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ماجستير اللغة الإنجليزية

## **Investigating Difficulties Facing Palestinian EFL Students in Pronouncing English Vowels.**

دراسة صعوبات نطق أصوات العلة الإنجليزية التي تواجه الدارسين  
الفلسطينيين للغة الإنجليزية كلغة أجنبية

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## إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

# Investigating Difficulties Facing Palestinian EFL Students in Pronouncing English Vowels.

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## نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة عمادة البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ محمد لامع سعدي اسعد شملخ لنيل درجة الماجستير في كلية الآداب/ قسم اللغة الإنجليزية (اللسانيات التطبيقية) وموضوعها:

دراسة صعوبات نطق أصوات العلة الانجليزية التي تواجه الدارسين الفلسطينيين للغة الانجليزية كلغة أجنبية

### Investigating Difficulties Facing Palestinian EFL Students in Pronouncing English Vowels

وبعد المناقشة التي تمت اليوم السبت 8 جمادي الثانية 1439 هـ الموافق 2018/02/24 الساعة العاشرة صباحاً، في قاعة مبنى القدس اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله تعالى ولزوم طاعته وأن يسخر علمه في خدمة دينه ووطنه.

والله ولي التوفيق،،،

عميد البحث العلمي والدراسات العليا

.....

أ.د. مازن إسماعيل هنية



## **Abstract**

The research aims at investigating Errors Committed by Palestinian University English Language Students in Pronouncing English Vowels (monophthongs and diphthongs). The research was confined to male university students at the Islamic University-Gaza (IUG) and was carried out by involving 71 of the targeted population.

Regarding the data collection tools, the research used: 1) questionnaire in order to investigate students' attitude towards pronouncing English Vowels. 2) interviews that includes words list to be pronounced by the interviewed students. The words list included 12 monophthongs and 8 diphthongs in three different positions: word initial, word medial and word final.

The findings of the research reveal that the most problematic monophthong sounds are: /æ/, /ɒ/, /ɔ:/, /u:/, /ɜ:/ and /i:/ those sounds did not exceed 50% of correct pronunciations. Moreover, the most problematic diphthong sounds are: ʊə/, /Iə/, /əʊ/, /eə/, /eI/ and /aʊ/ such sounds are the ones that did not exceed 50% of correct pronunciations. Additionally, investigated students showed an overall positive attitude towards pronouncing English vowels as well as reflecting clear understanding and knowledge about key weaknesses and the appropriate mechanisms to overcome them.

Based on the finding of the research, it is recommended to attribute additional attention to speaking skills including pronunciation, the needed attention cannot be attained without placing into testing and/or include it in universities' grading system.

## ملخص البحث

تهدف الدراسة الى التعرف على الأخطاء التي يرتكبها طلاب الجامعات في نطق أحرف العله الإنجليزية، حيث

تقتصر الدراسة على الطلاب الذكور المتخصصين في دراسة اللغة الإنجليزية في الجامعة الإسلامية في غزة، إذ

اشتملت عينة البحث على ما مجموعه 71 طالبا.

جمع الباحث البيانات الأولية للبحث من خلال:

1. استبيان والذي يهدف الى التعرف على مواقف واتجاهات الطلاب المبحوثين حول أصوات العله باللغة

الإنجليزي.

2. مقابلة والتي تم من خلالها تسجل الأصوات المنطوقة عبر قوائم الكلمات، حيث اشتملت قوائم الكلمات

على مفردات تمثل 12 صوت عله منفرد و 8 أصوات عله مركبه من صوتين، إذ تم اختبار كل من

الأصوات في ثلاث مواضع مختله: أول الكلمة، منتصف الكلمة، وآخر الكلمة.

أظهرت الدراسة بعد فحص وتحليل الأصوات بأن أصوات العله المفردة: /i:/، /ɜ:/، /u:/، /ɔ:/، /v/، /æ/ هي

أكثر الأصوات صعوبة على الطالب حيث لم تتجاوز نسب الأصوات الصحيحة الـ 50%. كما تبين بعد دراسة

وتحليل الأصوات بأن أصوات العله المركبة من صوتين /au/، /ei/، /eə/، /əv/، /Iə/، /və/ هي أكثر الأصوات

صعوبة على الطالب حيث لم تتجاوز نسب الأصوات الصحيحة الـ 50%.

## **Dedication**

To the most encouraging protecting and devoting... My Father

To the endless love support and passion... My Mother

To the model, advice and passion... My Brother

To patience and love in my life... My Wife

To the most beautiful... My sisters

To the best my life... My Son and My Daughters

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## Table of Contents

Declaration .....	I
Abstract .....	II
Dedication .....	IV
Acknowledgement.....	V
Table of Contents .....	VI
List of Tables.....	VIII
List of Figures .....	IX
List of Abbreviations.....	X
<b>Chapter One: Introduction</b> .....	1
1.1 Introduction.....	2
1.1.1 English Vowels .....	3
1.2 Research Problem.....	5
1.3 Research Question.....	5
1.4 Research Hypotheses: .....	6
1.5 Objectives of the Study .....	6
1.6 Significance of the Study .....	7
1.7 Limitations of the study .....	7
<b>Chapter Two: Literature Review</b> .....	8
2.1 Section One: Theoretical Frame .....	9
2.1.1 Phonetics and Phonology.....	9
2.1.2 Pronunciation Definition.....	10
2.1.3 English Vowel Sounds.....	11
2.1.4 Modern standard Arabic Vowel Sounds.....	15
2.1.5 Correspondence between Spelling and Pronunciation .....	17
2.1.6 Difficulties in Pronunciation.....	21
2.2 Section Two: Previous Studies .....	24
2.2.1 Commentary.....	29
<b>Chapter Three: Research Methodology</b> .....	31
3.1 Introduction.....	32
3.2 Research Methodology .....	32
3.3 Population and sample size:.....	33
3.4 Instrumentations .....	34
3.4.1 The Questionnaire .....	35
3.4.2 Reliability of Questionnaire.....	41
3.5 Interview .....	41
3.5.1 Validation of interview: .....	42
3.5.2 Reliability of the interview: .....	42
3.5.3 Findings of the Interview .....	44



<b>Chapter Four: Results and Data Analysis</b> .....	47
4.1 Introduction .....	48
4.2 Analysis of Questionnaire Item.....	48
4.3 Interview .....	60
4.3.1 Validation of interview: .....	61
4.3.2 Findings of the Interview .....	62
4.4 Discussion of Hypothesis Testing.....	84
4.4.1 Palestinian EFL make more errors with English diphthongs than monophthongs.....	84
4.4.2 There is statistically significant relation between difficulties in pronouncing English vowel sounds (monophthongs and diphthongs) and the learners' levels and General Point Average (GPA)? .....	84
4.4.3 Palestinian EFL make pronunciation errors due to interlingual difficulties. ....	85
4.4.4 Palestinian EFL learners make pronunciation errors due to intra lingual difficulties. ....	86
4.4.5 Palestinian EFL attitudes towards the pronunciation of English vowel sounds (monophthongs and diphthongs) are positive.....	86
4.4.6 There are variations in pronunciation errors that are attributed to vowel's sound position (word initial, middle and final).....	87
<b>Chapter Five: Findings, Conclusion and Recommendations</b> .....	88
5.1 Findings.....	89
5.2 Conclusions .....	90
5.3 Recommendation.....	91
5.4 Suggested Remedial Program .....	92
5.5 Recommendation for Further Studies .....	93
<b>References</b> .....	94
<b>Appendices</b> .....	99
5.5.1 Framework for teaching pronunciation and providing strategies to teach so.....	105
5.5.2 Framework for teaching language learning strategies. ....	106

## List of Tables

<b>Table (1.1):</b> Involved Vowels in the research .....	5
<b>Table (2.1):</b> Simple, Short Vowels (Monophthongs) .....	12
<b>Table (2.2):</b> Simple, Long Vowels (Monophthongs).....	13
<b>Table (2.3):</b> Simple, Long and Short Vowels (Monophthongs) .....	14
<b>Table (3.1):</b> Distribution of Research's Population.....	33
<b>Table (3.2):</b> Distribution of Research's Sample .....	34
<b>Table (3.3):</b> Categorization of Questionnaire Items .....	36
<b>Table (3.4):</b> Correlation coefficient of each item and the whole of questionnaire .....	39
<b>Table (3.5):</b> Word List Presented in the Interview .....	43
<b>Table (3.6):</b> Finding of the Interviews, in Relation to Monophthongs.....	44
<b>Table (3.7):</b> Findings of the Interviews in Relation to Diphthongs.....	46
<b>Table (4.1):</b> Means and Test values for each item of the questionnaire .....	55
<b>Table (4.2):</b> Respondent's University GPA .....	58
<b>Table (4.3):</b> Respondent's Level at university education.....	58
<b>Table (4.4):</b> Independent Samples T-test - GPA University.....	59
<b>Table (4.5):</b> Independent Samples T-test - Level at university education.....	60
<b>Table (4.6):</b> Finding of the Interviews in Relation to Monophthongs.....	62
<b>Table (4.7):</b> Findings of the Interviews in Relation to Diphthongs.....	75
<b>Table (4.8):</b> Independent Samples T-test - GPA University.....	83
<b>Table (4.9):</b> Independent Samples T-test - Level at university education.....	83
<b>Table (5.1):</b> Total Average Rate of Monophthongs and Diphthongs .....	84
<b>Table (5.2):</b> Independent Samples T-test - GPA University.....	85
<b>Table (5.3):</b> Independent Samples T-test - Level at university education.....	85
<b>Table (5.4):</b> Means and Test values for each item of the questionnaire .....	86
<b>Table (5.5):</b> Count and Rate of the Incorrect Pronunciations .....	87

## List of Figures

<b>Figure (2.1):</b> Modern Standard Arabic Vowels (Monophthongs) .....	16
<b>Figure (2.2):</b> Modern Standard Arabic Vowels (Diphthongs) .....	17
<b>Figure (4.1):</b> /ə/ and /ʌ/ sound.....	74

## **List of Abbreviations**

EL: English Language

EFL: English as a Foreign Language

ELL: English Language Learners

RP: Received Pronunciation

AL: Arabic Language

MSA: Modern Standard Arabic

IUG: Islamic University of Gaza

# **Chapter One:**

## **Introduction**

# Chapter One

## Introduction

### 1.1 Introduction

Language is a system that consists of the development, acquisition, maintenance and use of complex systems of communication, particularly the human ability to communicate and express themselves verbally or non-verbally. Additionally, In our everyday life, the most common and easiest way to communicate is through speech. From time immemorial, people have always preferred speech to other means of communication to express their ideas and feelings and successfully interact in their communities. Any communication process requires that the speaker and the listener understand each other, otherwise it breaks down. One of the most important factors to ensure effective communication is good pronunciation without which communication is hard or even impossible.

In this regard (Khader, 2017) view language as a systematic coordination of sounds, vocals and symbols. Such sounds are shaped from the organs of speech to send some expressive messages. Humans use sounds for linguistic signaling. This is due to the structure of the human vocal organs that enable man to produce a wide range of sounds that can be put together in an extraordinarily sophisticated way.

Differentiating between phonetics and phonology is such a difficult task, still figuring out variations is possible. Phonetics deals with the physics of human sound by being interested more with “acoustic waveforms, formant values, measurements of duration measured in milliseconds, of amplitude and frequency, or in the physical principles underlying the production of sounds” Odden (2005, p.2). On the other hand, phonology is an intellectual cognitive structure that provides guidelines to mental grammar. This mental grammar is the thing that deals with man's subconscious and how this subconscious relates language sounds together. Additionally, mental grammar is the generative grammar stored in the brain that allows a speaker to produce language that other speakers can understand. Also known as competence grammar and linguistic competence (Chomsky, 1957).

According to Bloomfield (1933), Lyons (1968) and Bloch and Trager (1942), spoken versions of languages were used many years before the written versions.

Accordingly, it can be said that man's communication was heavily handled for speaking, and this was the case until the written scripts have seen the light.

Consequently, the researcher thinks that even with the presence of written scripts, and with its importance in keeping and maintaining information, the spoken form of the language still keeps a strong fist over language due to the wider usage over written form of any language.

This importance of the spoken form of language makes anyone learning a foreign language, including Arab learners, dreams to sound native like, still this thing is hard to be achieved by a considerable amount of foreign language learners because such learners think that they speak English clearly, but in fact they do make numerous errors specially in pronouncing English sounds due to variations in sound systems and absence of some English sounds in either standard or colloquial Arabic. (Dirou, 2016).

Arabic and English vary in their linguistic systems for they belong to two different families the thing that leads each language to use different language components: phonology, morphology, syntax and semantics (Na'ama, 2011).

Avery and Ehrlich (2012) said that the mother tongue of any language learner has an effect on learner's ability to produce the sounds of the English language. In other words, learners face difficulties in pronouncing some sounds, especially sounds that do not have an equivalent in their mother tongue. Thus, Arab learners find it challenging to produce particular sounds that do not exist in Arabic.

### **1.1.1 English Vowels**

The pronunciation of English vowels has recently received more attention from language teachers and researchers who are interested in the learning and teaching of English as a foreign language (EFL). In fact, correct pronunciation of words is largely dependent on the pronunciation of vowel sounds. This fact suggests that pronunciation problems of English vowels can affect the meaning of words which leads to comprehensibility problems. A major factor that affects learning the pronunciation of English vowels is the irregular relationship that exists between English vowel alphabets and the vowel phonemes of English (Ali, 2011).

In fact, the letter-sound relationship of English is irregular. That is, a direct phoneme-grapheme correspondence is rare in the English orthography system. This can be attributed to historical reasons where the vocabulary items of English developed

from different languages including, but not limited to, Celtic, German, French, Latin and Greek, such origins do have different orthography systems (Baugh & Cabole, 1993).

Ali (2011) assumes that if the relationship between letters and sounds was clear and direct to first speech members, it might not remain the same as time passes for the following speech members. They will have difficulty in understanding the relationship between letters and sounds. An example of this is clear in English words such as “knight” that descends from German, presenting a cognate of “knecht”. English orthography writes it as knight and it pronounces it as /naIt/.

Moreover, Shandera & Burleigh (2005) asserted that the study of English vowels system is relatively complicated. This complication can be attributed to the fact of having various sets of phonetic vowels' symbols even for those who claim following the International Phonetic Alphabet- IPA.

To this end, in an attempt to define vowels, Roach (2009, p. 10) states that “vowels are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips”.

“Vowels are made by voiced air passing through different mouthshapes; the differences in the shape of the mouth are caused by different position of the tongue and of the lips” (O'connor, 1998, p.79)

Crystal (2008, p, 543) provides a more comprehensive definition for vowels: “The vowel is one of the two general categories used for the classification of speech sounds...Vowels can be defined in terms of both phonetics and phonology. Phonetically, they are sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction; the air escapes evenly over the centre of the tongue...In addition to this, in a phonetic classification of vowels...would generally be made to two variables...(a) the position of the lips – whether rounded, spread, or neutral; (b) the part of the tongue raised, and the height to which it moves.”

Based on Crystal (2008), Roach (2009), O'connor (1998) and Pennington's (1996) review this research is going to involve 12 simple vowels (monophthongs), and 8 Diphthongs.

The table below shows the involved sounds into investigation.



**Table (1.1): Involved Vowels in the research**

	Vowel Class	Sounds
1	Simple Vowels (Monophthongs)	/ I, i:, e, ɜ:, æ, ə, ʌ, u:, ʊ, ɔ:, ɒ, ɑ:/
2	Diphthongs	/Iə, ʊə, eɪ, əʊ, ɔɪ, eə, aɪ, aʊ/

## 1.2 Research Problem

The main problem here arises from the fact that Arabic and English Language vary in their sound systems. This variation poses some serious difficulties because certain phonemic segments and patterns encountered in English are not found in Arabic. The researcher attempted to shed light on the problems that Arab learners of English faced with particular vowel sounds. Such difficulties force some serious errors, whereas these errors are considered a big defect in the pronunciation of English language students at Gaza Universities.

This study is designed to identify errors that Gaza University students at the second and fourth level commit in pronouncing English vowels, in addition to attempting to provide an explain for such errors.

This study also aims at arriving at some conclusions, and pedagogical suggestions that may help university instructors to understand and correct their students' errors in a more systematic and scientific way.

## 1.3 Research Question

Based on the previous discussion the main research question is:

**What are the Vowel Pronunciation Errors Committed by Islamic University of Gaza (IUG) English Language Students in Pronouncing English Vowels?**

In an attempt to answer the former question, the researcher breakdowns the main question into the following sub-questions as follow:

- ☒ What is more problematic for Palestinian (EFL) Learners in pronouncing English vowels (diphthongs or monophthongs)s?
- ☒ Are there statistically significant differences in the means scores of error in pronouncing English vowel sounds (monophthongs and diphthongs) due to learners' University level and General Point Average (GPA)?

- ☒ To what extent do Palestinian EFL learners make pronunciation errors due to interlingual difficulties?
- ☒ To what extent do Palestinian EFL learners make pronunciation errors due to intralingual difficulties?
- ☒ What are Palestinian EFL learners' attitudes towards the pronunciation of English vowel sounds (monophthongs and diphthongs)?

#### **1.4 Research Hypotheses:**

- Palestinian EFL Learners make more errors with English diphthongs than monophthongs.
- There are statistically significant differences in the means scores of error in pronouncing English vowel sounds (monophthongs and diphthongs) due to learners' University level and General Point Average (GPA)
- Palestinian EFL Learners make pronunciation errors due to interlingual difficulties.
- Palestinian EFL Learners make pronunciation errors due to intralingual difficulties.
- Palestinian EFL Learners' attitudes towards the pronunciation of English vowel sounds (monophthongs and diphthongs) are positive.
- There are variations in pronunciation errors that are attributed to vowel's sound position (word initial, middle and final)

#### **1.5 Objectives of the Study**

- To identify Palestinian University English Language Students' difficulties in Pronouncing English Vowel Sounds (Monophthongs, Diphthongs);
- To determine the impact of Place (word initial, medial and final position) on the accuracy of pronouncing vowel sounds (Monophthongs, Diphthongs);
- To explore students' attitude towards pronouncing English vowels (Monophthongs and Diphthongs);
- To provide empirical findings and results for tutors, teachers, students and interested scholars for further development in teaching and learning English vowel sounds;

## **1.6 Significance of the Study**

The significance of this study rises from the researcher's experience in the field of teaching for the last eight years and his interaction with foreigners visiting Gaza strip.

