Research Title:

**Investigating the Problems of Learning Diphthongs among (EFL) Learners in Sudan University for Sciences and Technology**

تقصي مشاكل تعلم حروف المد النحائية لدى الطلاب الدارسين للغة الإنجليزية بجامعة السودان للعلوم والتكنولوجيا

*A Thesis Submitted for: The fulfillment of the requirements of Bachelor in English language*

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الآية

قال تعالى:

وَقُلۡ رَبِّ زَدْنِي عِلْمًا

صِحَاحُ اللَّهِ العَظِيمِ

سورة طه، الآية: 114
DEDICATION

To those who give us the sense of life and search for a world full
Of peace

Tolerance and mutual respect to our parents, those who live the
life with us whenever and whatever we go.
Acknowledgments

We would like to express our gratitude for first to Allah and consulting teacher, lecturers in Sudan university of science and technology, college of education studies and English department for their helpful advice to complete this study.

With love and respect to the always great and wonderful to our best teacher supervisor Dr. Alsadig Osman whom standing with us in this hard work with great push toward our aim, we would like to thank everyone assisted us in this work. Our thankfulness is due to all of the teachers who help us and answered our questions.

Last but not least, a warm word of gratefulness goes to our beloved of our family.
ABSTRACT

The aim of this study is to explore the problem of learning diphthongs. The study focused second year's students at Sudan University of science and technology. The SPSS program was used to analyze the data were 30 student that had been collected was through experimental test. The study finding that student of EFL reflects that mispronunciation leads to misunderstanding the meaning as a result of the absence of teaching diphthongs and those students of EFL reflect that difficulties in pronunciation leads to misunderstanding diphthong. The study recommended that the teacher should pay more attention to the words meaning and their correct pronunciation. The study suggested that the researchers should focus on the meaning of words and utterance in correct way. The researchers can do more studies on the trip thong.
مستخلص البحث

تهدف هذه الدراسة إلى اكتشاف مشكلة تعلم حروف المد الثانئ. ركزت هذه الدراسة على طلاب المستوى الثاني في جامعة السودان للعلوم والتكنولوجيا. استخدم برنامج الـSPSS لتحليل البيانات. جمعت البيانات من 30 عينة من الطلاب من خلال استخدام الاختبار. اوضحت نتائج هذه الدراسة أن الخطأ اللفظي يقود إلى عدم فهم المعنى نتيجة لغياب وقصور في تدريس حروف المد الثانئ. أوصت هذه الدراسة بأنه يجب على المعلم الانتباه جيدا إلى معاني الكلمات والاستماع الجيد. واقترحت هذه الدراسة أنه يجب على الباحثين التركيز على معاني الكلمات والنطق بالشكل الصحيح. إن الباحثين يمكنهم عمل دراسات أكثر عن حروف المد الثلاثي.
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CHAPTER ONE

INTRODUCTION

1.0 Introduction

(Roach: 1983:20) A crude definition of diphthongs might be combination of vowel there is movement of the tongue, lips and jaw from one pure vowel sound to another. There are a large numbers of diphthongs sounds which consists of a movement or glide from one vowel to another. A vowel which remains constant and doesn't glide is called a pure vowel; it's one of the most common pronunciation mistake that results in a learning of English having a foreign accent is the production of pure vowel where a diphthong should be pronounced. In terms of length diphthongs are like 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.

There are eight English diphthongs divided into centering and closing diphthongs. Centering diphthongs are called SO because they all glide or move to words the center particularly to words the (schwa /a/). The closing diphthongs have the characteristics of moving to words a closer vowel.

1.1 Statement of the problem:-

This study is going to shad a light on the problem of learning diphthongs among EFL students at Sudan university so while we were studying at Sudan university we found out that the most of the students have problems in term of distinguishing diphthongs and even ourselves face the same problem so lead us to write about this problem in order to find solution for this problem.
1.2 Objective of research
1- To enable EFL students to pronounced diphthongs correctly
2- To the use of develop student’s awareness in using English Diphthongs

1.3 Question of research
1- To what extent can EFL students pronounced diphthongs correctly
2- To what extent can students use diphthongs apparently?

