés : l’exactitude de prononciation, erreurs, la lettre « O », interférence, la sur-généralisation.
ملخص

إن دقة النطق مشكلة يواجهها معظم الطلاب أثناء تعلمهم للغات الأجنبية. الهدف من هذه الدراسة هو تحديد وتحليل ووصف الأخطاء المرتكبة من قبل طلاب اللغة الإنجليزية (جامعة العربي بن مهيدي) أثناء نطق الحرف ’0’.

بالإضافة إلى المقارنة بين طلاب السنة الأولى و السنة الثالثة وبالتالي المقارنة بين معدل أخطاء طلاب السنة الأولى و السنة الثالثة على مستوى نطق هذا الحرف، يتمثل هدفنا الأساسي في الارتقاء بوعي الأساتذة بإحاطة الطلاب أثناء نطق هذا الحرف للتفكير في معالجة هذه الأخطاء ووضع المزيد من التركيز والوقت لتعليم النطق. كفرضية أولى في هذه الأطروحة: هناك عجز واضح في نطق طلاب السنة الأولى والثالثة للحرف ’0’.

كفرضية ثانية، هنالك فرق بين طلاب السنة الأولى والثالثة في نطق الحرف ’0’، و أن طلاب السنة الثالثة أحسن من طلاب السنة الأولى. من خلال تحليل الأخطاء طريقة المقارنة ووصفكما المتبانين في هذا البحث للكشف عن أي فرق بين طلاب السنة الأولى و السنة الثالثة في نطق الحرف المقصود. تم تنفيذ العمل الميداني باستخدام مسجل صوتي لجمع البيانات، و قد أكد هذا البحث أن هناك عدم إحترام في نطق الحرف ’0’ في كلا المجموعتين ويرجع ذلك أساسا إلى التدخل والتعليم المفرط.

وقد أكدت كذلك نتائج هذه الدراسة على وجود فرق كبير بين المستويين المشاركين في هذا البحث على مستوى نطق الحرف ’0’.

وقد كان نتائج هذه الدراسة على وجود فرق كبير بين المستويين المشاركين في هذا البحث على مستوى نطق الحرف ’0’.

الكلمات المفتاحية: دقة النطق، الأخطاء، الحرف ’0’، التدخل، التعليم المفرط.