The researcher, during his experience in the field of English language teaching in both public schools and private language centers, has noticed that students face some obstacles in English language pronunciation. This resulted into committing pronunciation errors, especially in the English vowel sounds.

Moreover, the researcher himself encountered some problems, during his early career life, in interacting with foreigners visiting Gaza, during interpretation and/or discussion. Such incorrect pronunciation in many cases hindered the flow of communication, as the addressee used to ask the researcher to repeat what he was saying, or asking for additional clarification.

To this end, the researcher thinks that it is a problematic area for ELL where significant attention should be paid to this issue. Thus, the researcher believes the first stage to solve this issue is to identify the problem and have a scientifically based investigation for it. In other words, it is worthy to investigate the most common places of errors committed by English language learners. After that plans and recommendations can be concluded to tackle such a problem.

The researcher is aware that such studies were done in the Arab world, still according to the researcher's knowledge such an issue was not investigated recently in the Gaza Strip. Moreover, the researcher thinks that Palestinian Arabic is an important factor for committing to pronunciation errors. As a result, it is worthy to make such an investigation in the context of the local Palestinian Arabic.

## **1.7 Limitations of the study**

This study will mainly deal with the English vowels system, which includes Monophthongs and Diphthongs. The study is confined to male English language department students at the Islamic University of Gaza.

# **Chapter Two: Literature Review**

## **Chapter Two**

### **Literature Review**

#### **2.1 Section One: Theoretical Frame**

##### **2.1.1 Phonetics and Phonology**

A highlighted previously studying pronunciation includes two areas of linguistics: phonetics and phonology. The study of pronunciation system of a language is known as phonology, whereas the study of the sounds themselves is known as phonetics.

Other scholars elaborated more in differentiating between phonetic and phonology. According to Crystal (2008), phonology is that part of linguistics that is concerned with the sound systems of languages. This science is limited to the number of sounds that are used distinctively in any language. In other words, “phonology is concerned with the range and function of sounds in specific languages, and with the rules which can be written to show the types of phonetic relationships that relate and contrast words and other linguistic units” (Crystal, 2008, p. 365).

Additionally, Giegerich, et al., (2002) said that phonology focuses on the characteristics of the sound system that differs one language from another. “It is the language-specific selection and organization of sounds to signal meanings” (Giegerich, et al., 2002, p. 2). Accordingly, this makes phonologists more concerned with sound patterns of a specific language.

Further, phonetics, according to Crystal (2008), is that science which studies the features of human sound production, specially the sounds that are used in speech. Crystal (2008) asserts that phonetics provides mechanisms to describe, classify and transcribe human speech sounds.

Furthermore, Little (2006) says that phonetics is that science that studies and classifies speech sounds, casting more emphasis on the physical aspects of their production. Moreover, phonetics is the study of sound of human systems. This science involves anatomic structure, acoustic energy and listeners’ perception (Thorum, 2013).

The current study is mainly focusing on the pronunciation of English vowel (diphthongs and monophthongs) and the difficulty it poses to Palestinian EFL learners it draws on aspects of phonetics and phonology. Thus, the researcher found it useful to make some general insights about phonetics and phonology.

Phonetics is a field which focuses on understanding the way which speech sounds are produced by the speaker, transmitted in the air, and received by the listener. Thus, according to Roach (2001) phonetics can be classified into three fields: 1) articulatory phonetics, 2) acoustic phonetics, and 3) auditory phonetics (Roach, 2001).

Articulatory phonetics is the science that studies the manner speech sounds are produced in by the vocal organs. It is mainly depending on anatomy and physiology, and is sometimes referred to as physiological phonetics. This area usually holds a central place in the training of phoneticians. Thus, the classification of sounds used in the International Phonetic Alphabet (IPA) is based on articulatory variables (Crystal, 2008) and (Roach, 2001).

Acoustic Phonetics is a division of phonetics which focuses on the physical aspects of speech sound during way form mouth to ear (Crystal, 2008). It is completely dependent on the use of instrumental techniques of investigation, particularly electronics, and some grounding in physics and mathematics is a prerequisite for advanced study of this subject. Its importance to the phonetician is that acoustic analysis can provide a clear, objective datum for investigation of speech (Crystal, 2008).

Auditory Phonetics is that part of phonetics which investigates the perceptual reaction to speech sounds, as received by ear, auditory nerve and brain. This field is less investigated than other fields mainly because of the difficulties encountered as soon as one attempts to identify and measure psychological and neurological responses to speech sounds. Anatomical and physiological studies of the ear are well advanced, as are techniques for the measurement of hearing, and the clinical use of such study is now established under the headings of audiology and audiometry (Crystal, 2008).

### **2.1.2 Pronunciation Definition**

Attempting to define pronunciation usually reflected the different back grounds of scholars approaching it. For instance, Trask (1996) defined pronunciation as “the manner in which speech sounds, especially connected sequences are articulated by individual speakers or by speakers generally” (Trask, 1996, p. 291) This definition, focuses on studying, investigating and describing speech sounds.

Additionally, Pennington & Richards (1986) says that “pronunciation is largely identified with the articulation of individual sounds and, to a lesser extent, with the stress and intonation patterns of the target language...” (Pennington & Richards, 1986,

p. 208). This definition adds a broader range than the former for it goes further to incorporate other articulatory aspects, namely stress and intonation patterns.

Moreover, Richards and Renandya (2002) and Roach (2001) agreed to view pronunciation as the combination of individual sounds, sound segments and supra segmental features (including tone, stress, rhythm, and intonation). The former combination can occur in group or connection to each other.

### **2.1.3 English Vowel Sounds**

Vowel sounds are those sounds that are produced with no obstruction to the airflow or the regressive pulmonic airstream when passing from the larynx to the lips (Roach, 2009), (McMahon, 2002) and (O'Connor, 1980). Additionally, Crystal (2008, p. 517) elaborated more on vowels as follows:

“One of the two general categories used for the classification of speech sounds, the other being consonant. Vowels can be defined in terms of both phonetics and phonology. Phonetically, they are sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction; the air escapes evenly over the center of the tongue. If air escapes solely through the mouth, the vowels are said to be oral; if some air is simultaneously released through the nose, the vowels are nasalized. In addition to this, in a phonetic classification of vowels, reference would generally be made to two variables, the first of which is easily describable, the second much less so: (a) the position of the lips – whether rounded, spread, or neutral; (b) the part of the tongue raised, and the height to which it moves.”

The only obstruction for vowel sounds is in the larynx itself as the vocal folds are closed and for the air to pass it pushes them apart causing vibration. As mentioned above, this is the case with all voiced sounds, vowels included. Nonetheless, after this obstruction of the vocal folds, the air makes its way outside without any more stop from other articulators.

Moreover, vowels are commonly described according to certain parameters (Shriberg & Kent, 2003)

- The portion of the tongue that is involved in the articulation. Example: front versus back vowels
- The tongue's position relative to the palate.

Example: high versus low vowels.

- The degree of lip rounding or unrounding

There are two types of vowels: monophthongs and diphthongs. Monophthongs remain qualitatively the same throughout their entire production. They are pure vowels as Abercrombie (1967) said. Diphthongs are vowels in which there is a change in quality during their duration. The initial segment, the beginning portion of such a diphthong, is phonetically referred to as the onglide and its end portion as the offglide (Ladefoged, 2005).

### 2.1.3.1 Types of English Vowel Sounds

English vowels can be grouped into two main classes: Simple Vowels and Non simple Vowels. The former includes Monophthongs, long and short, and the former includes Diphthongs and Triphthongs. However, due to the research limitation discussion and presentation will be limited to Monophthongs and Diphthongs as those two are the main focus of the study.

#### 2.1.3.1.1 Simple Vowels (Monophthongs)

In English, we have a large number of vowel sounds. Initially the researcher will discuss the short vowels. English has seven short vowels that are symbolized as follows:

/ I, e, ə, ʌ, ʊ, ɒ, æ/ (Roach, 2009; Crystal, 2008; McMahon, 2002)

**Table (2.1):** Simple, Short Vowels (Monophthongs)

	Front	Central	Back
Closed	I		ʊ
Middle	e	ə	
Open	æ	ʌ	ɒ

Articulated by the researcher based on the review of (Roach, 2009; Crystal, 2008; McMahon, 2002)

- /I/ As in **bit, pin fish**. The lips are slightly spread.
- /e/ As in **bet, men, yes**. The lips are slightly spread
- /æ/ As in **bat, man, gas**. The lips are slightly spread



- /ə/                    **About, oppose, perhaps.** The lip position is neutral
- /ʌ/                    As in **cut, come, rush.** The lip position is neutral
- /ʊ/                    As in **put, pull, push.** The lips are rounded
- /ɒ/                    As in **pot, gone, cross.** The lips are slightly rounded

In contrast to short vowel sounds, there are long vowel sounds called long monophthongs. Such vowel sounds tend to be longer than the short vowels in similar contexts. The five long vowels are as follows: /i:, ɜ:, u:, ɔ:, ɑ:/

**Table (2.2): Simple, Long Vowels (Monophthongs)**

	Front	Central	Back
Closed	i:		u:
Middle		ɜ:	ɔ:
Open			ɑ:

Articulated by the researched based on the review of (Roach, 2009; Crystal, 2008; McMahon, 2002)

- /i:/                    As in **beat, mean, peace.** It is closer and more front and /I/ and lips are he lips are only slightly spread
- /ɜ:/                    As in **bird, fern, purse.** It is Middle- Central sound and the lip position is neutral
- /ɑ:/                    As in **card, half, pass.** This is an open vowel but less back than /ɒ/ The lip position is neutral
- /ɔ:/                    As in **board, torn, horse.** This vowel is almost fully back and has quite strong lip-rounding
- /u:/                    As in **food, soon, loose.** It is more back and more close than /ʊ/. lips are moderately rounded

To sum up the following table (2.3) groups all simple vowels (long and short)

**Table (2.3): Simple, Long and Short Vowels (Monophthongs)**

	Front	Central	Back
<b>Closed</b>	i: ɪ		u: ʊ
<b>Middle</b>	e	ɜ: ə	ɔ:
<b>Open</b>	æ	ʌ	ɑ: ɒ

### 2.1.3.1.2 Nonsimple Vowels (Diphthongs)

A diphthong is a vowel sound that demonstrates articulatory movement resulting in a qualitative change during its production. Its initial portion, the onglide is acoustically more prominent and usually longer than the offglide (Bauman-Waengler, 2009; Balčytytė-Kurtinienė, 2014; Roach, 2009 and Crystal, 2008). In terms of length, diphthongs are similar to the long vowels described above. Perhaps the most important thing to remember about all the diphthongs is that the first part is much longer and stronger than the second part (Celec-Murica, Brinton, & Goodwin, 1996; O'connor, 1980; Roach, 2009). The total number of diphthongs is eight. They are as follows: /eɪ, aɪ, ɔɪ, ɪə, eə, uə, əʊ, aʊ/

Diphthongs Classing		
Central	Closing	
Ending in /ə/	Ending in /ɪ/	Ending in /ʊ/
/ɪə, eə, uə/	/eɪ, aɪ, ɔɪ/	/əʊ, aʊ/

Articulated by the researcher based on (Celec-Murica, Brinton, & Goodwin, 1996; O'connor, 1980; Roach, 2009).

#### 1- Central Vowels

ɪə As in **beard, weird, fierce.**

eə As in **aired, cairn, scarce**

uə As in **moored, tour, lure**

The closing diphthongs have the characteristic that they all end with a glide towards a closer vowel. Because the second part of the diphthong is weak, they often do not reach a position that could be called close.

## 2- Closing Vowels

### - Closing Vowels ending in /ɪ/

/eɪ/            As in paid, pain, face

/aɪ/            As in tide, time, nice

/ɔɪ/            As in oil, point, voice

### - Closing Vowels Ending in /ʊ/

Two diphthongs glide towards ʊ, so that as the tongue moves closer to the roof of the mouth there is at the same time a rounding movement of the lips. This movement is not a large one, again because the second part of the diphthong is weak.

/əʊ/            As in load, home, most

/aʊ/            As in Owl, mount and Bow (v)

#### 2.1.4 Modern standard Arabic Vowel Sounds

The Arabic language is a Semitic language, and is one of the world's most classical languages. Modern Standard Arabic (MSA) has 36 phonemes, of which six are simple vowels, two diphthongs, and 28 are consonants (Alkhouli, 1990; and Deller, Proakis, and Hansen, 1993)

Other researchers consolidate Arabic simple vowels to eight, such writers include the two diphthongs into the simple vowels (Omar, 1991). However, in this research the will be following the former classing six vowels in addition to two more diphthongs. This is due to the fact that after an in-depth investigation it makes more sense for him to group Arabic vowels into six monophthongs and additional two diphthongs (resulting from the combination/ glide from one vowel to another).

The symbols used below to refer to Arabic vowels are taken from (Kopczynski, & Meliani, 1993)

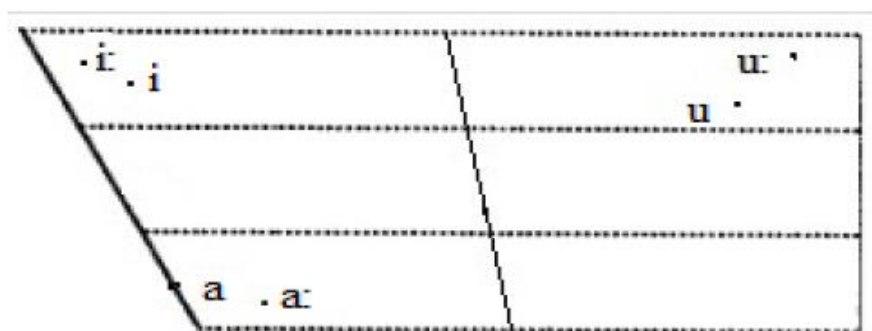
##### 2.1.4.1 Arabic Short Vowels

- /ɪ/ (as in the word /mɪn/ "من" meaning "from") is a high, front, short vowel represented in Arabic by the /kæsræh/, a small diagonal line placed below a letter, e.g. (ﻝ) pronounced as /ɪ/. The lips are neutrally spread when pronouncing this sound.

- /a/ (as in the word /sæd/ with a shorter æ, "سد" meaning "dam") is a low, front, short vowel represented by the /fæthæh/, a small diagonal line placed above a letter, e.g. (ﺃ) pronounced as /læ/. The lips are neutral.
- /u/ (as in the word /hʊm/ "هُم" meaning "they") is a high, back, short vowel represented by the /dæmmæh/, a small curl-like diacritic placed above a letter, e.g. (ﻭ) pronounced as /ʊ/. The lips are loosely rounded.

#### 2.1.4.2 Arabic Long Vowels

- /i:/ (as in the words /dʒi:l/ "جيل" meaning "generation" and /fi:/ "في" meaning "in") is a high, front, long vowel represented in Arabic by the letter (ي) /yæʔæ/. The lips are slightly spread.
- /a:/ (as in the words /la:/ (a: is pronounced longer than the English æ) "لا" meaning "no" and /ma:l/ "مال" meaning "money") is a low, front, long vowel represented in Arabic by the letter (ا) /æɪf/. The lips are neutrally open.
- /u:/ (as in the word /nu:n/ "نون" meaning "letter n in Arabic") is a high, back, long vowel represented in Arabic by the letter (و) /wao/. The lips are closely rounded



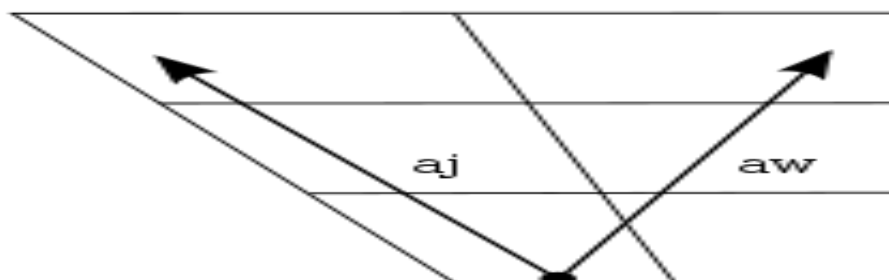
**Figure (2.1):** Modern Standard Arabic Vowels (Monophthongs)

(From Kopczynski, and Meliani 1993, 187)

Modern Standard Arabic vowels are only six in number as discussed above; nevertheless, some combinations of vowels which are allowed in some dialects can be considered diphthongs. These two combinations or diphthongs are;

1. /au/ a combination of a /fæthæh/ and u /dæmmæh/ as in the word /naum/ "نوم" meaning "sleep". As noticed, the /wao/ "و" is written yet pronounced more like a /dæmmæh/.

2. /ai/ a combination of a /fæθæh/ and i /kæsræh/ as in the word /bait/ "بيت" meaning "home". Again, the /yæ'æ/ here is shortened and pronounced as a /kæsræh/.



**Figure (2.2):** Modern Standard Arabic Vowels (Diphthongs)

(From Kopczynski, and Meliani 1993, 187)

### 2.1.5 Correspondence between Spelling and Pronunciation

Several factors influence the relation between written and spoken system of a language. Pronunciation is rarely affected by a word spelling, and spelling may gradually be modified in accordance with changes in the phonological system (Khansir, English Spelling and Sound, 2012). Thus, Bloomfield (1933, p.21) asserted that “writing is not language but merely a way of recording language by means of visible marks”. In the same context, Khansir (2010) said that the written version of language has to have systematized form by making use of the components, namely graphemes, vocabulary, syntax, and so on, so as to make a decoder understand it clearly. Language is a storehouse of knowledge with many dimensions of production and reception, so a standard system is needed to record a language in coded form.

Nonetheless, the researcher think that Pronunciation is the central factor in recognizing word in spoken forms. Hence, learning accurate pronunciation of English words is the most important factor in learning and teaching a foreign and second language specially when we know that pronunciation is dilemmic for English language learners, for English language does not have fixed phonetic rules, due to the fact that English has borrowed words and expressions extensively from many languages throughout its history.