1.4 Hypothesis of research
1- EFL students don't pronounced diphthongs correctly.
2- Students don't use diphthongs apparently.

1.5 Methodology of research
Research is using test in collecting the data and the data will be analyzed by using spss program

1.6 Limitations
Sudan University of science and technology faculty of education Department of English language (second year) 2017-2018
CHAPTER TWO

Part 1 - Literature review

2.0 Introduction

Is scientific study of speech Phonetics is branch of linguistic that comprises the study of the sound of human speech or. In the case of sign language the equivalent aspects of sign (O card (2005)p.15) Phonetic is concerned with describing the sound that occur in the language of the works we want to know what these sounds are how they fall into pattern and how they change in differ end circum stance. most importantly we want to know what aspect of the sounds are necessary for conveying the meaning of what is being said .(Peter Lade Fo Ged ) course in phonetics)2008)

2.1 Types of phonetics

In fact, speech can be studied from three points of view :-

(a) from the view point of articulations – the way sounds are produced in terms of the articulatory used. this branch of phonetics is usually referred as articulatory phonetics.

(b) from the view point of perception: the way speech sounds are perceived by the listener. this branch is called auditory phonetics.

(c) from the view point of the sound waves produced by speaking. these sound waves are scientifically measured by using certain machines for their quantity quality and so forth. this branch of phonetics is labeled acoustic phonetics.
The general study of the characteristics of speech sounds is called phonetics. Our main interest will be in articulatory phonetics, which is the study of how speech sounds are made, or articulated. Other areas of study are acoustic phonetics, which phonetics deals with the physical properties of speech as sound waves in the air, and auditory (or perceptual phonetics) which deals with the perception, via the ear, of speech sounds.

Diphthong, in phonetics, a gliding vowel in the articulation of which there is a continuous transition from one position to another. Diphthongs are to be contrasted in this respect with so-called pure vowels—i.e., unchanging, or steady state, vowels.

2.2 Types of phonetics

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(c) from the viewpoint of the sound waves produced by speaking. These sound waves are scientifically measured by using certain machines for their quantity, quality, and so forth. This branch of phonetics is labeled acoustic phonetics.
2.3 The articulation of sounds

When describing the articulation of English sound we should consider both consonants and vowels the place of articulation, manner of articulation and activity of the vocal cards. Vowels are usually described in terms of the position of the tongue, height of the tongue and the shape of the lips.

2.3.1 Consonants :-

Consonants are usually described as sounds in the production of which air steam is obstructed partially or completely at different points.

2-3-1 place of articulation :-

Considering the place of articulation, we can distinguish at least nine points of articulation in English.

2-3-2 Bilabial sounds :-

Bilabial are the sound in the production of which the upper and lower lips are involved these sound are 1 p 1 b 1 and 1 m 1.

2-3-3 Bilabial – dental – sounds :-

Here, the upper teeth and the lower lip are brought into contact with each other the sound produced in this way are /f/ and /v/.

2-3-4 Dental inter dental sounds :-

In the production of these sound the lip the tongue is placed between the upper and lower teeth. Example of these sound are /θ / and /g/.

2-3-5 Alveolar sounds :-

In the production of alveolar sound the lip of the tongue is placed against the alveolar the sounds produced /t/, /h/, /s/, /z/, /l/ and /r/. 
2-3-6. palate – alveolar sound : ( post – alveolar ):
It is called because it is partly palatal and partly alveolar. The front of the tongue is put in an area lightly further back than that for /s/ and /z/ that is to say between the alveolar ridge and the hard palate this is done with a rounding of the lips. These sounds are / , /, /3/ and /d3/ . For /d3/ the closure is made between the tip, blade, and rims of the tongue and the upper alveolar ridge and side teeth, at the same time the front of the tongue is /r/ is also classified as post- alveolar.

2-3-7- Palatal sounds :-
This refers to one sound /I/ . in its production, the center of tongue is placed against the palate .

2-3-8– velar sound :-
These are produced with the back of the tongue put against the soft palate (velum) these are K-G and J .