The case is different in Arabic, starting with the word "broke" in Arabic is pronounced /kæsræh/ and written as (كسَرَ) ; six letters or graphemes represent six phonemes, thus, in Arabic, speakers usually pronounce what they see or what is written (Abushihab, 2010).

In other words, spelling in Arabic is regular since there is correspondence between graphemes and phonemes. Thus, Arabic orthography can be described as shallow or transparent orthography, which is defined as “a type of orthography in which there is high correspondence between sounds and letters”. Only two exceptions are found they are the two demonstratives (هَذَا) /ha:ðə/ and (ذَلِكَ) /ðɑ:lɪk/ which are pronounced with the long vowel /a:/ but written with the diacritic /æθæh/ (Awad, 2010, p.12). As a result, it can be said that in Arabic there is one-to-one correspondence between the phonemes and the graphemes. Each phoneme is represented by a grapheme, a letter or a diacritic. The graphemes correspond to the phonemes of the spoken word in a direct and unequivocal manner.

On the contrary, English spelling is not phonetic; there is no one-to-one correspondence between the sounds and the letters. To elaborate, this the most eminent example George Bernard Shaw’s, the famous Irish writer, word “ghoti” which is supposed to be pronounced as the word (fish). He claimed that (gh) combination is pronounced /f/ as in (tough) /tʌf/, (o) is pronounced /ɪ/ as in (women) /wɪmɪn/ and (ti) combination is pronounced /ʃ/ as in (notion) /nəʊʃən/ (Kelly, 2000). Through this funny example, Shaw referred to the *opaque* or *deep* orthography of English spelling. Opaque or deep orthography is “a type of orthography in which there is no correspondence between sounds and letters” (Awad, 2010, p. 12). Thus, in English one cannot depend on the written form to detect the pronunciation. For example, the word (asthma) /æsmə/ is pronounced without the sound /θ/ or /ð/ however (th) is written.

Accordingly, Umera-Okeke, (2008) highlighted several points that play part in this issue as follow:

1. Same Letter Different Sounds:

The same letter does not always represent the same sound in English. Some letters can stand for as many as four different sounds. For instance, the letter U is realized as:

Sound /ʊ/	Put /pʊt/	Sugar /ʃʊgə/
Sound /aɪ/	Buy /baɪ/	Guy /gaɪ/
Sound /ə/	Succeed /sək'si:d/	Succumb /sə'kʌm/
Sound /ʌ/	study /stʌdi/	gull /gʌl/
Sound /uə/	ju·ry /'dʒʊəri	ru·ral /'rʊərəl

## 2. Same Sound Different Letters

Another area of discrepancy between spelling and sound in English is a situation where the same sound is not always represented by the same letter. As an example, the sound /aɪ/ is realized in the following spellings:

Letters ai	aisle /aɪl/
Letters ei	height /haɪt/
Letters eye	Eye /aɪ/
Letter i	Tidy /'taɪdi/
Letter ie	Die /daɪ/
Letter uy	buy /baɪ/

## 3. Silent Letters:

A lot of English words have silent letters which though written are not meant to be pronounced, for instance the silent W as in: wretched, wrestling, wrinkle, wrong, who, whore, wrath, wrist, wrap, sword, wrapper, whom

## 4. Inserting Sound where there is no Sound:

Another sound/spelling problem in English is the intrusion of sound where there is no spelling to indicate that sound. The words could be spelt but the pronunciation is a problem to learners of English.

/j/ is pronounced before u in the following words:

Use	/ju:z/
Cute	/kju:t/
Beauty	/bju:ti/
Cube	/kju:b/
Europe	/juərəp/

## 5. Variants of the Plural and Past Tense Morpheme:

The next area of variant that is a problem to nonnative speakers of English is variation in the pronunciation of the plural and past tense morpheme. Everyone knows that the regular ways of forming plurals is by the addition of -s/es to the base word. To form the regular past, we also add -ed to the base. When these are added to words, we still have variations in pronunciations of the words formed. Thus, we have different allophones to /s/ in words like:

/s/	/z/	/ɪz/
Cats /kæts/	dogs /dɒgz/	houses /haʊzɪz/
Books /buks/	cows /kaʊz/	rushes /rʌʃɪz/

Additionally, Kenworthy (1990) addressed several reasons that result in spelling problems among foreign language learners as follows:

1. Among learners whose native languages use the Roman alphabet, as English does, problems may be caused by confusion between the sound value of a particular letter in the native language and its value in English.
2. Learners whose native language uses a non-alphabetic system will have to adjust to alphabetic conventions.
3. Another source of difficulty is the English spelling system itself. As soon as learners are exposed to written English, they start to make generalizations about how the system works. Since English is an alphabetic system, this means basically sorting out which letter corresponds to which sound.
4. Finally, the pronunciation of the learner. If a learner has difficulty in distinguishing English /p/ as in 'pet' from English /b/ as in 'bet', then, in doing a dictation, he or she may spell 'pill' as 'bill'.

O'Grady (1993) refers to some problems with English orthography which show the arbitrary link between symbols and sounds. Some of the points mentioned in his study relate to vowel sounds:

1. Some graphemes or letters do not represent any phoneme or sound as in the word (care) (e) letter is silent and does not correspond to any sound.
2. A group of two vowels can represent a single vowel sound. The phoneme /i:/ is represented in the word (receive) by two letters (ei).
3. The same letter can represent different phonemes in different words. The letter (o) is pronounced /ɒ/, /əʊ/, /ɔ:/ in (on), (bone) and (corn) respectively.
4. The same phoneme can be represented by different graphemes in different words. The vowel sound /u:/ is represented by different letters in the words (rude), (loop) and (soup).



### 2.1.6 Difficulties in Pronunciation

It is clear that learners of foreign languages process native language with ease despite the variability in speaker sounds, accents, speech rate and emotional effect (Zhang & Wang, 2007). Pallier, Christophe, & Mehler (1997) explained that listeners of different languages use their perceptual system to exploit knowledge about the constraints on the co-occurrence of phonemes. They also attempt to start an outline of the speech signal that follows the patterns of their native language. Japanese speakers insert illusory phonemes when a word does not conform to this pattern. As a result, speakers of Japanese (a language that does not allow word-internal obstruent clusters) have a lot of trouble discriminating between VCCV and VCVCV. Accordingly, one can add another closer example for the Arabic context, whereas Arab EFL learners insert intrusive vowel with words that do not match the Arabic consonant cluster as in the word spring the correct pronunciation is supposed to be /sprɪŋ/ instead they pronounce it as /si 'prɪŋ/.

Arab learners face the problem not only of recognizing certain sounds but also of producing them as follows Pallier, Christophe, & Mehler, 1997; Elkhair, 2014; and Ali, 2015):

- Difficulty in recognizing and producing the diphthongs below:

- o /eə/, /ʊə/, /iə/.

/eə/ as in there /ðeə/, fair /feə/, wear /weə/

/ʊə/ as in sure /ʃʊə/, poor /pʊə/, pure /pjʊə/

/iə/ as in ears /iəz/

These are often replaced by the nearest vowel sound followed by a clear Arabic /r/.

/eə/ becomes /e:/ as in dɜ:r/ دير

/ʊə/ becomes /u:/ as in /du:r/ دور

/iə/ becomes /i:/ as in /bi:r/ بير

- o /əʊ/ as in coat /kəʊt/, hope /həʊp/

This sound is often replaced by the colloquial Arabic vowel /ɔ:/ as in /fɔ:z/ فوز, /mɔ:z/

لوز, /ɔ:z/

- o /ei/ as in tail /teɪl/, late /leɪt/

This is replaced by the long colloquial Arabic vowel /e:/ as in /bɜ:t/

- Confusion of some pairs of vowel sounds:

- /i/ and /e/ as in sit /sit/ and set /set/

/ʌ/ and /ɒ/ as in luck /lʌk/ and lock /lɒk/

/əʊ/ and /ɔ:/ as in coat /kəʊt/ and caught /kɔ:t/

The difference between these pairs is non-phonemic in Arabic. They occur as variant allophones of the same vowel.

- /u:/ and /ʊ/ as in fool /fu:l/ and foot /fʊt/

The difficulty here is largely due to the spelling.

- /ɜ:/ and /ɑ:/ as in dirt /dɜ:t/ and dart /dɑ:t/

The former sound is non-existent in all forms of Arabic, and the latter is an allophone of /ā/, not a separate phoneme as in English.

- /ei/ and /e/ as in sail /seil/ and sell /sel/

The former is non-existent in Arabic, and the latter is an allophone of /i/, not a separate phoneme.

- Intrusive vowels: The Arab learner often introduces an extra vowel into English words, for example:

/si 'prɪŋ/ instead of /sprɪŋ/ spring

/wɜ:kɪd/ instead of /wɜ:kt/ worked

/grændɪfɑ:ðə/ instead of /grænd fɑ:ðə/ grandfather

This is often because of the difficulties of English consonant clusters.

- The schwa /ə/:

The difficulty arises from the very nature of this sound in the English sound system. The schwa sound is the commonest of all English vowel sounds, and yet it represents no particular vowel. The root of the problem lies in the fact that the schwa replaces any of several vowel sounds when they are unstressed. This is compounded by the absence of any similar vowel in Arabic. A related problem is that in English there is a whole group of words-function words which may have no stress at all. Auxiliary verbs like am, does, the, for, and to have weak forms. That is, when they are pronounced in connected speech, they are unstressed and the vowel reduces to the schwa: am /əm/

for /fə/            /to /tə/.

Such a reduction of the vowel sound is not a distinct feature in Arabic. In addition, the Arab tradition insists on very distinct articulation of every letter of the alphabet when reading a text.

To sum up, based on the previous presentation of English and Arabic vowels, it can be said that the English vowels system is more complex than the Arabic system especially in central and back areas.

Accordingly, in English, we have 20 vowels, monophthongs, diphthongs. However, we have only six Arabic monophthongs in addition to two diphthongs. This leads to a fact that most of the English vowels are unknown to Arab learners including Palestinian thus, resulting in many pronunciation difficulties.

Additionally, Arabic has one-to-one correspondence between the phonemes and the graphemes. Each phoneme is represented by a grapheme, a letter or a diacritic. The graphemes correspond to the phonemes of the spoken word in a direct and unequivocal manner. On the contrary, English spelling is not phonetic; there is no one-to-one correspondence between the sounds and the letters.

## **2.2 Section Two: Previous Studies**

### **1- (Ali & ALzahrani, 2016)**

This study addresses the frequency of the errors in pronouncing English vowels committed by Saudi students of English language. The study aims at giving information about the most frequent errors of English vowels that Saudi students make.

The study approached data through a quantitative method of data analysis which permits statistical analysis. Moreover, the study made some predictions regarding the frequent errors of English vowels that students make while learning vowel sounds of English for comparison purpose.

Results show that the errors which students make in the area of front, central and back English vowels form the highest percentage of occurrence frequency all through the data. Some substitutions of diphthong vowels with short and long vowels are also frequent. The more frequent the vowels are the more vulnerable to error making they are.

### **2- (Gadanya, 2016)**

This paper investigates the problems of learning English vowel pronunciation. It aims at identifying the factors that affect learning English vowel sounds and their proper realization in words.

The data collection tools used in the study are questionnaire and word list for the respondents (students) and observation of some of their lecturers. All the data collected were analyzed using simple percentage.

The findings show that it is not a single factor that influences learning English vowel pronunciation but rather many factors concurrently do so. Among the factors examined, it has been found that lack of correlation between English orthography and its pronunciation, not mother-tongue, has the greatest influence on students' learning and realization of English vowel sounds.

### **3- (Sembiring & Ginting, 2016)**

This research aimed at investigating pronunciation errors committed by the fourth semester students of English Education Study Program at UNIKA in terms of consonants, vowels, and diphthongs, in addition to find out reasons of such errors. The total sample of this research was 24 students. Results of the research showed that the

errors in pronouncing consonant sound were 32%, vowels were 31% and diphthong sounds were 32%.

Such errors were attributed to students' unfamiliarity with the words, poor practice of English words and lack of understanding pronunciation subjects.

Accordingly, students are encouraged to practice a lot in pronouncing English words based on English phonetic transcription and have students exposed more to English language environment.

#### **4- (Ali, 2015)**

This study attempts to measure the influence of a language course on the elimination of pronunciation problems of English vowels that are experienced by Saudi students as a result of a complex letter-sound relationship. The course was intended to boost the students' awareness of the letter-sound relation of English vowels. The course comprised language items such the nature, classification and letter-sound relationship of vowels reinforced by practice activities. Test material comprised three lists of English monosyllabic, disyllabic and multi syllabic words that were arranged into pre-and-post tests for comparison purpose. The participants of the study included students of English, at Al Baha University who do not have any kind of exposure to native English. In the tests, students were asked to pronounce words making advantage of decoding and pronunciation abilities they developed after the course.

Results revealed that the pronunciation of English vowels of Saudi students improved with respect to English vowel on monosyllabic and disyllabic words probably due to the language course. However, they have difficulty in pronouncing and decoding vowel sounds in multi syllabic words. Although the course delivered is crucial for the improvement of learners' vowels pronunciation, listening practice will probably form a strong strategy in accomplishing the learners' awareness of pronunciation.

#### **5- (Al-Shoufi, 2015)**

This study highlights the errors made by Syrian learners in pronouncing English vowel sounds as a result of the negative impact of their mother tongue, Arabic.

This study deals with these hypotheses and answers questions about Syrian learners' ability to pronounce English vowel sounds. The subjects of the study are Syrians learning English at a private language institute at five different linguistic levels. A list of nonsense words is designed so that each word represents an English vowel sound. The

data is collected by asking the participants to record these words and it is analyzed later by using Praat. The formant frequencies for the pronounced vowels are measured and compared with Standard English vowel formants. This is done in order to study the errors made with English vowels at each level and the impact of Arabic on pronouncing them. Data Analysis shows that at all the levels diphthongs and triphthongs cause more errors than monophthongs, which supports our first hypothesis. It also shows that learners depend on orthography to pronounce the nonsense words used. Nevertheless, depending on orthography helps learners in pronouncing the words, which refutes our second hypothesis.

6- (Mirzaeia, Gowharya, Azizifara, & Esmailia, 2015)

Knowing a second or foreign language is not possible without knowing its sound system. Besides, it is also impossible to disregard the effect of the first language sound system on the pronunciation of sounds of the second language. The more these effects disappear, the more native like the learners' sound. Consequently, comparing the sound system of the two languages helps to recognize the differences of the languages and sources of feasible errors the learners make which results in decreasing the effects of the first language. Thus, this study tried to compare the performance of EFL Kurdish and Persian learners in the acquisition of English vowels. In so doing, contrastive analysis hypothesis (CAH) was applied to compare the vowels of Kurdish and Persian with English. Furthermore, a total of 120 students take part in the study to study any probable differences between the phonological performance of Kurdish and Persian EFL learners at elementary and advanced levels. The results showed some significant differences at the elementary level between the two groups of speakers, though this was not shown at advanced levels. EFL educators can use the results of this research in their pedagogical judgment makings.

7- (Hassan, 2014)

This study investigates the problems in English pronunciation experienced by learners whose first language is Sudanese Spoken Arabic. In other words, to find the problematic sounds and the factors that cause these problems. Then the study addressed some techniques that help the Sudanese Students of English improve their pronunciation. The subjects for the study were fifty students from University of Sudan of Science and Technology (SUST), and thirty university teachers of English from the same university.

The instruments used for collecting the data were observation, recordings and a structured questionnaire. The data collected were analyzed both statistically and descriptively. The findings of the study revealed that Sudanese Students of English whose language background is Sudanese Spoken Arabic, had problems with the pronunciation of English vowels that have more than one way of pronunciation in addition to the consonant sound contrasts e.g. /z/ and /ð/, /s/ and /θ/, /b/ and /p/, /j/ and /tʃ/. Based on the findings, the study concluded that factors such as Interference, the differences in the sound system in the two languages, inconsistency of English sounds and spelling militate against Sudanese Students of English (SSEs) competence in pronunciation.

#### **8- (Riadi, 2013)**

This research aims to find out the students' problems in pronouncing short and long English vowels. The subjects of this research were the second semester students of English Education Study Program. There were 30 students who were involved in this research. Here, the researcher applied a descriptive study. The data were derived through students' performance test by using minimal pair test.

There were 15 sentences with 900 total phonetic transcriptions produced by the overall students. The data revealed that, most of the students have problems in pronouncing short and long English vowels. It was found that there were 483 correct pronunciations out of 900 totals with the mean score were 54.

The total numbers for incorrect pronunciation of short vowels were 79 and long vowels were 338. Furthermore, from 30 students, only 6 students scored over 60 and only 1 student scored over 75.

#### **9- (Al Dilailmy, 2012)**

Omani students of English encounter some Phonetic and Phonological problems reflected in the perception, identification and production of various English speech sounds. Most of these problems are related to the relatively complicated orthographic system of English taught to Omani students at earlier stages of English language learning and to the inconsistent relationship between spelling and pronunciation of English and the differences between the sound system of Arabic and English. They often result in some pronunciation challenges for Omani students of English (hence OSE) with respect to consonants, consonant clusters, vowels, diphthongs and words

used in connected speech. Omani regional differences also pose a serious pronunciation difficulty represented by first language interference in the target language. This paper tries to account for the areas of difficulty and provide some suggestions and recommendations that could overcome the pronunciation problems in the oral performance of Omani students of English.

**10-** (Al Saqqaf & Vaddapalli, 2012)

This paper attempted to tackle teaching English pronunciation to Arab students. The most noticeable feature in the English pronunciation of an Arab student is the poor mastery of English vowels. The paper aims at providing a suitable model of teaching English vowels to Arabic speaking students. The researchers therefore, confined themselves to contrasting the vowel system of Arabic and some varieties of English, mainly Received Pronunciation (also known as BBC English), General American, and some other established varieties. Data of eight of speakers of English from various countries of the Gulf were collected and analyzed. Based on the data analysis, the researchers tried to suggest a model of English that is viable to teach Arab learners. Some pedagogical implications were also offered to the teachers of English.

**11-** (Iverson & Evans, 2007)

This study examined whether individuals with a wide range of first-language vowel systems Spanish, French, German, and Norwegian\_ differ fundamentally in the cues that they use when they learn the English vowel system \_e.g., formant movement and duration. All subjects: 1) identified natural English vowels in quiet; 2) identified English vowels in noise that had been signal processed to flatten formant movement or equate duration; 3) perceptually mapped best exemplars for first and second-language synthetic vowels in a five-dimensional vowel space that included formant movement and duration; and 4) rated how natural English vowels assimilated into their L1 vowel categories. The results demonstrated that individuals with larger and more complex first-language vowel systems (German and Norwegian) were more accurate at recognizing English vowels than were individuals with smaller first-language systems (Spanish and French). However, there were no fundamental differences in what these individuals learned. That is, all groups used formant movement and duration to recognize English vowels, and learned new aspects of the English vowel system rather than simply assimilating vowels into existing first-language categories. The results



suggest that there is a surprising degree of uniformity in the ways that individuals with different language backgrounds perceive second language vowels

12- (Fabra & Romero, 2012)

This paper reported two experiments on nonnative vowel perception and production. In Experiment 1, three groups of Catalan learners varying in English proficiency were tested on their ability to discriminate seven Catalan–English (CE) and four English–English (E–E) vowel contrasts. The vowel contrasts were natural speech tokens obtained from native Catalan and native American English speakers. On average, listeners distinguished the CE /i–i:/ contrast relatively well, and they could partially distinguish /i–i:/, /u–u:/, and /a – ʌ:/, but they had great difficulty with the /e–ʌ/, /a–æ/ and /ɜ–ɜ/ contrasts. In Experiment 2, a subgroup of the Catalan learners and a control group of native English speakers produced words containing vowels. Vowel accuracy was assessed by means of acoustic measurements and by native listener judgments. The acoustic measurements revealed that, in spectral terms, learners produced vowels that were less peripheral than the native English (NE) versions, although there was a tendency for vowel expansions as a function of language proficiency. Vowel duration in the tense–lax vowel pairs also progressed toward more native like values in the productions of the more proficient learners.

### 2.2.1 Commentary

The previously presented studies, generally, aimed at: investigating the impact of language course to improve pronunciation of English vowels, studying problem of English pronunciation encountered by learners, tracing the process of teaching English pronunciation. Those can summarize the main objectives of the previously presented literature.

Moreover, the previous studies were using various data collection tools as follows: monosyllabic, disyllabic and multi syllabic words, pre-and–post tests, questionnaires, classroom observations and document collections.

Novelty in the current study rises from: aim, methodology, and population. This research attempts to identify proficiency level of EFL learners in the field of English language pronunciation. According to the researchers this matter was not traced before now for Palestinian students. In other words, this research attempts to diagnose and provide insights into the current vowel pronunciation problems. Unlike other studies

that were either dealing with consonants or tracing change pedagogical phonology experiment. Moreover, this study is confined to students at the second and fourth level at English Department -Faculty of Education and Faculty of Arts- at the Islamic University of Gaza.

# **Chapter Three:**

# **Research Methodology**

## **Chapter Three: Methodology, Findings and Discussion**

### **3.1 Introduction**

This chapter addresses and elaborates the methodology used in this research. Accordingly, both a questionnaire and an interview were the main pillars for data collection and gathering. To have more insights into the current research methodology additional information and highlights will be given on the following:

- Information about the research design
- Research population
- Questionnaire and interview design
- Content validity for pilot study and statistical data analysis.

### **3.2 Research Methodology**

The research followed the analytical descriptive approach in addition to the statistical analysis. Rodgers (2002, p. 117) defined the descriptive research as "A research that describes group characteristics or behaviors in numerical terms". They maintain that, "The descriptive statistics are those statistics used to analyze descriptive research data, usually in terms of central tendency and dispersion".

The researcher conducted this method due to its relevance to the study. The descriptive analytical method of research has many advantages. These advantages, according to Seltzer and Cook (1986), enable the researcher to:

1. Collect detailed and factual information that describes existing phenomena about a population.
2. Identify problems or justify current conditions and practices that are occurring within a population.
3. Make comparisons and evaluations of a population.
4. Determine what others are doing with similar problems or situations and thus benefit from their experience in making future plans and decisions.

However, it also has many disadvantages such as:

1. Respondents may answer superficially especially if the questionnaire takes a long time to complete. The common mistake of asking too many questions should be avoided.
2. Research subjects may not be willing to answer the questions. They might not wish to reveal the information or they might think that they will not benefit from responding perhaps even be penalized by giving their real opinion.

Moreover, data were collected from primary and secondary resources. The secondary resources include the use of books, journals, statistics and web pages, while primary data were collected by using questionnaires that were developed specifically for this research in addition to an interview. Many of measurement tools questionnaires and interview where used by other researchers were adapted, combined and modified to fit the purpose of this research. This ended up in developing one questionnaire which is distributed to 71 respondents to collect the primary data, the researcher retrieved 71 out of the 71 distributed questionnaires.

### 3.3 Population and sample size:

The population of this research was limited to students majored English language at the Islamic University. Moreover, the research was limited to male students in the second and the fourth year of both faculties of education and faculty of arts. Thus the research population is distributed as the following table (3.1):

**Table (3.1):** Distribution of Research’s Population

#	Description	Number of Units
1	Second Year, Faculty of Arts, English Language	23
2	Second Year, Faculty of Education, English Language	16
3	Fourth Year, Faculty of Arts, English Language	21
4	Fourth Year, Faculty of Education, English Language	14
Total		74

This population was intentionally selected for various reasons as follows:

- The second and fourth year at university: it was in the researcher's mind to divide the population into two categories: early exposure stage and late exposure stage. The second year in university education represents early exposure stage and the fourth year in university education represents late exposure stage.
- Gender, males: the reason for choosing males not females is that male students were more accessible for the researcher due to cultural and social factors. It was easier for the researcher to access male students' lectures and interview them in addition, phone calling them again if needed to re-interview them. By including only male students the researcher neutralized any factors that might influence the interviewee, as being shy or distracted by other socio-cultural factors.

Based on the above, the researcher sampled the population using the following equation:

$$n = \left( \frac{Z}{2m} \right)^2 \quad (1)$$

The resulting size of the research sample was as follows:

**Table (3.2):** Distribution of Research's Sample

#	Description	Number of Units
1	Second Year, Faculty of Arts, English Language	22
2	Second Year, Faculty of Education, English Language	15
3	Fourth Year, Faculty of Arts, English Language	19
4	Fourth Year, Faculty of Education, English Language	14
<b>Total</b>		<b>70</b>

### 3.4 Instrumentations

The researcher used two main tools: a questionnaire and an interview with the form of multiple choice questions. The questionnaire was designed to investigate and identify research subjects' attitudes towards pronouncing English vowels (diphthongs and monophthongs). Moreover, the interview was designed to identify areas of

weaknesses in pronouncing English vowels and more specifically to identify the most problematic vowel sounds English language learners face in their pronunciation.

### **3.4.1 The Questionnaire**

The questionnaire designed was based on extensive surveying of related literature regionally and internationally, mainly it came to investigate English language learners' attitudes towards pronouncing English vowels. Thus a clearer picture of causes of errors which are made by non-native speakers in the production of RP English vowels can be reached.

The questionnaire intends to elicit research participants' replies regarding the effectiveness of the techniques adopted in the teaching of this course. Thus some suggested techniques are included. The feedback obtained from the questionnaire will be a remarkable value to the final findings of this work.

The questionnaire is in a four-point scale Strongly Agree, Agree, Disagree, Strongly Disagree.

Broadly speaking, the questions included in the questionnaire fall into two categories:

- Questions relevant to difficulties research participants find when they produce RP English vowels (question 1,2,3,4,5,6,7).
- Questions that elicit the participants' feedback about the techniques used in teaching English phonetics course and their opinion on other suggested techniques (question 8,9,10,11,12,13,14,15)

**Table (3.3):** Categorization of Questionnaire Items

No.	Questionnaire Item	Description
1	I feel that RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation.	Difficulties research participants find when they produce RP English vowels
2	I believe that teaching the production of RP English vowels needs an experienced and a professional instructor	Difficulties research participants find when they produce RP English vowels
3	I think that the major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language	significance of using different techniques in teaching English sounds
4	I feel that the difficulty in uttering RP English vowels is a part of weakness in phonological skills in general	Difficulties research participants find when they produce RP English vowels
5	I believe that inconsistency of English Spilling contributes to vowels' pronunciation difficulties	Difficulties research participants find when they produce RP English vowels
6	I consider that the difficulty in pronouncing RP English vowels result from weakness in speaking skill.	Difficulties research participants find when they produce RP English vowels
7	I feel that difficulty in RP English vowels is due to the lack of training in pronouncing these vowels	Difficulties research participants find when they produce RP English vowels



No.	Questionnaire Item	Description
8	I believe that improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like	Techniques used in teaching English phonetics
9	I consider that vowels Identification Drills are the most useful ones to facilitate pronouncing RP English vowels.	Techniques used in teaching English phonetics
10	I believe that RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs	Techniques used in teaching English phonetics
11	I believe that better teaching of RP English vowels is conducted through practicing them within context	Techniques used in teaching English phonetics
12	I consider minimal pairs are very beneficial in teaching RP English vowels	Techniques used in teaching English phonetics
13	I believe that special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners	Techniques used in teaching English phonetics
14	I believe that full mastery of RP English vowels requires intensive ear training	Techniques used in teaching English phonetics

No.	Questionnaire Item	Description
15	I believe that mastering RP English vowels is attained gradually hand by hand with the mastery of other communicative skills.	Techniques used in teaching English phonetics

Accordingly, in order to reach the former resulting questionnaire, the process of constricting the questionnaire went through the following steps:

1. The questionnaire was designed by the researcher, and was reviewed and modified by the research's supervisor.
2. The modified copy was given to a number of 7 academic referees from different universities.
3. The questionnaire was then modified based on the referee's comments.
4. Next, a pilot study sample of 30 questionnaires was distributed to help test the validity and reliability of the questionnaire, this provides a trial for the questionnaire, which involves testing the wordings of questions, and identifying ambiguous questions.
5. Based on the pilot phase findings, it was concluded that the questionnaire is ready to be distributed as a final copy.

#### **3.4.1.1 Content validity of the questionnaire:**

The content validity of the questionnaire was conducted through the supervisor review in order to assure that the content of the questionnaire is consistent with the research objectives, and evaluate whether the questions reflect the research problem or not. Also, 5 academics from the Islamic University of Gaza, one form Al-Azhar University, one form Maskat University, and one form Indiana University reviewed the questionnaire and provided valuable notes to improve its validity that their comments were taken into consideration.

#### **3.4.1.2 Pilot Study**

A pilot study of 30 respondents for the questionnaire was conducted before collecting the results of the sample. It provided a trial run for the questionnaire, which involves testing the wordings of question, identifying ambiguous questions, testing the

techniques that was used to collect data, and measuring the effectiveness of standard invitation to respondents.

### 3.4.1.3 Validity of Questionnaire

Validity refers to the degree to which an instrument measures what it is supposed to be measuring. Validity has a number of different aspects and assessment approaches. Statistical validity is used to evaluate instrument validity, which include internal validity.

### 3.4.1.4 Internal Validity

Internal validity of the questionnaire is the first statistical test that is used to test the validity of the questionnaire. It is measured by the correlation coefficients between each item of the questionnaire and the whole questionnaire.

Table (3.4) clarifies the correlation coefficient for each item of the questionnaire and the whole questionnaire. The p-values (Sig.) are less than 0.05, so the correlation coefficients of those field is significant at  $\alpha = 0.05$ , so it can be said that the all items of the questionnaire are consistent and valid to be measure what it was set for.

**Table (3.4):** Correlation coefficient of each item and the whole of questionnaire

No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
1.	I feel that RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation.	.428*	0.000
2.	I believe that teaching the production of RP English vowels needs an experienced and a professional instructor	.392*	0.000
3.	I think that the major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language	.491*	0.000

No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
4.	I feel that the difficulty in uttering RP English vowels is a part of weakness in phonological skills in general	.433*	0.000
5.	I believe that inconsistency of English Spelling contributes to vowels' pronunciation difficulties	.432*	0.000
6.	I consider that the difficulty in pronouncing RP English vowels result from weakness in speaking skill.	.406*	0.000
7.	I feel that difficulty in RP English vowels is due to the lack of training in pronouncing these vowels	.205*	0.044
8.	I believe that improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like	.328*	0.003
9.	I consider that vowels Identification Drills are the most useful ones to facilitate pronouncing RP English vowels.	.428*	0.000
10.	I believe that RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs	.232*	0.026
11.	I believe that better teaching of RP English vowels is conducted through practicing them within context	.448*	0.000
12.	I consider minimal pairs are very beneficial in teaching RP English vowels	.430*	0.000
13.	I believe that special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners	.475*	0.000

No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
14.	I believe that full mastery of RP English vowels requires intensive ear training	.460*	0.000
15.	I believe that mastering RP English vowels is attained gradually hand by hand with the mastery of other communicative skills.	.496*	0.000

\* Correlation is significant at the 0.05 level

### 3.4.2 Reliability of Questionnaire

The reliability of an instrument is the degree of consistency which measures the attribute; it is supposed to be measuring. The less variation an instrument produces in repeated measurements of an attribute, the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient.

#### 3.4.2.1 Cronbach's Coefficient Alpha

The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency. The value of Cronbach's Alpha equals 0.875. This value is considered high which indicates an excellent reliability of the entire scale.

#### 3.4.2.2 Split Half Method:

The correlation coefficient between the odd and even questions equal 0.792. The Spearman-Brown Coefficient equals 0.878. This correlation coefficient is statistically significant at  $\alpha = 0.05$ , so it can be said that the scale is consistent and valid to measure what it was set for.

### 3.5 Interview

The second data collection tool in the research is interviews. In the previous sections, finding resulted for questionnaire were used to discuss and interpret quantitative results. On the other hand, findings and results of the interview are

qualitative in their nature thus, will be used to discuss and interpret the descriptive and qualitative part of this study. Accordingly, the interview was mainly focusing on pronouncing out lists of words. Thus, during the interview research subjects were asked to pronounce 51 words, mainly three different positions of monophthongs (word initial, word middle, word final) and three different positions of diphthongs (word initial, word middle, word final).

### **3.5.1 Validation of interview:**

The content validity of the interview was conducted through the supervisor's review. This review aimed at assuring that the content of the interview is consistent with the research objectives, and evaluate whether the questions reflect the research problem or not. Additionally, 5 academics from the Islamic University of Gaza, one from Al-Azhar University, one from Maskat University, and one from Indiana University reviewed the interview questions and provided valuable notes to improve its validity that their comments were taken into consideration.

### **3.5.2 Reliability of the interview:**

To assure reliability of the interview results the researcher, used two methods of testing reliability, inter-rater reliability and intra-rater reliability.

Inter-rater reliability was conducted by handling the interviews' row dare to another expert in the field and then compare the results of the inter-rater with the results of the researcher. In this context, the recordings of the interviews (recordings of research subjects' pronunciations of word lists) were transcribed by the researcher, after that the row data (recordings of research subjects' pronunciations of word lists) were transcribed by another two inter-raters, each of them was asked to put his transcription according to the recordings the inter-rater hear. After compering the results of the researcher and the two inter-raters, there was an overall agreement in 82% of the results and 18% of the result were inconsistent between the three inter-rater.

After that the sounds that were not consistent were measured using an acoustic software parameter, a program called Prate. Parameters form this software were pulled out and an agreement was reached based on the software's findings.

Intra-rater reliability was conducted by the researcher himself, where the researcher, chose randomly 15 of the recordings, listened to write down the transcription of the words list listened to then listened to the same 15 recording after 10 days another time. Accordingly, no differences were found, worth mentioning that intra-rater reliability was conducted by the researcher before moving to the inter-rater reliability.