2-3-9- glottal sound :-
In English, this to one sound too, it is the sound /h/ . it is produced by the Glottis Air passes between the glottis while they are apart.

2-3-10-Labio – velar sounds : -
The sound /w/ in English is classified as labio – velar because two points are said take part in its articulation it is said with the back of the lower and upper lips are brought close to each other without making any contact ( peters ( a defog end a course in phonetics 2008 )
2.4 Teeth, lips, mouth, larynx and pharynx:

Human teeth are upright, not slanting outwards like those of apes, and they are roughly even in height. Such characteristics are not very useful for ripping or tearing food and seem better adapted for grinding and chewing. They are also very helpful in making sounds such as f or v. Human lips have much more intricate muscle interlacing than is found in other primates and their resulting flexibility certainly helps in making sounds like p or b. The human mouth is relatively small compared to other primates, can be opened and closed rapidly, and contains a smaller, thicker and more muscular tongue which can be used to shape a wide variety of sounds inside the oral cavity. In addition, unlike other primates, humans can close off the airway through the nose to create more air pressure in the mouth. The overall effect of these small differences taken together is a face with more intricate muscle interlacing in the lips and mouth, capable of a wider range of shapes and a more rapid and powerful delivery of sounds produced through these different shapes. (The study of language – Yule p27)

2.5 Articulators above the larynx:

All the sounds we make when we speak are the result of muscles contracting. The muscles in the chest that we use for breathing produce the flow of air that is needed for almost all speech sounds; muscles in the larynx produce many different modifications in the flow of air from the mouth. After passing through the larynx the air goes through what we call the vocal tract, which end at the mouth and nostril. Here the air from the lungs escapes into the atmosphere. We have a large and complex set of muscles that can produce changes in the shape of the vocal tract, and in order to learn how the sound of speech are produced it is necessary to become familiar with the different
parts of the vocal tract. These different part are called articulators, and the study of them is called articulatory phonetics.

Fig 1 is diagram that is used frequently in the study of phonetics. It represents the human head, seen from the side, displayed as though. (the study of language — yulep34)

1 The articulators

i) The pharynx is tube which begins above the larynx.

ii) The velum or soft palate is seen in the diagram in a position that allows air to pass through the nose and through the mouth.

iii) The hard palate is often called the “roof of the mouth” you can feel its smooth curved surface with your tongue.

iv) The alveolar ridge is between the top front teeth and the hard palate.

v) The tongue is of course, a very important articulator and it can be moved into many different place and different shape.
Vi) The teeth (upper and lower) are usually shown in diagrams like Fig. 1 only at the front of mouth, immediately behind the lips.

Vii) The lips are important in speech. They can be pressed together, brought into contact with the teeth.

![Diagram of the tongue with divisions labeled: tip, blade, front, back, root.]

**Fig. 2 Sub-divisions of the tongue**

### 2.6 Vowel and Consonant:

The word vowel and consonant are very familiar ones, but when we study the sound of speech scientifically we find that it is not easy to define exactly what they mean. The most common view is that vowels are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips. A doctor who wants to look at the back of a patient’s mouth often ask to say “ah” making this vowel sound is the best way of presenting an unobstructed view. But if we make sound s or d it can be clearly felt that we are making it difficult or important for the air to pass through the mouth. Most people would have no doubt that sounds like s and d should be called consonant. However, there are many cases where the decision is not so easy to make. One problem is that some English sound that we think of as consonants, such as the sound at the beginning of the word “hay” and “way”, do not really obstruct the flow of air more than some vowel do. Another
problem is that different language have different ways of dividing their sound into vowel and consonants; for example, the usual sound produced at the beginning of the word “red” is felt to be a consonant by most English speaker, but in some other language (some dialects of Chinese, for example) the same sound is treated as one of the vowels.

If we say that the difference between vowel and consonants is a difference in the way that they are produced, there will inevitably be some cases of uncertainty or disagreement; this is problem that cannot be avoided. It is possible to establish two distinct group of sound (vowels and consonants) in another way. Consider English words beginning with the sound h; what sounds can come next after this h? We find that most of the sound we normally think of as vowel can follow (for example e in the word “hen”), but practically none of the sounds we class as consonant.