**Table (3.5):** Word List Presented in the Interview

#	Sound	Word Initial	Word Middle	Word Final
1	i:	Eager	Quay	See
2	ɪ	English	Pretty	Mini
3	E	Empty	Says	**
4	Æ	Abduct	Plait	**
5	ʌ	Upset	Monkey	**
6	ɑ:	Artist	Father	Par
7	ɒ	Occupation	Want	**
8	ɔ:	Autograph	Yawn	Sure
9	ʊ	**	Woman	**
10	u:	Ooze	Spoon	**
11	ɜ:	Urban	Worst	**
12	ə	Among	Banana	Farmer
13	aɪ	Aisle	Time	Sigh
14	eɪ	Ate	Pain	Pay
15	ɔɪ	Ointment	Boil	Joy
16	əʊ	Open	Coat	Go
17	eə	Air	Parent	Where
18	ʊə	**	Tour	Pure
19	ɪə	ear	Beard	Clear
20	aʊ	Owl	Down	Bow (v)
<b>Total</b>		<b>18</b>	<b>20</b>	<b>13</b>
		<b>51</b>		

### 3.5.3 Findings of the Interview

**Table (3.6):** Finding of the Interviews, in Relation to Monophthongs.

#	Sound	x/√	Word Initial		Word Middle		Word Final		ALL		χ	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
1.	i:	x	31	43.7	71	100	10	14.1	112	52.6	112	52.6	6			
		√	40	56.3	-	-	61	85.9	101	47.4				101	47.4	7
2.	I	x	41	57.7	30	42.3	30	42.3	101	47.4	101	47.4	7			
		√	30	42.3	41	57.7	41	57.7	112	52.6				112	52.6	6
3.	e	x	10	14.1	51	71.8	-	-	61	43	61	43	9			
		√	61	85.9	20	28.2	-	-	81	57				81	57	4
4.	æ	x	71	100	71	100	-	-	142	100	142	100	1			
		√	0	0	0	0	-	-	0	0				0	0	12
5.	ʌ	x	-	-	40	56.3	-	-	40	28.2	40	28.2	11			
		√	71	100	31	43.7	-	-	102	71.8				102	71.8	2
6.	ɑ:	x	11	15.5	39	54.9	43	60.6	93	43.7	93	43.7	8			
		√	60	84.5	32	45.1	28	39.4	120	56.3				120	56.3	5
7.	ɒ	x	61	85.9	61	85.9	-	-	122	85.9	122	85.9	2			
		√	10	14.1	10	14.1	-	-	20	14.1				20	14.1	10
8.	ɔ:	x	61	85.9	51	71.8	71	100	183	85.9	183	85.9	2			
		√	10	14.1	20	28.2	-	-	30	14.1				30	14.1	10



#	Sound	x / √	Word Initial		Word Middle		Word Final		ALL		χ	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
9.	o	χ	-	-	60	84.5	-	-	60	84.5	60	84.5	4			
		√	-	-	11	15.5	-	-	11	15.5				11	15.5	9
10.	u:	χ	41	57.7	18	25.4	-	-	59	41.5	59	41.5	10			
		√	30	42.3	53	74.6	-	-	83	58.5				83	58.5	3
11.	ɜ:	χ	30	42.3	50	70.4	-	-	80	56.3	80	56.3	5			
		√	41	57.7	21	29.6	-	-	62	43.7				62	43.7	8
12.	ə	χ	30	42.3	-	-	-	-	30	14.1	30	14.1	12			
		√	41	57.7	71	100	71	100	183	85.9				183	85.9	1

**Table (3.7): Findings of the Interviews in Relation to Diphthongs.**

#	Sound	x / √	Word Initial		Word Middle		Word Final		ALL		x	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
1	aɪ	x	47	66.2	-	-	-	-	47	22.1	47	22.1	8			
		√	24	33.8	71	100	71	100	166	77.9				166	77.9	1
2	eɪ	x	59	83.1	60	84.5	36	50.7	155	72.8	155	72.8	5			
		√	12	16.9	11	15.5	35	49.3	58	27.2				58	27.2	4
3	ɔɪ	x	60	84.5	-	-	-	-	60	28.2	60	28.2	7			
		√	11	15.5	71	100	71	100	153	71.8				153	71.8	2
4	əʊ	x	71	100	71	100	59	83.1	201	94.4	201	94.4	3			
		√	-	-	-	-	12	16.9	12	5.6				12	5.6	5
5	eə	x	71	100	71	100	59	83.1	201	94.4	201	94.4	3			
		√	-	-	-	-	12	16.9	12	5.6				12	5.6	5
6	ʊə	x	-	-	71	100	71	100	142	100	142	100	1			
		√	-	-	0	0	0	0	0	0				0	0	7
7	ɪə	x	71	100	71	100	71	100	213	100	213	100	1			
		√	0	0	0	0	0	0	0	0				0	0	7
8	aʊ	x	60	84.5	-	-	47	66.2	107	50.2	107	50.2	6			
		√	11	15.5	71	100	24	33.8	106	49.8				106	49.8	3

# **Chapter Four:**

## **Results and Data Analysis**

#### 4.1 Introduction

This chapter puts forward the statistical analysis of the data collected through the study. The present study aims at investigating vowel pronunciation errors among Palestinian EFL students at the Islamic University of Gaza. The results listed below answer the main question "What are the Vowel Pronunciation Errors Committed by Islamic University of Gaza (IUG) English Language Students in Pronouncing English Vowels" and the eight hypotheses of the study.

#### 4.2 Analysis of Questionnaire Item

Table (4.1) shows the following results:

- The mean of item #1 **“RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation”** equals 3.07 (76.76%), Test-value = 6.16, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

This agreement asserts that the research participants are finding diphthongs more problematic than monophthongs, such a result is consistent with (Al Saqqaf & Vaddapalli, 2012). The one reason for this, is that English has eight diphthongs while Arabic language has only two. Another reason of this that diphthongs are built up by the combination of two sounds or making a glide from one sound to another, thus it would be easier to produce one sound than making the combination or the glide form one sound to another.

- The mean of item #2 **“Teaching the production of RP English vowels needs an experienced and a professional instructor”** equals 3.59 (89.79%), Test-value = 15.34, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. this reflects that the respondents agreed to this item.

This indicates that students are aware of the importance and mastery of pronunciation, or being native like. This is not an easy task, this thing needs thorough training and exercising, which includes being followed up and supervised by a trainer and/or tutor. The former results are soundly consistent with the finding of both (Al Saqqaf & Vaddapalli, 2012) and (As-sammer, 2014)

- The mean of item #3 **“The major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language”** equals 2.93 (73.24%), Test-value = 5.87, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

Findings here indicate good awareness of one of the major problems that causes pronunciation errors, especially when talking about foreign learners of a language. As the current sample of this research are Arab learners, the sound inconsistency between the source language (Arabic, 3 monophthongs and 2 diphthongs) and the target language (English, 12 monophthongs and 8 diphthongs) makes it problematic for Arab learners to master the target language pronunciation. This results from the fact that Arab learners will be facing 9 new monophthongs and another 6 diphthongs that are not found in their mother language and they are not phonologically aware of them. The former results are soundly consistent with the finding of both (Al Saqqaf & Vaddapalli, 2012), (As-sammer, 2014) and (Al Dilailmy, 2012)

- The mean of item #4 **“Difficulty in uttering RP English vowels is a part of weakness in phonological skills in general”** equals 2.80 (70.07%), Test-value = 3.60, and P-value = 0.001 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed on this item.

This result talks about an important and central filed an English language learner should master which is phonological awareness, this tern refers to the awareness or the ability that enables learners to utter the target’s language correctly, in addition to uttering or pronouncing the combination of written letters in an appropriate manner. In order to master pronunciation learners should be equipped with this skill. Hereby, student are aware of both the importance of this skill and it’s absence within their skills. Just as (Al Saqqaf & Vaddapalli, 2012), and (Al Dilailmy, 2012) pointed out in their studies

- The mean of item #5 **“Inconsistency of English Spilling contributes to vowels’ pronunciation difficulties”** equals 2.99 (74.65%), Test-value = 5.11, and P-

value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

This result highlights that English language learners face a problem in pronunciation and spelling- the inconsistency of English Spelling. Several factors are integrated together to influence the relation between written and spoken system of a language. Pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system (Khansir, English Spelling and Sound, 2012). Thus, Bloomfield (1933) asserted that writing is not language but merely a way of recording language by means of visible marks. Nonetheless, the researcher thinks that pronunciation is the central factor in recognizing word in spoken forms. Hence, learning appropriate pronunciation of English words is the most important factor in learning and teaching a foreign and second language. Especially when we know that pronunciation is dilemmic for English language learners, for English does not have fixed phonetic rules, due to the fact that English language has borrowed words and expressions extensively from many languages throughout its history. English spelling is not phonetic; there is no one-to-one correspondence between the sounds and the letters. To elaborate this the most eminent example George Bernard Shaw's, the famous Irish writer, word "ghoti"

- The mean of item #6 **"Difficulty in pronouncing RP English vowels result from weakness in speaking skill"** equals 2.96 (73.94%), Test-value = 4.71, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

- The mean of item #7 **"Difficulty in RP English vowels is due to the lack of training in pronouncing these vowels"** equals 3.30 (82.39%), Test-value = 9.51, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

For both the sixth and seventh domain, it is important for non- native learners to have good command of four main skills, input skills (Reading and listening) and output skills (Writing and Speaking). One of the most important sub-skills is pronunciation.

Whereas, pronunciation enables students to utter the target language's sounds correctly. According to the above finding it is clear that research subjects are aware of lacking the supposed-to-be command in speaking as a result of facing troubles in pronunciation.

- The mean of item #8 **“Improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like”** equals 3.30 (82.39%), Test-value = 8.03, and P-value = 0.000 which is smaller than the level of significance  $\alpha=0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

This domain in the questionnaire investigates students' attitudes towards the techniques to be followed for improving their pronunciation. Just as As-sammer (2014) pointed out in his study, it seems that students are aware that constant and continuous exposure to the natives' pronunciation can contribute for their endeavors of improving and developing native-like or good pronunciation. Accordingly, the researcher believes that constant exposure to the correct pronunciation can have the most considerable impact in developing students' pronunciation. This is the fact which Awad (2010) pointed out by saying that spelling in Arabic is regular since there is correspondence between graphemes and phonemes. Thus, Arabic orthography can be described as shallow or transparent orthography, which is defined as a type of orthography in which there is high correspondence between sounds and letters (Awad, 2010). However, in English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Thus this exposure can initiate learning any word by hearing the good and correct pronunciation then moving to learn its spelling. In other words, the process of exposure to native pronunciation can contribute to eliminating inter-lingual interference in the field of spelling and pronunciation.

- The mean of item #9 **“Vowels Identification Drills are the most useful ones to facilitate pronouncing RP English vowels”** equals 2.85 (71.13%), Test-value = 4.84, and P-value = 0.000 which is smaller than the level of significance  $\alpha=0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

This result confirms the known proverb “practice makes peface” whereas, the investigated sample of the study agreed that vowels identification drills are useful for them to develop their pronunciation. This result leads to another one, that is not only exposure or hearing the correct pronunciation for once is enough, however drilling to identify vowels must be practiced simply due to the fact that vowels identification drills develop students’ awareness to different possible pronunciations of the same grapheme.

- The mean of item #10 “**RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs**” equals 3.07 (76.76%), Test-value = 5.89, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

- The mean of item #11 “**Better teaching of RP English vowels is conducted through practicing them within context**” equals 3.04 (76.06%), Test-value = 5.84, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

- The mean of item #12 “**Minimal pairs are very beneficial in teaching RP English vowels**” equals 3.08 (77.11%), Test-value = 8.16, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

The tenth, eleventh and twelfth domains are mainly about the sequencing and contextualizing the process of teaching vowels. It seems that it is important for teachers to start from the easy part and then move the difficult one. In this regard it is important to remind that vowel sounds are those sounds that are produced with no obstruction to the airflow or the regressive pulmonic airstream when passing from the larynx to the lips (Roach, 2009), (McMahon, 2002) and (O’connor, 1980). While on the other hand a diphthong is a vowel sound that demonstrates articulatory movement resulting in a qualitative change during its production. Its initial portion, the onglide is acoustically more prominent and usually longer than the offglide (Bauman-Waengler, 2009; Balčytytė-Kurtinienė, 2014; Roach, 2009 and Crystal, 2008). Thus it can be said that



monophthongs are easier to be learned, thus it is supposed to be started with then move to the difficult part which is diphthong.

Alongside with sequencing the process of teaching vowels, this sequencing must be dealt up with contextualizing the teaching process because it is easier to recall information if tough within a context in addition to assessing teacher to teach their students the strong and weak forms in pronunciation and how that can affect the accuracy of pronunciation.

- The mean of item #13 “**Special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners**” equals 3.27 (81.69%), Test-value = 10.63, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

The former finding, which is consistent with Al Saqqaf & Vaddapalli (2012), As-sammer (2014) and Al Dilailmy (2012), stresses the need to have a student centered teaching process, where the student is the main focus, thus the educational process should be designed and structured according to the learners’ needs. Accordingly, different students may face different problems thus, first of all such a problem must be identified and analyzed. In order to mitigate such a problem, students can be grouped according to the problems they face so the remedial process can reach its optimum results, by adjusting the allocated time, resources and effort and directly streaming them there they need to be allocated.

- The mean of item #14 “**Full mastery of RP English vowels requires intensive ear training**” equals 3.39 (84.86%), Test-value = 12.62, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is significantly greater than the hypothesized value 2.5. We conclude that the respondents agreed to this item.

- The mean of item #15 “**Mastering RP English vowels is attained gradually hand by hand with the mastery of other communicative skills**” equals 3.04 (76.06%), Test-value = 8.37, and P-value = 0.000 which is smaller than the level of significance  $\alpha = 0.05$ . The sign of the test is positive, so the mean of this item is

significantly greater than the hypothesized value 2.5. It can be conclude that the respondents agreed to this item.

The fourteenth and the fifteenth domain in the questionnaire investigate students' attitudes towards the techniques to be followed for improving their pronunciation alongside with the overall development of other communicative skills. Just as As-sammer (2014) pointed out in his study, it seems that students are aware that constant and continuous exposure to the natives' pronunciation can contribute for their endeavors of improving and developing native-like or good pronunciation. Moreover, the researcher believes that constant exposure to the correct pronunciation can have the most considerable impact in developing students' pronunciation. This is a fact which Awad (2010) pointed out by saying that spelling in Arabic is regular since there is correspondence between graphemes and phonemes. Thus, Arabic orthography can be described as shallow or transparent orthography, which is defined as a type of orthography in which there is high correspondence between sounds and letters (Awad, 2010). However, in English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Thus this exposure can initiate learning any word by hearing the good and correct pronunciation then moving to learn its spelling. In other words, the process of exposure to native pronunciation can contribute to eliminating inter-lingual interference in the field of spelling and pronunciation.

- The mean of each item equals 3.11 (77.79%), Test-value = 20.65, and P-value=0.000 which is smaller than the level of significance  $\alpha=0.05$ . The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 2.5. It can be conclude that the respondents agreed to each item.

All in all, students seem to have positive attitudes towards RP English vowels, and students showed positive awareness concerning the most challenging field to develop good RP pronunciation. Additionally, the research subjects demonstrated good knowledge about the most effective techniques to be followed for their pronunciation development. Finding and diagnosing the problem is an important start to mitigate it still this cannot work alone, whereas finding and recommendations are supposed to be put in action to reach the intended result.

**Table (4.1):** Means and Test values for each item of the questionnaire

	<b>Item</b>	<b>Mean</b>	<b>S.D</b>	<b>Proportional mean (%)</b>	<b>Test value</b>	<b>P-value (Sig.)</b>	<b>Rank</b>
1.	I feel that RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation.	3.07	0.78	76.76	6.16*	0.000	7
2.	I believe that teaching the production of RP English vowels needs an experienced and a professional instructor	3.59	0.60	89.79	15.34*	0.000	1
3.	I think that the major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language	2.93	0.62	73.24	5.87*	0.000	13
4.	I feel that the difficulty in uttering RP English vowels is a part of weakness in phonological skills in general	2.80	0.71	70.07	3.60*	0.001	15
5.	I believe that inconsistency of English Spelling contributes to vowels' pronunciation difficulties	2.99	0.80	74.65	5.11*	0.000	11
6.	I consider that the difficulty in pronouncing RP English vowels result from weakness in speaking skill.	2.96	0.82	73.94	4.71*	0.000	12
7.	I feel that difficulty in RP English vowels is due to the lack of training in pronouncing these vowels	3.30	0.70	82.39	9.51*	0.000	4

	<b>Item</b>	<b>Mean</b>	<b>S.D</b>	<b>Proportional mean (%)</b>	<b>Test value</b>	<b>P-value (Sig.)</b>	<b>Rank</b>
8.	I believe that improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like	3.30	0.83	82.39	8.03*	0.000	3
9.	I consider that vowels Identification Drills are the most useful ones to facilitate pronouncing RP English vowels.	2.85	0.60	71.13	4.84*	0.000	14
10.	I believe that RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs	3.07	0.82	76.76	5.89*	0.000	7
11.	I believe that better teaching of RP English vowels is conducted through practicing them within context	3.04	0.78	76.06	5.84*	0.000	10
12.	I consider minimal pairs are very beneficial in teaching RP English vowels	3.08	0.60	77.11	8.16*	0.000	6
13.	I believe that special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners	3.27	0.61	81.69	10.63*	0.000	5
14.	I believe that full mastery of RP English vowels requires intensive ear training	3.39	0.60	84.86	12.62*	0.000	2

	Item	Mean	S.D	Proportional mean (%)	Test value	P-value (Sig.)	Rank
15.	I believe that mastering RP English vowels is attained gradually hand by hand with the mastery of other communicative skills.	3.04	0.55	76.06	8.37*	0.000	9
	<b>All items of the questionnaire</b>	3.11	0.25	77.79	20.65*	0.000	

\* The mean is significantly different from 2.5 font is Calibri here!

#### 4.2.1.1 Statistical analysis Tools

The researcher used data analysis both qualitative and quantitative data analysis methods. The Data analysis was made by utilizing (SPSS 25). The researcher utilized the following statistical tools:

- 1) Pearson correlation coefficient for Validity.
- 2) Cronbach's Alpha and Split Half Method for Reliability Statistics.
- 3) Frequency and Descriptive analysis.
- 4) One-sample T test.
- 5) Independent Samples T-test.

**T-test** is used to determine if the mean of an item is significantly different from a hypothesized value 2.5. If the P-value (Sig.) is smaller than or equal to the level of significance,  $\alpha=0.05$ , then the mean of a item is significantly different from a hypothesized value 2.5. The sign of the Test value indicates whether the mean is significantly greater or smaller than hypothesized value 2.5. On the other hand, if the P-value (Sig.) is greater than the level of significance,  $\alpha=0.05$ , then the mean item is insignificantly different from a hypothesized value 2.5.

**The Independent Samples T-test** is used to examine if there is a statistical significant difference between two means among the respondents toward the Difficulties

Facing Palestinian EFL Students in Pronouncing English Vowels due to (University GPA and Level at university education).

#### 4.2.1.2 Personal Data

##### Your current University GPA

Table No (4.1) shows that 5.6% of the respondents has GPA University that from 60%-69%, 28.2% are from 70%-79%, 64.8% are from 80%-89% and 1.4% of them are from 90%-100%.

**Table (4.2):** Respondent's University GPA

University GPA	Frequency	Percent
60%-69%	4	5.6
70%-79%	20	28.2
80%-89%	46	64.8
90%-100%	1	1.4
Total	71	100.0

#### 4.2.1.3 Level at university education

Table No.(4.3) shows that 46.5% of the respondents are " Second year " Level at university education and while 53.5% of them are Fourth year students.

**Table (4.3):** Respondent's Level at university education

Level at university education	Frequency	Percent
Second year	33	46.5
Fourth year	38	53.5
Total	71	100.0

#### 4.2.1.4 GPA University

Table (4.4) shows that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents toward due to GPA University. We conclude that there are no differences in the averages of the research responses due to GPA University.

As long as the GPA should reflect students' overall performance, this is supposed to be reflected positively on students' attitudes towards pronunciation, in other words, the higher students' GPA is the more students' positive their attitude is supposed to be, and vice versa. However, this is not the case, the thing that opens a by-dimensional debate to interpret this.

This first dimension is that the university GPA is not the most appropriate parameter, to measure student's overall competence in the target language, as a result of the fact that student in local universities including the Islamic University of Gaza are obliged to study courses in their mother tongue, thus they might perform perfectly in such courses and with lower level in the target language courses.

The second dimension is, which the researcher believes in more, is that students have clear awareness and knowledge about the theoretical background and framework of pronunciation, still they keep lacking the practical dimension. Thus, their attitudes are positive and they expressed good understanding and knowledge about techniques needed to develop their pronunciation, still such knowledge is not reflected on their academic performance.

**Table (4.4):** Independent Samples T-test - GPA University

	Mean		Test Value	Sig.
	60%-79%	80%-100%		
<b>GPA University</b>	3.18	3.08	1.681	0.097

#### 4.2.1.5 Level at university education

Table (4.5) show that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents toward due to Level at university education. We conclude that there are no differences in the averages of the research responses due to Level at university education.

As long as students' university level should reflect students' development in the target language, this is supposed to be reflected positively on students' attitudes towards pronunciation, in other words, the higher the students' university level is the more students' positive their attitude is supposed to be, and vice versa. However, this is not the case. The thing that might reflect the students accessing the university are equipped with previous good knowledge, theoretically, about pillars and elements needed to possess good pronunciation, thus during their academic life at the university things just keep confirming. Such a knowledge is not importantly confined to the 12 years of schools' education however, such knowledge can be streaming form student's constant exposure to native's pronunciation via internet, a course that is easy to access and gain information form.

**Table (4.5):** Independent Samples T-test - Level at university education

	Mean		Test Value	Sig.
	Second year	Fourth year		
<b>Level at university education</b>	3.11	3.11	-0.083	0.934

#### 4.3 Interview

The second data collection tool in the research is interviews. In the previous sections, finding resulted for questionnaire were used to discuss and interpret quantitative results. On the other hand, findings and results of the interview are qualitative in their nature thus, will be used to discuss and interpret the descriptive and qualitative part of this study. Accordingly, the interview was mainly focusing on pronouncing out lists of words. Thus, during the interview research subjects were asked to pronounce 51 words, mainly three different positions of monophthongs (word initial,



word middle, word final) and three different positions of diphthongs (word initial, word middle, word final).

#### **4.3.1 Validation of interview:**

The content validity of the interview was conducted through the supervisor's review. This review aimed at assuring that the content of the interview is consistent with the research objectives, and evaluate whether the questions reflect the research problem or not. Additionally, 5 academics from the Islamic University of Gaza, one from Al-Azhar University, one from Maskat University, and one from Indiana University reviewed the interview questions and provided valuable notes to improve its validity that their comments were taken into consideration.

### 4.3.2 Findings of the Interview

**Table (4.6):** Finding of the Interviews in Relation to Monophthongs.

#	Sound	x / √	Word Initial		Word Middle		Word Final		ALL		χ	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
1.	i:	x	31	43.7	71	100	10	14.1	112	52.6	112	52.6	6			
		√	40	56.3	-	-	61	85.9	101	47.4				101	47.4	7
2.	I	x	41	57.7	30	42.3	30	42.3	101	47.4	101	47.4	7			
		√	30	42.3	41	57.7	41	57.7	112	52.6				112	52.6	6
3.	e	x	10	14.1	51	71.8	-	-	61	43	61	43	9			
		√	61	85.9	20	28.2	-	-	81	57				81	57	4
4.	æ	x	71	100	71	100	-	-	142	100	142	100	1			
		√	0	0	0	0	-	-	0	0				0	0	12
5.	ʌ	x	-	-	40	56.3	-	-	40	28.2	40	28.2	11			
		√	71	100	31	43.7	-	-	102	71.8				102	71.8	2
6.	ɑ:	x	11	15.5	39	54.9	43	60.6	93	43.7	93	43.7	8			
		√	60	84.5	32	45.1	28	39.4	120	56.3				120	56.3	5
7.	ɒ	x	61	85.9	61	85.9	-	-	122	85.9	122	85.9	2			
		√	10	14.1	10	14.1	-	-	20	14.1				20	14.1	10

#	Sound	x / √	Word Initial		Word Middle		Word Final		ALL		χ	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
8.	ɔ:	x	61	85.9	51	71.8	71	100	183	85.9	183	85.9	2			
		√	10	14.1	20	28.2	-	-	30	14.1				30	14.1	10
9.	ʊ	x	-	-	60	84.5	-	-	60	84.5	60	84.5	4			
		√	-	-	11	15.5	-	-	11	15.5				11	15.5	9
10.	u:	x	41	57.7	18	25.4	-	-	59	41.5	59	41.5	10			
		√	30	42.3	53	74.6	-	-	83	58.5				83	58.5	3
11.	ɜ:	x	30	42.3	50	70.4	-	-	80	56.3	80	56.3	5			
		√	41	57.7	21	29.6	-	-	62	43.7				62	43.7	8
12.	ə	x	30	42.3	-	-	-	-	30	14.1	30	14.1	12			
		√	41	57.7	71	100	71	100	183	85.9				183	85.9	1

The following discussion of the result addresses the findings resulting from the interviews. The researcher will initiate discussion by addressing the most problematic sounds in the monophthongs section and then move to the less problematic sound gradually.

- **/æ/**

Based on the findings resulting from the interview the most problematic monophthong vowel sound was the sound /æ/. The sound was tested in two: word initial and word final. Accordingly, none of the tested 71 research participants succeeded in pronouncing the sound correctly. The word “Abduct” was used to test the sound /æ/ in the initial position and the word “Plait” to test the word in the middle position.

In the initial position the 71 students interviewed in this research shifted the sound into /ʌ/. Neither of the two sounds /æ/ and /ʌ/ occurs in the Modern Standard Arabic (MSA) sound system. The researcher thinks that the reason of this miss pronunciation is resulting from overgeneralization, fault teaching and/or focalization of the wrong pronunciation, which in turn might be as a result of hearing the wrong pronunciation for the first time thus, it kept coming up unconsciously.

For the middle the 71 students interviewed in this research shifted the sound /æ/ into three different sound /eI/ (51 occurrence), /aI/ (10 occurrence) and /i:/ (10 occurrence). In this case, research subjects where trying to read the letter rather producing the appropriate sound which is a result of inter-lingual interference. As a matter of fact, Arabic is regular since there is correspondence between graphemes and phonemes as Awad (2010) pointed out. On the contrary, English pronunciation is rarely affected by the way in which a word is spelled, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Based on the former writers’ review students attempt to borrow systems form their mother tongue and use them in the target language.

- **/v/ and /ɔ:/**

The second most problematic sounds were /v/ and /ɔ:/, both of the sounds were problematic for research participants as 85.9% of the produced sounds attempting to pronounce them were wrong.

- /v/

The sound was tested in two: word initial and word final. Whereas, the word “Occupation” was used to test the sound in the initial position and the word “Want” was used to test the sound in the middle position.

In the initial position the sound /v/ was miss pronounced in 60 cases and the resulting wrong sounds are /I/ (21 occurrence), /ʊ/ (39 occurrence).

First of all, it can be said that an important factor that led to number of mistakes is that the /v/ sound does not occur in MSA. Not having such a sound in Arabic language led students to borrow a sound from their schemata of their mother tongues and put it in use in the target language this is the case with the replaced wrong sound /I/, however, this cannot be the only reason whereas wrong exposure to the word in the first time might result in so. For the sound /ʊ/ which occurred 39 times as a wrong pronunciation for the sound /v/ it can be said that inter-lingual interference played considerable role here. In other words, the sound /v/ does not occur in Arabic language thus students tend to borrow the closest sound in Arabic which in this case is /ʊ/ as in the word /hʊm/ "هُم" meaning they.

In word middle position the /v/ sound only 10 of the 71 investigated students pronounced the sound correctly and the remaining 61 students pronounced it wrongly, altering the /v/ sound into /ə/. Bering in mind that the word used in testing here as “Want”, in this case, research subjects were trying to read the letter rather producing the appropriate sound which is a result of inter-lingual interference. As a matter of fact, Arabic language is regular since there is correspondence between graphemes and phonemes as Awad (2010) pointed out. On the contrary, English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Based on the former writers’ review students attempt to borrow systems from their mother tongue and use them in the target language, thus pronouncing the letter “a” as /ə/.

- /ɔ:/

The sound was tested in three positions: word initial word middle and word final. Whereas, the word “Autograph” was used to test the sound in the initial position,

the word “Yawn” was used to test the sound in the middle position and the word “Sure” was used to test the sound in the middle position.

In word middle position, the sound /ɔ:/ was miss pronounced in 61 case and the resulting wrong sounds are: /ɒ/ (10 occurrences), /ʊ/ (51 occurrences). Here it can be said that when pronouncing the wrong sound /ɒ/, instead of /ɔ:/ the investigated were producing the vowel quality, especially when knowing the both sounds /ɒ/, /ɔ:/ are back, but /ɔ:/ is more back than more rounded than /ɒ/. Moreover, in /ɔ:/ the tongue is in middle position while in /ɒ/ the tongue is fully open.

Interlingual interference can be seen again in the 51 cases of the wrongly pronounced sound /ʊ/, here the investigated students are concentrating on reading the letters and specially the letter “u” thus pronouncing it as /ʊ/. Here students were copying the system of their mother tongue, the Arabic language, whereas Arabic is regular since there is correspondence between graphemes and phonemes, however it is not the case with English pronunciation for, English is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system.

In the word middle position sound, the word “Yawn” was, here 51 wrong pronunciations were produced altering the sound /ɔ:/ into /əʊ/. Once again students are miss pronouncing sounds due to interlingual interference and intralingual interference (the difficulty of the target language). As mentioned before English is not systematic as Arabic in terms of correspondence between the pronunciation and orthography. Accordingly, in this case, students try to follow the way they pronounce words in their mother tongue putting it into action with the target language. Moreover, the difficulty of the target language contributes in the increasing number of pronunciation errors as long as the English language is a deep language, where there is no correspondence between the way it is written and the way it is pronounced.

The same former discussion can justify the 71 wrong pronunciation case in the final position, whereas the word used to test so was “Sure” and all interviewed cases miss pronounced the sound /ɔ:/ altering to into /u:/.

- /u:/

The following most problematic sound was /u:/ whereas, the sound was pronounced incorrectly in 84.5% of recorded sounds. Here this sound was tested in two positions word initial “Ooze” and word middle “Spoon.”

In the word initial position, the sound /u:/ was miss pronounced in 41 cases where the sound was altered into /ɔ:/ in 31 cases and /ʊ/ in 10 cases. The current case, the tested sound is present in students’ target language still students keep committing errors in pronouncing it. This is as a result of inter lingual interference, whereas they pronounced the initial two letters in “Ooze” as /ɔ:/. Students were trying to pronounce the letters they see just as they do in their target language. Additionally, the wrongly pronounced sound /ʊ/, can be attributed to students’ failure in uttering the long vowel instead of the short vowel.

In the word middle position, the word used in testing the sound was “Spoon”; the sound was miss pronounced as /ɔ:/ in 18 cases, and was pronounced correctly as /u:/ in 53 cases. Hereby, this case seems to me less problematic for the research subjects to pronounce. This can as a result of having a common relevant word, moreover, the sound and the way the word is written are marching.

- /ɜ:/

The following problematic sound was the sound /ɜ:/, whereas, 56.3% of the recorded sounds were wrong. The sound was tested in word initial position and word middle position. The word “Urban” was used to test the sound in the initial position and the word “Worst” was used to test the sound in the middle position.

41 students pronounced the sound correctly and 30 students pronounced the sound wrongly, whereas 20 students altered to sound /ju:/ instead of /ɜ:/ and 10 students altered to sound into /ʌ/. Hereby, the researcher assumes, that the 20 students that altered the sound into /ju:/ were influenced by the dominance of their mother tongue and the difficulty of the target language itself. Looking deeply into the sound /ju:/ results in the fact that it is a combination of two sounds the consonant sound /j/ and vowel /u:/, thus students here were making direct marching between the letter “U” and its sound, just as they learned the sound of the letter when learning the English alphabet. this miss pronunciation is a result of intralingual interference, due the difficulty of English

language and intra lingual interference, the variation of correspondence between pronouncing words and spelling them.

In the middle position, 50 students miss pronounced the sound /ɜ:/ and altered it into /ɔ:/ and the remaining 21 students pronounced the sound correctly. Hereby, the word used to test this sound was “Worst” and the resulting 50 wrong pronunciation can be attributed to both interlingual difficulties and intralingual difficulties. Whereas, in the English language there is not correspondence between spelling words and pronouncing them, moreover generalization cannot be made in most of the cases, for example, the letter “O” is pronounced as /ɔ:/ in “Or”. Accordingly, students were applying the same sound on the tested word due to the presence of the same letter, still this did not work. In the same time the intralingual interference plays part here, whereas, students learned the sound of the letter “O” is /ɔ:/ thus they were borrowing the system from their mother tongue and put it in action with the target language. Worthy mentioning that Arabic language has direct correspondence between the way orthography and pronunciation but, in English there is no such correspondence.

- /i:/

The following in the sequence of problematic monophthong sounds is the sound /i:/ where 52.6% of the participating students in the research did not succeed in producing the correct sound. The sound was tested in three positions word initial, word middle and word final. The word used in testing the initial position was “Eager”, the word used in the middle position was “Quay” and the word used in testing the final position was “See”

In the initial position, 31 student miss pronounced the sound /i:/ and altered in into /ɜ:/ in 31 cases. As mentioned before, English is not systematic as Arabic in terms of correspondence between the pronunciation and orthography. Accordingly, in this case, students try to follow the way they pronounce words in their mother tongue putting it into action with the target language. Moreover, the difficulty of the target language contributes in the increasing number of pronunciation errors as long as English language has no correspondence between the way it is written and the way it is pronounced.



In word middle position, none of the tested students pronounced the sound correctly, whereas, 69 of the investigated students miss-pronounced the sound as /ju:/ and two students pronounced it as /aI/.

Looking deeply into the sound /ju:/ results in the fact that it is a combination of two sound the consonant sound /j/ and vowel /u:/, thus students here were making direct matching between the letter “U” and its sound, just as they learned the sound of the letter when learning the English alphabet. this miss-pronunciation is a result of intra lingual interference, due the difficulty of English language and intra lingual interference, the variation of correspondence between pronouncing words and spelling them.

The word final position, was tested using the word “See”, where 61 students pronounced the sound correctly as “i:” and only 10 students “I”. For the researcher, the reason of the 10 miss-pronounced was nothing more than failure in uttering the long sound and limiting it to a short sound. However, the most interesting variance her is the large number of students that pronounced the sound correctly, here it can be said that intralingual factors and interlingual factors attributed positively to this sound.

For intralingual factors, it can be said the vowel sound in the word “See” is corresponding to its orthography. In other words, students did not face difficulty in matching the sound with the letters they see. In this regard we need to keep in mind that the fact that students’ mother tongue has direct correspondence between pronunciation and orthography, as a result the study came out with this large number of correct pronunciations.

- **/I/**

The seventh in the row of the problematic sounds is the sound /I/. 47.4% of the interviewed students pronounced the sound wrongly. The sound was tested in initial (English), middle (Pretty) and final position (Mini).

41 students miss pronounced the sound as /e/ instead of /I/ and the remaining 30 interviewees pronounced it correctly. In this case, research subjects where trying to read the letter rather producing the appropriate sound which is a result of inter-lingual interference. As a matter of fact, Arabic is regular since there is correspondence between graphemes and phonemes as Awad (2010) pointed out. On the contrary,

English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Additionally, students were making wrong generalizations of matching letters and sounds, in many cases the letter “E” is pronounced as /e/ as in egg, this factor can be attributed to intra lingual interference, or the difficulty of the target language itself.

The same former discussion can be applicable for the word middle case and word final case, where 30 students pronounced the sound as /e/ instead of /I/.

- /ɑ:/

The following problematic sound was the sound /ɑ:/ which came with failure rate of 43.7%. The word “Artist” was used to test the sound in the initial position, “Father” was used to test the sound in the middle position and “Par” to test the final position.

In the initial position, 11 students pronounced the sound wrongly as /e/, in the middle position 39 students miss pronounced the sound and altered it to /ə/. This case is due to intralingual interference, or difficulty of the target language. Here students were making generalizations form other words’ pronunciation, for example the letter “A” is pronounced as /ə/ in “Banana” still this generalization is incorrect due to the fact that English lacks consistency between pronunciation and orthography.

In the final position, 43 students pronounced the sound wrongly as /eI/, this case can be attributed to interlingual difficulties. As a matter of fact, students while learning the English alphabet, they were taught that the letters “A” is pronounces as /eI/, meanwhile, we must keep in mind that the students’ mother tongue is Arabic, a language were direct correspondence pronunciation and orthography is present, in other words students learn to pronounce words by making direct matching between the letters they see and the sounds of those they learned. Thus students where approaching the word “Par” with the influence of their mother tongue, resulting in producing the sound /eI/ instead of /ɑ:/.

- /e/

The following sound in row was the sound /e/. This sound scored 43% failure rate. The sound was tested in two positions word initial and word final. Words that were put in place to test the two positions are “Empty” for the initial position and “Says” for the middle position.

In the initial position only 10 students pronounced the sound wrongly, and the remaining 61 pronounced the sound correctly. In this case, intralingual factors positively contributed to reach this considerable amount of correct pronunciations. In other word, the words “empty” was testing the sound /e/ in the initial position, hereby students succeeded in making correct generalization of matching the sound with the letter, where as in words as “Egg” the letter “e” is pronounced as /e/, thus making this generalization had its positive impact in this case.

However, students’ success in pronouncing the vowel sound in the initial position, the case is the other way around when the sound is tested in the middle position. As resulted from the interview findings only 20 out of the 71 interviewed students pronounced the sound correctly in the middle position. 51 of the investigated students pronounced the sound /eI/ instead of /e/. In this case, intralingual interference is playing its negative impacts to have this number of wrong pronunciations. Whereas, it is not common in English language to have different pronunciation for the same vowel and the same word when adding the third person singular “S”. for example in (pay-pays) the vowel sound remains the same in both cases. Moreover, it is known for students that in the word “Say” the vowel sound is pronounced as /eI/. Still, when adding the third person singular “S” the middle vowel is changed into /e/. This irregular change in pronouncing the vowel sound from /e/ into /eI/ resulted in this considerable amount. As a result of the previous discussion intralingual interference played its impact in miss pronouncing this vowel sound in this position.