The part the tongue, between front and back, which is raised highest. Let us look at some example:

i) make a vowel like the I: in the English word “see” and look in a mirror; if you tilt your head back slightly you will be able to see that the tongue is held up close to the roof of the mouth.

ii) in the making the two vowel described above, it is the front part of the tongue that is raised.

Diphthongs contrast with monophthongs, where the tongue or other speech organs do not move and the syllable contains only a single vowel sound. For instance, in English, the word ah is spoken as a monophthong (/ə:/), while the word owe is spoken as a diphthong in most dialects (/ɔː /). A diphthong is simply two distinct vowel sounds in sequence. The name of the letter “i” is an example of a diphthong: it combines the sounds “ahh” and “eee.” “Ahh-
Or, consider the word “cow.” After the hard-C sound, the rest of the word is a diphthong consisting of the short-A sound, “aaa,” and the long-U sound, “ooo.” Cow.(the study of language –yulep27)

According to (Roach:1983:20) English is usually described as having eight diphthongs, and they can be usefully grouped in the following ways:

- **Centering:** diphthongs end with a glide towards /ə/. They are called centering. Because /ə/ is a central vowel. e.g: *sure /ʊə/, there /eə/.*
- **Closing:** diphthongs end with a glide towards /i/ or to ward /o/. The glide is towards higher position in the mouth.e.g: *they /eɪ/, boy /ɔi/.*

According to Arnold, a sequence of two different vowels occur in two successive syllables as in sec Ann [ɪ] + [x] too eager [u] + [ɪ] e*c. such a sequence has no particular name but a sequence of different vowels with in one and same syllable is called a diphthong.

A diphthong as we have said occurs within single syllables is per from with a single in stress pulse (or pulse of initiator power) in English diphthong the stress pulse is a decrescendo one, starting rather stress. Pulse of high [hai] may be represent English examples are [a l] in high [a Q] in how [d l] in boy and in very many types of English [e t] in day [o Q] or [d Q] in go etc. in a diphthong the two vowels the starting point (or first element) a the finishing point (second element) such as [a] and [ɪ] in high are not perceived as two separate vowels but the diphthong is perceived as transitional gliding sound starting at the first element and gliding towards the sound element.

As the mark [ ] over the[ɪ] indicates the weak or unstressed element of the diphthong.
A Decrescendo diphthongs like this often caned diphthongs because of the fact that stress falls away from a peak never the beginning the diphthong.
Crescendo or rising diphthong which start weakly stressed and buildup to a peak near the end represented by 5 are also possible some people might describe such English word [ w ] etc.
As containing rising diphthongs [ I e ] [ I ] [ I u ] [ I o ] but it is more usual to describe them (end transcribe them ) as we have done that is as sequences of the semivowels [ I ] and [ w ] vowel ( A practical in introduction on PHONEICS , J . Cat ford 191).
According to Arnold, literally "two sounds" or "two tones"), also known as a gliding vowel, is a combination of two adjacent vowel sounds within the same syllable. Technically, a diphthong is a vowel with two different targets: that is, the tongue (and/or other parts of the speech apparatus) moves during the pronunciation of the vowel. In many dialects of English, the phrase no highway cowboys / noʊˈhaɪwəˌkaʊboʊz/ has five distinct diphthongs, one in every syllable.
Diphthongs contrast with monophthongs, where the tongue or other speech organs do not move and the syllable contains only a single vowel sound. For instance, in English, the word ah is spoken as a monophthong (/aː/), while the word ow is spoken as a diphthong in most dialects (/aʊ/). Where two adjacent vowel sounds occur in different syllables—for example, in the English word re-elect—the result is described as hiatus, not as a diphthong.
Diphthongs often form when separate vowels are run together in rapid speech during a conversation. However, there are also unitary diphthongs, as
in the English examples above, which are heard by listeners as single-vowel sounds (phonemes). In closing diphthongs, the second element is more close than the first (e.g. [ai]); in opening diphthongs, the second element is more open (e.g. [ia]). Closing diphthongs tend to be falling ([ai]), and opening diphthongs are generally rising ([ia]), as open vowels are more sonorous and therefore tend to be more prominent. However, exceptions to this rule are not rare in the world's languages. In Finnish, for instance, the opening diphthongs /ie/ and /uo/ are true falling diphthongs, since they begin louder and with higher pitch and fall in prominence during the diphthong.

A third, rare type of diphthong that is neither opening nor closing is height-harmonic diphthongs, with both elements at the same vowel height. These occurred in Old English:

- *beon* [beo̞n] "be"
- *ceald* [kæo̞ld] "cold"

A centering diphthong is one that begins with a more peripheral vowel and ends with a more central one, such as [ɪə], [ɛə], and [ʊə] in Received Pronunciation or [iə] and [uə] in Irish. Many centering diphthongs are also opening diphthongs ([iə], [uə]).

Diphthongs may contrast in how far they open or close. For example, Samoan contrasts low-to-mid with low-to
2.7-Narrow and wide:

Narrow diphthongs are the ones that end with a vowel which on a vowel chart is quite close to the one that begins the diphthong, for example Northern Dutch [eɪ], [ɔʏ] and [ʊʊ]. Wide diphthongs are the opposite - they require a greater tongue movement, and their offsets are farther away from their starting points on the vowel chart. Examples of wide diphthongs are RP/GA English [aɪ] and [aʊ].

2.7.1-Length:

Languages differ in the length of diphthongs, measured in terms of morae. In languages with phonemically short and long vowels, diphthongs typically behave like long vowels, and are pronounced with a similar length. In languages with only one phonemic length for pure vowels, however, diphthongs may behave like pure vowels. For example, in Icelandic, both monophthongs and diphthongs are pronounced long before single consonants and short before most consonant clusters. Some languages contrast short and long diphthongs. In some languages, such as Old English, these behave like short and long vowels, occupying one and two morae, respectively. Languages that contrast three quantities in diphthongs are extremely rare, but not unheard of; Northern Sami is known to contrast long, short and "finally stressed" diphthongs, the last of which are distinguished by a long second element.

According to Arnold the main prominence is always on the first element of the diphthongs the second element being only lightly sounded diphthongs undergo the same reduction of length before l pit , k . f . s f Q l as the long vowels phonetics F d word Arnold 1989. Is sounds which consist of a
movement or glide form one vowel to another a vowel which remains constant and does not glide is called pure vowel and one of the most some on pronoun citation mistake that result in learner of English have “foreign” accent is the production of pure vowel where a diphthong should be pronounced.

2.8 The Characteristics of Diphthongs:
A crude definition of diphthongs might be combination of vowel there is movement of the tongue, lips and jaw from one pure vowel sound to another. The first sound in each phoneme is longer and louder than the second in /u:/ (Roach: 1983:20).

2.8.1 Mid vowels:
For mid vowels the tongue is neither high or nor low in the mouth. Moving from /e/ through to /ɔ:/ we also notice the different positions of the tongue /e/ is affront vowel, and /ɔ:/ is aback vowel.

/e/ The front of the tongue is between the half-open and half-close positions. Lips are loosely spread. The tongue may touch the upper molars. As in: egg, left.

/ə/ The centre of the tongue is between the half-close and half-open position. Lips are relaxed, and neutrally spread. As in: about, paper, banana.

/ɜ:/ The centre of the tongue is between the half-close and half-open position. Lips are relaxed, and neutrally spread. As in: shirt, her.

/ɔ:/ The back of the tongue is raised to between the half–open and half close positions. Lips are loosely rounded. As in: call, snore, taught.
2.8.2 Open vowels:
From open vowels, the tongue is low in the mouth, moving from /æ/ through to /ɔ/, we also notice the different positions of the tongue; /æ/ is an affront vowel and /ɔ/ is a back vowel.

/æ/ The front of the tongue is raised to just below the half-open position. Lips are neutrally open. As in: *hat, attack*.

/ɔ/ The centre of the tongue is raised to just above the fully open position. Lips are neutrally open. As in: *run, uncle, come*.