- /u:/

The following sound in ranking the problematic vowels, 9<sup>th</sup> in sequence, is the sound /u:/. 41.5% of recorded sounds were wrong. The sound was tested two positions, word initial and word final.

In the initial position, the word “Ooze” was used for testing, whereas 41 of the interview students pronounced the sound wrongly as /ɔ:/ instead of /u:/. In this case, research subjects were trying to read the letter rather than producing the appropriate sound which is a result of inter-lingual interference. As a matter of fact, Arabic language is regular since there is correspondence between graphemes and phonemes as Awad (2010) pointed out. On the contrary, English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. In other words, it is the interlingual interference that led students to pronounce the double letter “O” as /ɔ:/.

In the word middle position, the case is different, results of the recorded interviews show that 53 students pronounced the sound correctly and 18 miss pronounced the sound as /ɔ:/. For the 18 students who pronounced the sound wrongly the former disruption can be applicable, still it can be seen that there is an overall success in uttering the correct sound in the middle position, whereas the word used in testing the sound in this middle position was “Spoon” such a word is so common and it has been in their schemata since their primary school education.

- /ʌ/

The tenth sound in this sequence is the sound /ʌ/ 28.2% only of the interview candidates failed to pronounce the sound correctly. The sound was tested in the initial and middle position. “Upset” was used to test the sound in the initial position and “Monkey” was used to test the sound in the middle position.

In this regard, it is interesting that all candidates pronounced the sound correctly, this can be attributed to the fact the word used to test the sound is “Upset” and in this case inter-lingual interference had its positive contribution. In other words, the students attempt to match the orthography with its common sound, just as they do when pronouncing any word in their mother tongue worked correctly. Another factor can be pointed out that is that student’s generalization in pronouncing some sounds that is based on the orthography had its positive role. For example, the letter “U” is pronounced as /ʌ/ in words like up, study and gull.

For the word middle position, results were not that satisfying, where results show that 40 out of the 71 students interviewed pronounced the sound wrongly, all

wrong pronunciations came into the sound /ɒ/. This number of errors came as a result of inter and intralingual interference, in other words student's mother tongue direct correspondence between orthography and pronunciation negatively influenced student's pronunciation. Students were pronouncing the letter "O" in "monkey" as /ɒ/ instead of /ʌ/. Intralingual interference, played part here in having this number of miss pronounced sounds where the letter "O" can be pronounced as:

- /ɒ/ across
- /əʊ/ ago
- /ɔ:/ born
- /ʌ/ monkey
- /ɜ:/ work
- /u:/ do
- /ʊ/ Wolf
- /ɪ/ women
- /ə/ to

The former list is not a conclusive one, but it helps in giving insights about the difficulty of English in having different pronunciations for the same letter. This factor contributes in miss pronouncing the sound /ʌ/ into /ɒ/ in the middle position.

- /ə/

Interestingly the sound /ə/ seemed to be the easiest sound for students where, only 14.1% of the interviewed students miss pronounced it, the sound was tested in three positions, the word "Among" for initial position, the word "Banana" for the middle positions and "Farmer" for the final position. In the middle and final position all students pronounced the sound as /ə/.

In the initial position, 30 students pronounced the sound /ʌ/ instead of /ə/. This sound was the most problematic for the researcher and the inter-raters. The researcher and the inter-raters were disputing wither the heard sound was /ʌ/ or /ə/. In order to resolve this dispute, the researcher and the inter-raters using the Paart software, a spectrogram software, to decide on the heard sounds.

However, we have an overall success in this sound in the initial position still I believe that the 30 wrong sounds were as a result of having the two sounds /ʌ/ and /ə/ placed central in the mouth cavity and the sound /ə/ is in the lowest place in the middle position and /ʌ/ is in the highest place in the open position, making them so close to each other. The below chart gives the needed elaboration.

	Front	Central	Back
Closed			
Middle		ə	
Open		ʌ	

**Figure (4.1):** /ə/ and /ʌ/ sound

**Table (4.7): Findings of the Interviews in Relation to Diphthongs.**

#	Sound	x / √	Word Initial		Word Middle		Word Final		ALL		x	%	Rank %	√	%	Rank %
			No. Value	%	No. Value	%	No. Value	%	No. Value	%						
1	aI	x	47	66.2	-	-	-	-	47	22.1	47	22.1	8			
		√	24	33.8	71	100	71	100	166	77.9				166	77.9	1
2	eI	x	59	83.1	60	84.5	36	50.7	155	72.8	155	72.8	5			
		√	12	16.9	11	15.5	35	49.3	58	27.2				58	27.2	4
3	oI	x	60	84.5	-	-	-	-	60	28.2	60	28.2	7			
		√	11	15.5	71	100	71	100	153	71.8				153	71.8	2
4	əʊ	x	71	100	71	100	59	83.1	201	94.4	201	94.4	3			
		√	-	-	-	-	12	16.9	12	5.6				12	5.6	5
5	eə	x	71	100	71	100	59	83.1	201	94.4	201	94.4	3			
		√	-	-	-	-	12	16.9	12	5.6				12	5.6	5
6	ʊə	x	-	-	71	100	71	100	142	100	142	100	1			
		√	-	-	0	0	0	0	0	0				0	0	7
7	Iə	x	71	100	71	100	71	100	213	100	213	100	1			
		√	0	0	0	0	0	0	0	0				0	0	7
8	aʊ	x	60	84.5	-	-	47	66.2	107	50.2	107	50.2	6			
		√	11	15.5	71	100	24	33.8	106	49.8				106	49.8	3

The following discussion of the result addresses the findings resulting from the interviews. The researcher will initiate discussion by addressing the most problematic sounds in the diphthongs section and then move to the less problematic sound gradually.

- **/ʊə/ and /ɪə/**

Both diphthong sounds /ʊə/ and /ɪə/ are the most problematic ones amongst diphthong sounds. Both sounds were so problematic to an extent none of the recorded sounds were correct.

- /ʊə/

This sound was tested in two positions, word middle and word final. In word middle position, the word “Tour” was used for testing the sound /ʊə/ in the middle position. All interviewed students did not pronounce the sound correctly and the wrongly pronounced sounds were as follow:

- /aʊ/ 35 occurrences
- /ɔ:/ 12 occurrences
- /u:/ 24 occurrences

First of all, we must keep in mind that the sound /ʊə/ is not found nether in MSA nor in local dialects of Arabic. Additionally, Arabic has only 2 diphthongs while English has eight diphthongs, leaving Arab ELL a gap of 6 sounds to bridge.

Looking back to the three cases of the wrongly pronounced sounds, the researcher believes that one case can be attributed to interlingual interference and the other two cases is a result of not succeeded in making the glide form one sound to the other.

For the 35 students that pronounced the sound /aʊ/ instead of /ʊə/, those students were negatively influenced by interlingual interference, keeping in mind that the word used here was “Tour” students were attempting to make direct correspondence between orthography and pronunciation just as they do while pronouncing words in their mother tongue, however as we mentioned before that English language has beep orthography where there is no direct correspondence between sounds and letters. Pronouncing the sound /aʊ/ alters the word form “Tour” to “Tower” this came as a result of trying to



make the direct correspondence between the letter “O” as /a/ and the letter “U” as /o/ and combining them to /ao/.

The case is different with the 12 sounds pronounced as /ɔ:/ and the 24 sounds pronounced as /u:/. Here it is a case of failing in making the glide form one sound to another and as a result producing a long vowel. In both cases students were concentrating on one letter and making out it a long vowel “O” as /ɔ:/ and “U” as /u:/.

In the word middle position, the 71 interviewed student produced the sound /u:/ instead of /ʊə/ in “Pure”. Students again were negatively influenced by inter lingual interference, keeping in mind that the word used here was “Pure” students were attempting to make direct correspondence between orthography and pronunciation just as they do while pronouncing words in their mother tongue, however as we mentioned before that English language has been orthography where there is no direct correspondence between sounds and letters.

- /Iə/

In the same step comes the sound /Iə/ with the former sound. Once more, all students pronounced the sound wrongly in the three positions and more interestingly all students replaced the diphthong /Iə/ with the long vowel /i:/. The words used to test the sound were “Ear” in the initial position, “Beard” in the word middle position and “Clear” in the word final position.

An important factor here that must be taken into consideration is the fact that the sound /Iə/ does not exist in neither MSA nor local dialects of Arabic. Additionally, it is the interlingual factor that is playing its negative impact, whereas students are attempting to pronounce the letters just as they learned them while learning the English alphabet, the letter “E” is pronounced as /i:/ then. Research participants were putting the way they pronounce words in their mother tongue in practice with the target language, and due to the fact the Arabic has direct correspondence between pronunciation and orthography and English lacks this correspondence students keep committing pronunciation errors. This case is one of them, whereas students, in all three positions, are pronouncing the sound of the letter /i:/ instead producing of the diphthong /Iə/.

- **/əʊ/ and /eə/**

The second in the sequence of the most problematic sounds are the sounds /əʊ/ and /eə/, with both of them a 94.4% failure rate.

- /əʊ/

The sound /əʊ/ was tested in three positions, word initial “Open”, word middle “Coat” and word final “Go”. In the word initial position and word middle position the 71 recorded sounds were incorrect, and all them came up with the monophthong /ɔ:/ instead of /əʊ/, in the word final position 59 students’ pronunciations were wrong producing the sound /ɔ:/ while the remaining 12 students produced the sound correctly as /əʊ/.

Once again, the resulting wrong sound /ɔ:/ in all cases can be attributed to the difficulty Arab ELL find in English pronunciation as a result of not having correspondence between English orthography and pronunciation. Arab ELL usually attempt to pronounce words according the system following in their mother tongue, where direct correspondence between orthography and pronunciation is dominating, consequently the resulting wrong sound here /ɔ:/ is a result of making correspondence between the letter “O” and its sound, /ɔ:/, while learning the English alphabet.

- /eə/

In the same stage comes the diphthong sound /eə/. the sound was tested in three positions word initial “Air”, word middle “Parent” and word final “Where”. In the case of word initial and word final none of the interviewed students pronounced the sound /eə/ correctly, however, it was replaced by the sound /e/. For the word final position, the sound /eə/ was pronounced correctly in 12 cases and miss pronounced in 59 case as /ɜ:/.

Looking back to the results of the produced sounds in the initial and middle position it is clear that students pronounced the sound /e/, which is the first part of the diphthong, instead of /eə/. What does that indicate?

For the researcher it is a matter of failing in processing the sound in the mouth cavity, in other words, in this case students did not succeed in making the glide from the /e/ to the /ə/ resulting in a monophthong sound instead of a diphthong sound.

- /eI/

The following sound the row of the problematic sounds in the sound /eI/. Out of the 71 interviewed students 72.8% pronounced the sound incorrectly. The sound was tested in three positions word initial “Ate” word middle, word middle “Pain” and word final “Pay”. In the word initial position 59 students pronounced the sound incorrectly as /e/, in word middle position 60 students pronounced the sound incorrectly as /e/ and in word final position 35 students pronounced the sound incorrectly as /aI/.

Investigating the results of the produced sounds in the initial and middle position it is clear that students pronounced the sound /e/, which is the first part of the diphthong, instead of /eI/. Thus, for the researcher it is a matter of failing in processing the sound in the mouth cavity, in other words, in this case students did not succeed in making the glide from the /e/ to the /I/ resulting in a monophthong sound instead of a diphthong sound.

- /aʊ/

The diphthong that follows here as problematic is the sound /aʊ/, where 50.2% of the interviewed students pronounced it incorrectly. The sound was tested in three positions: word initial “Owl” word middle position “Down” and “Bow”

In the word initial position, 60 students pronounced the sound wrongly as /ɔʊ/ (56 occurrences and /u:/ (4 occurrences). The reason behind this production of this sound is the fact that students were attempting to pronounce the sounds of the letters they see, as a result of being influenced with their mother tongue. In student’s mother tongue, Arabic language, there is direct correspondence between orthography and pronunciation, which is usually described as shallow pronunciation, however, in the English language the case is different where such correspondence cannot be seen.

Careful look for the sound /ɔʊ/ indicates that students were trying to pronounce the letter “O” as /ɔ:/ but due to having the letter “W” directly after the “O” the /ɔ:/ was shortened so students can pronounce the /ʊ/ thus the resulting sound was /ɔʊ/.

In addition to the former reason the fact that incorrect exposure or training of pronouncing sounds cannot be eliminated in “Owl” simply because results of the word “Down”, which was used to test the sound in the middle position, show that all 71

interviewed students pronounced it correctly, however the same orthography “ow” that was the same reason to the high number of errors. In other words, the researcher thinks that the nature of exposure and training students receive in pronunciation can play considerable part in succeeding or failing in pronunciation. This fact is supported by the results previously discussed in the questionnaire section.

In the fourteenth and the fifteenth domain in the questionnaire student’s attitudes towards the techniques to be followed for improving their pronunciation alongside with the overall development of other communicative skills were investigated. Just as As-sammer (2014) pointed out in his study it seems that students are aware that constant and continuous exposure to the natives’ pronunciation can contribute for their endeavors of improving and developing native-like or good pronunciation. Accordingly, I believe that constant exposure to the correct pronunciation can have the most considerable impact in developing students’ pronunciation. This is fact which Awad (2010) pointed out spelling in Arabic is regular since there is correspondence between graphemes and phonemes. Thus, Arabic orthography can be described as shallow or transparent orthography, which is defined as “a type of orthography in which there is high correspondence between sounds and letters” as mentioned earlier in the research. However, in English pronunciation is rarely affected by the way in which a word is spelt, and spelling may gradually be modified in accordance with changes in the phonological system as Khansir (2012) pointed out. Thus this exposure can initiate learning any word by hearing the good and correct pronunciation then moving to learn its spelling. In other words, process of exposure to native pronunciation can contribute to eliminating inter-lingual interference in the field of spelling and pronunciation.

In the word final position, the word “Bow. v” was used to test the sound in the final position (Bow the verb). 47 students pronounced /ɔʊ/ instead of /aʊ/. The researched is aware the sound /ɔʊ/ does not exist with diphthong sounds, however, it was exactly the sound produced by the investigated students. The reason behind this production of this sound is the fact that students were attempting to pronounce the sounds of the letters they see, as a result of being influenced with their mother tongue. In student’s mother tongue, there is direct correspondence between orthography and pronunciation, which is usually described as shallow pronunciation, however, in English language the case is different where such correspondence cannot be seen.

Careful look for the sound /ɔʊ/ indicates that students were trying to pronounce the letter “O” as /ɔ:/ but due to having the letter “W” directly after the “O” the /ɔ:/ was shortened so students can pronounce the /ʊ/ thus the resulting sound was /ɔʊ/.

- /ɔI/

The sound /ɔI/ did not seem to be that problematic for students, whereas 28.2% only of the students miss-pronounced the sound in the three positions. The sound was tested in three positions word initial “Ointment” word middle “Boil” and word final “joy”.

In the initial position 60 students replaced the diphthong sound /ɔI/ with the monophthong sound /ʊ/. However, the correspondence between the letters “oi” and the sound, student are making errors in pronouncing this sound. The researcher thinks that the lack of good and appropriated training is the reason here.

In the middle and final position, all 71 students pronounced the sound correctly. The reason for this amount of correct pronunciations is the fact that intra lingual interference is impacting positively here. Whereas all tested students are Arabic language speakers and in Arabic there is direct correspondence between orthography and pronunciation. Accordingly, students’ approach to pronounce “Boil” and “Joy” just as they do in Arabic resulted in success with pronouncing the sound /ɔI/.

- /aI/

The last sound in the sequence of the problematic sounds was the sound /aI/ where only 22.1% miss pronounced it. The sound was tested in three positions: word initial “Aisle”, word middle “Time” and word final “Sigh”

In the word initial position, 47 students pronounced the wrongly as /eI/ instead of /aI/. This result can be attributed to inter lingual interference whereas, as mentioned before, Arabic and English language are not the same in terms of correspondence between orthography and pronunciation: Arabic language has dominating correspondence between orthography and pronunciation while English language lacks such correspondence.

Students were trying to pronounce the letter “A” in “Aisle” just as they learned while learning the English Alphabet, students were thought that the letter “A” is pronounced as /eI/.

In the middle and final position, all 71 students pronounced the sound correctly. The reason for this amount of correct pronunciations is the fact that intralingual interference is impacting positively here. Whereas all tested students are Arabic language speakers and in Arabic there is direct correspondence between orthography and pronunciation. Accordingly, students’ approach to pronounce “Time” and “Sigh” just as they do in Arabic language resulted in success with pronouncing the sound /aI/. Worthy mentioning that students were taught that the letter “I” is pronounced as /aI/ while learning the English Alphabet.

### **GPA University**

Table (4.8) show that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents due to GPA University. We conclude that there are no differences in the averages of the research responses due to GPA University.

The above result reflects a gap in between student’s academic achievement and their pronunciation proficiency, whereas it is supposed to have better pronunciation for students with higher GPA and vice versa, however this is not the case. This result means that the phonetic competence is not properly reflected in the students’ GPA as a result of not having an appropriate testing mechanism to the phonetic competence, or pronunciation is not having the needed attention during preparing the evaluation criteria for any course by tutors.

As a matter of fact, students will not pay the needed attention to things that are not evaluated or tests. The same case for tutors, they will not pay attention for things they are not planning to test or evaluate.

**Table (4.8):** Independent Samples T-test - GPA University

	Mean		Test Value	Sig.
	60%-79%	80%-100%		
<b>Monophthongs</b>	12.79	12.72	0.239	0.812
<b>Diphthongs</b>	6.75	7.34	-1.201	0.234
<b>Total</b>	19.54	20.06	-0.948	0.347

### **Level at university education**

Table (4.9) show that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents due to Level at university education. We conclude that there are no differences in the averages of the research responses due to Level at university education.

The former result reflects no change and/or development in students' pronunciation during their academic life. Whereas, there are not statistical correlation between student's level and their pronunciation proficiency. That means the academic inputs in the field of pronunciation development is not enough. As mentioned before that, excluding pronunciation proficiency during evaluating students' resulted in neglecting this field form both tutors and students' academic's efforts.

**Table (4.9):** Independent Samples T-test - Level at university education

	Mean		Test Value	Sig.
	Second year	Fourth year		
<b>Monophthongs</b>	12.79	12.71	0.286	0.776
<b>Diphthongs</b>	6.91	7.34	-0.925	0.358
<b>Total</b>	19.70	20.05	-0.678	0.500

#### 4.4 Discussion of Hypothesis Testing

##### 4.4.1 Palestinian EFL make more errors with English diphthongs than monophthongs.

Finding form, the interview show that the success rate is 44% in monophthongs and 56% of failure rate. In diphthongs the case is more problematic, where only 31% of the recorded sounds were correct and the remaining 69% were in correct. However, the fact that neither monophthongs nor diphthongs reached the success rate, still the results of monophthongs are better than diphthongs. Thus, this hypothesis is accepted.

**Table (4.10):** Total Average Rate of Monophthongs and Diphthongs

	$\chi$		$\sqrt$	
	N	%	N	%
<b>Monophthongs</b>	1154	56	905	44
<b>Diphthongs</b>	1126	69	507	31
<b>Total</b>	2280	61.8	1412	38.2

##### 4.4.2 There is statistically significant relation between difficulties in pronouncing English vowel sounds (monophthongs and diphthongs) and the learners' levels and General Point Average (GPA)?

###### GPA University

Table (5.2) show that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents due to GPA University. We conclude that there are no differences in the averages of the research responses due to GPA University.



**Table (4.11):** Independent Samples T-test - GPA University

	Mean		Test Value	Sig.
	60%-79%	80%-100%		
<b>GPA University</b>	3.18	3.08	1.681	0.097

#### **Level at university education**

Table (5.3) show that the p-value (Sig.) is greater than the level of significance  $\alpha = 0.05$ , then there is insignificant difference among the respondents due to Level at university education. We conclude that there are no differences in the averages of the research responses regarding Level at university education.

**Table (4.12):** Independent Samples T-test - Level at university education

	Mean		Test Value	Sig.
	Second year	Fourth year		
<b>Level at university education</b>	3.11	3.11	-0.083	0.934

Based on the findings of the interview and their correlation to Students' GPA and University level summarized in the above tables, it can be concluded that no correlation can be found between those variables, thus this hypothesis is refuted.

#### **4.4.3 Palestinian EFL make pronunciation errors due to interlingual difficulties.**

With reference to, the analysis and discussion in the previous chapter where pronunciation errors were deeply investigated analyzed and discussed; there were several cases that pronunciation errors committed by the investigated students were attributed to interlingual difficulties, especially variations between mother language and the target language in terms of inconsistency between orthography and pronunciation. Whereas, Arabic, the mother tongue of the investigated students, has dominating consistency between pronunciation and orthography where pronunciation and words'

spilling are directly matching. On the contrary, English is the opposite since, such consistency between orthography and pronunciation is not found or deep orthography language. Accordingly, this hypothesis is accepted.

#### **4.4.4 Palestinian EFL learners make pronunciation errors due to intra lingual difficulties.**

Based on the analysis and discussion in the previous chapter where pronunciation errors were deeply investigated, analyzed and discussed there were several cases that pronunciation errors committed by the investigated students were attributed to intra lingual difficulties. In other words, students do commit pronunciation errors as a result of the difficulty of the target.

As a matter of fact, several errors were documented that are attributed to the inconsistency, or lack of systematic, orthographic system. To be elaborated more, the same sound in English language might have different letters that represents it, or the same letter might be pronounced differently in different cases. Such an inconsistent system led students to commit several pronunciation errors. Thus this hypothesis is accepted.

#### **4.4.5 Palestinian EFL attitudes towards the pronunciation of English vowel sounds (monophthongs and diphthongs) are positive.**

Based on quantitative (statistical) and qualitative (analysis and discussion) findings of the questionnaire show that there was an overall agreement on the domains investigated within the questionnaire. Accordingly, this hypothesis is accepted.

**Table (4.13): Means and Test values for each item of the questionnaire**

<b>Item</b>	<b>Mean</b>	<b>S.D</b>	<b>Proportional mean (%)</b>	<b>Test value</b>	<b>P-value (Sig.)</b>
<b>All items of the questionnaire</b>	3.11	0.25	77.79	20.65*	0.000

**4.4.6 There are variations in pronunciation errors that are attributed to vowel’s sound position (word initial, middle and final)**

Based on quantitative analysis for the results of the interview, count and rate of the incorrect pronunciations recorded, it can be said that:

- With monophthong sounds, vowels in the middle position were the most problematic with around 47% of the incorrect sounds were there, followed by vowels in the initial position with 33.5% and word final with 19.5%
- With Diphthong sounds, vowels in the initial position were the most problematic with around 41.2% of the incorrect sounds were there, followed by vowels in the final position with 32.2% and word middle with 26.6%

Based on the former review it can be said that there are statistical variations in pronunciation error that can be attributed to position of the vowel. Thus, this hypothesis is accepted.

**Table (4.14): Count and Rate of the Incorrect Pronunciations**

	Monophthongs		Diphthongs	
	No. Wrong Sounds	%	No. Wrong Sounds	%
<b>Word Initial</b>	387	33.5	439	41.2
<b>Word Middle</b>	542	47.0	284	26.6
<b>Word Final</b>	225	19.5	343	32.2
<b>Total</b>	1154	100	1066	100

**Chapter Five:**  
**Findings, Conclusion and**  
**Recommendations**

## 5.1 Findings

- Findings from the interview show that the success rate is 44% in monophthongs and 56% of failure rate. In diphthongs, the case is more problematic, where only 31% of the recorded sounds were correct and the remaining 69% were incorrect. However, the fact that neither monophthongs nor diphthongs reached the success rate, still the results of monophthongs are better than diphthongs.
- There is insignificant difference among the respondents due to GPA University. We conclude that there are no differences in the averages of the research responses due to GPA University.
- There is insignificant difference among the respondents due to Level at university education. We conclude that there are no differences in the averages of the research responses regarding Level at university education.
- There were several cases that pronunciation errors committed by the investigated students were attributed to interlingual difficulties, especially variations between mother language and the target language in terms of inconsistency between orthography and pronunciation
- Several errors were documented that are attributed to the inconsistency, or lack of systematic, orthographic system. To be elaborated more, the same sound in English language might have different letters that represents it, or the same letter might be pronounced differently in different cases. Such an inconsistent system led students to commit several pronunciation errors
- Monophthong sounds, vowels in the middle position were the most problematic with around 47% of the incorrect sounds were there, followed by vowels in the initial position with 33.5% and word final with 19.5%
- Diphthong sounds, vowels in the initial position were the most problematic with around 41.2% of the incorrect sounds were there, followed by vowels in the final position with 32.2% and word middle with 26.6%

## 5.2 Conclusions

Based on the previously discussed and analysed results it can be concluded that:

- RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation
- Teaching the production of RP English vowels needs an experienced and a professional instructor
- The major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language
- Difficulty in uttering RP English vowels is a part of weakness in phonological skills in general
- Inconsistency of English Spelling contributes to vowels' pronunciation difficulties
- Difficulty in RP English vowels is due to the lack of training in pronouncing these vowels
- Improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like
- RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs
- Better teaching of RP English vowels is conducted through practicing them within context
- Special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners
- No statistical variations are found that are attributed to demographic data, students level and GPA.
- The most problematic monophthong sounds are: /æ/, /ɒ/, /ɔ:/, /u:/, /ɜ:/ and /i:/ such sounds are the ones that did not exceed 50% of correct pronunciations
- The most problematic diphthong sounds are: ʊə/, /Iə/, /əʊ/, /eə/, /eɪ/ and /aʊ/ such sounds are the ones that did not exceed 50% of correct pronunciations
- Among monophthong vowel sounds, middle positioned vowels were the most problematic, followed by vowels in the initial position then by word final position vowels.

- Among Diphthong vowel sounds, initial positioned vowels were the most problematic, followed by vowels in the final position followed the middle positioned vowels.

### **5.3 Recommendation**

- Additional attentions must be attributed to developing speaking skill in general and pronunciation in particular. Such attention is supposed to be since early stages of learning English.
- It is central to teach English pronunciation by people with good command of English language and more importantly by teachers with perfect or near to be perfect accent, especially at the early stages of teaching English.
- English Language learners since early stages of learning English have to be exposed to English as much as possible in order improve their performance in pronunciation in general.
- English language curricula have to pay attention to listening and speaking skills. Such skills must be graded and tested to gain the needed attention for both students and teacher at various language learning levels including university levels.
- English language teachers must be acquainted with results of contrastive analysis researcher, a field of study that highlights similarities and differences between the mother language and the target language. Such knowledge might give teachers insights about similarities and differences between the sound systems of both similarities and differences, accordingly teachers can invest on similarities and find other innovative ways to deal with differences so as to facilitate the teaching and learning process.
- Tutors of English language are supposed to make the balance between accuracy and fluency while teaching speaking but under no means pronunciation errors are left without correction; such correction can be immediate or delayed depending on the teacher's objective at that session: fluency of accuracy.
- Teaching spelling at all stages should be after teaching pronunciation. Such an order can contribute in overcoming inter lingual interference between Arabic

language and English language, especially in correspondence between orthography and pronunciation.

- Review of relevant literature can give teachers some insights about problematic area in pronunciation in general, however each context has its own inputs and output, thus problems might vary and remedial mechanisms too. Accordingly, teachers are supposed to function with their own context which includes customizing remedial mechanisms and techniques.

#### **5.4 Suggested Remedial Program**

Pronunciation errors are among the most difficult challenges to overcome for adult language learners. Grammar and other aspects of the target language can easily be assimilated but it takes time to master pronunciation features. It is no wonder to find a foreign language speaker with good knowledge of grammatical and lexical features but with very poor pronunciation

Given the importance of pronunciation in ensuring efficient communication, the aim of this study was not only to investigate the pronunciation errors made by Palestinian EFL learners in pronouncing English vowels, but also to find a way to remedy those errors. This section will provide some solutions to this matter.

First of all, the importance of errors should not be neglected. Scholars have demonstrated that one of the ways of going about pronunciation problems is by analysing the errors and their sources. Knowing the learners' pronunciation errors is very important for the teacher. It tells teachers what the most problematic sounds for students are. Thus, teachers should put a special focus on those problematic sounds while teaching. The teacher should also inform the learners about their most common errors and explain to them why those errors are common by using contrastive analysis for instance.

In other words, the more problematic a sound is the more focus must gain during the teaching and learning process. So, one of the best solutions for Palestinian students' pronunciation problems is to focus on their errors both during material designing and teaching process. This can improve their pronunciation performance and then help them communicate more efficiently.



Furthermore, pronunciation training needs to be given enough time and attention. The reason behind this is that students and teachers do not exert the needed effort to develop pronunciation because it is not included in the grading system for university courses. Not to mention that during the four university years students attend only one course of phonetics. So, it can be concluded that one of the reasons of their poor pronunciation is the lack of enough time allocated to pronunciation. Allocating enough time to pronunciation teaching would help to improve the students' pronunciation performance. for more details see appendix (2) .

### **5.5 Recommendation for Further Studies**

- An Acoustic Analysis of Palestinian EFL Students in Pronouncing English Vowels.
- Investigating the Impact of Extensive and Intensive Listening on Developing EFL Students' Pronunciation.
- Error Analysis Approach as a Remedy to overcome Pronunciation Problems made by Palestinian EFL Students in Pronouncing English Vowels.

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# Appendices

## **Appendix (1) : Data Collection Tool**

**Dear students,**

The purpose of this questionnaire and the sessions that follow is for a Master's study intended to investigate “**Difficulties Facing Palestinian EFL Students in Pronouncing English Vowels**”. You are thus kindly asked to participate by filling in the questionnaire and attending to a short session in which you will (a) fill in some personal data, and (b) pronounce some given written texts (c) and respond to a questionnaire. the interview will be recorded for documentation and further referencing purposes. **Your responses and recordings are confidential and will only be used for the purpose of the research.**



**Section 1: Personal Data.**

Please select **only one** answer of following choices that best fits you.

**1. Your current University GPA is.....**

- 60%-69%       70-79       80-89       90-100

**2. Level at university education**

- Second year       Fourth Year

**Section 2: State your opinion to the following statements**

#	Item	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that RP English diphthongs are more difficult than RP English monophthong in terms of pronunciation.				
2.	I believe that teaching the production of RP English vowels needs an experienced and a professional instructor				
3.	I think that the major source of difficulty in RP English vowels is attributed to the difference between the source language and the target language				
4.	I feel that the difficulty in uttering RP English vowels is a part of weakness in phonological skills in general				
5.	I believe that inconsistency of English Spelling contributes to vowels' pronunciation difficulties				
6.	I consider that the difficulty in pronouncing RP English vowels result from weakness in speaking skill.				
7.	I feel that difficulty in RP English vowels is due to the lack of training in pronouncing these vowels				
8.	I believe that improving pronouncing RP English vowels needs constant listening to native speakers or to native speakers-like				
9.	I consider that vowels Identification Drills are the most useful ones to facilitate pronouncing RP English vowels.				
10.	I believe that RP English vowels are better learned via teaching them at a sequence; monophthongs followed by diphthongs				
11.	I believe that better teaching of RP English vowels is conducted through practicing them within context				

#	Item	Strongly Agree	Agree	Disagree	Strongly Disagree
12.	I consider minimal pairs are very beneficial in teaching RP English vowels				
13.	I believe that special drills should be designed to teach RP English vowels depending on the diagnosis of the difficulties of a special group of learners				
14.	I believe that full mastery of RP English vowels requires intensive ear training				
15.	I believe that mastering RP English vowels is attained gradually hand by hand with the mastery of other communicative skills.				

**Section 3: Please Read Aloud the Following Words as Ordered**

#	Word	#	Word	#	Word
1.	Eager	21.	Says	41.	Par
2.	English	22.	Plait	42.	Sure
3.	Empty	23.	Monkey	43.	Farmer
4.	Abduct	24.	Father	44.	Sigh
5.	Upset	25.	Want	45.	Pay
6.	Artist	26.	Yawn	46.	Joy
7.	Occupation	27.	Woman	47.	Go
8.	Autograph	28.	spoon	48.	Where
9.	Ooze	29.	Worst	49.	Pure
10.	Urban	30.	Banana	50.	Clear
11.	Among	31.	Time	51.	Bow (v)
12.	Aisle	32.	Pain		
13.	Ate	33.	Boil		
14.	Ointment	34.	Coat		
15.	Open	35.	Parent		
16.	Air	36.	Tour		
17.	Ear	37.	Beard		
18.	Owl	38.	Down		
19.	Quay	39.	See		
20.	Pretty	40.	Mini		

## **Appendix (2) : Suggested Remedial Program**

Under the former demonstration the researcher suggests the following based in the review of (Varasarin, 2007), (Al Dilailmy, 2012)and (Kenworthy, 1990):

- Framework for teaching pronunciation and providing strategies to teach so.
- Framework for teaching language learning strategies.

### **5.5.1 Framework for teaching pronunciation and providing strategies to teach so.**

The teacher should incorporate the following approaches

#### **5.5.1.1 Set pronunciation in a communicative context**

Learners benefit greatly from explicit explanation of how pronunciation fits into the overall process of communication. A simple model of communication, showing a listener trying to interpret a message on the basis of cues in the speakers' speech, is sufficient. This gives learners a framework within which to understand what goes wrong when they are not understood or are misunderstood, and to gain a clear, practical idea of the nature of linguistic contrast but the basis of our ability to communicate in real life contexts.

#### **5.5.1.2 Take a learner-centred approach**

This type of teaching naturally encourages the use of naturalistic exercises and practice of real communicative situations. Classes must be learner-centred in the sense that learners should be able to practice speech that will be directly useful to them in their real lives. It is essential that learners should be encouraged to bring examples of communication failure to class for discussing. In addition to careful planning, teachers must be responsive to learners' needs and explore a variety of methods to help learners comprehend pronunciation features.

#### **5.5.1.3 Make analogies from the known to the unknown**

Sometimes learners can solve pronunciation problems by applying what they know about familiar sounds to unfamiliar ones. Teachers may start with some sounds that are common in the learners' native language and in English, and then ask the learners to practise them.

#### **5.5.1.4 Teach unfamiliar sound symbols**

The emphasis at this stage should be placed on those sounds that are unique to English so learners become aware of the differences between the target language and their mother tongue, and take extra caution when they have to read words containing these unique sounds.

#### **5.5.1.5 Select and prepare some common letter combinations and show learners the normal way to pronounce them**

For example, the letter combination of ‘ea’ is often pronounced as /i:/ as in peak, team and beat, etc. However, this strategy must not be overused because English does not have a fixed, one-to-one correlation between letters and sounds.

#### **5.5.1.6 Challenge learners to look for words spelled with letter combinations that represent more than one sound**

Learners might look in the reading material for words that have an ‘oo’ combination, such as cook, and school. List those words in two columns separately. Then list the words in which ‘oo’ represent the sound heard in cook such as look, book, and took, etc., and the ‘oo’ sound heard in school such as tool, boost, boot and noodle, etc. Learners can then share lists with everyone in the class and discuss the different sounds the letter in combinations represent.

#### **5.5.2 Framework for teaching language learning strategies.**

The following headings comprise a framework for teaching pronunciation and language learning strategies to help English language teachers to develop their teaching.

- Preview teaching material and activities to identify strategies for instruction.
- Present the strategy by naming it and explaining when and why to use it.
- Model the strategy provide opportunities to practice the strategy with various activities/tasks.
- Develop students’ ability to evaluate strategy use, and develop skills to transfer strategy use to new tasks.

During preliminary stages of strategy instruction, teachers will probably take a controlled and teacher-centred approach to instruction. As teachers become experienced in strategies instruction, they should adjust the content and intensify each step to

establish a closer match between their instructional approach and their particular teaching context. The time required for each step is variable, depending on the difficulty of the activity and the group of learners.