English, but not in all languages. If we listen to the word *house* (the diphthong in question is /aʊ/, we can hear that /a/ part of the sound is longer than the final /ʊ/ part. If you try making the /ʊ/ part longer, you will hear the difference.

A vowel which remains consonant and does not glide is called Alp vowel. According to (Roach: 1983: 20) English is usually described as having eight diphthongs, and they can be usefully grouped in the following ways:

- Centering: diphthongs end with a glide towards /ɜ/. They are called centering. Because /ɜ/ is a central vowel. e.g: *sure /ɔʊɜ/, there /eɪɜ/*.

- Closing: diphthongs end with a glide towards /i/ or to ward /ɔ/. The glide is towards higher position in the mouth. e.g: *they /ei/, boy /ɔɪ/*,
2.8.3 Centering diphthongs:

- /Iɨ/ The glide begins in the position for /I/, moving down and back towards /ɨ/. The lips are neutral, but with a small movement from spread to open. As in: *beer, fear*.

- /oʊ/ The glide begins in the position for /o/, moving forwards and down towards /ɨ/. The lips are loosely rounded, becoming neutrally spread. As in: *sure, tour*

- /eɪ/ The glide begins in the positions for /e/, moving back towards /ɨ/. The lips remain neutrally open. e.g: *where, wear, chair*.

2.8.4 Closing diphthongs ending in /I/: 

- /ei/ The glide begins in the position for /e/, moving up and slightly back towards /i/. The lips are spread. As in: *cake, way, say*.

- /ɔi/ The glide begins in the position for /ɔ:/, moving up and forward towards /i/. The lips start open and rounded, and change to change to neutral. As in: *toy, voice, avoid*.

- /ai/ The glide begins in an open position, between front and centre, moving up and slightly forward towards /i/. The lips move from neutral, to loosely spread. As in: *tie, high, buy*.

2.8.5 Closing diphthongs ending in /ʊ/: 

- /uː/ The glide begins in the position for /u:/, moving up and back towards /ʊ/. The lips start neutral, but change to loosely rounded. As in: *snow, home, go*.
• /aʊ/ The glide begins in apposition quite similar to /a:/, moving up towards /ʊ/. The lips start neutral, with a movement to loosely rounded. The glide is not always completed, as the movement involved is extensive. As in: house, loud, down. (Gerald, 2000:35-36)

In term of length diphthongs are the most important thing to remember about all the diphthongs is that the second part is much Example most of the diphthong at case in the words eye,” I “ consists of the a vowel and only in about the last guarter of the diphthong dose of the sound decreases. A result the part is shorter and guitar. Foreign learner must therefore always remember that the last part of English diphthong is eight the easier way to remember them is in terms of three group divide as in this diagram

2.9 Difference from a vowel and semivowel:

While there are a number of similarities, diphthongs are not the same phonologically as a combination of a vowel and an approximant or glide. Most importantly, diphthongs are fully contained in the syllable nucleus while a semivowel or glide is restricted to the syllable boundaries (either the
onset or the coda). This often manifests itself phonetically by a greater degree of constriction, though the phonetic distinction is not always clear. The English word yes, for example, consists of a palatal glide followed by a monophthong rather than a rising diphthong. In addition, the segmental elements must be different in diphthongs so that [ii], when it occurs in a language, does not contrast with [i:] though it is possible for languages to contrast [ij] and [i:].

- /ao/ as in Maus ‘mouse’
- /ɔy̯/ as in neu ‘new’

In the varieties of German that vocalize the /r/ in the syllable coda, other diphthongal combinations may occur. These are only phonetic diphthongs, not phonemic diphthongs, since the vocalic pronunciation [ɐ̯] alternates with consonantal pronunciations of /r/ if a vowel follows, cf. du hörst [du: ‘hø:ştir] ‘you hear’ – ich höre [iç ‘hø:ɾə] ‘I hear’. These phonetic diphthongs may be as follows:

![German diphthongs ending in [ɐ̯] (part 1), from Kohler (1999:88)](image-url)
German diphthongs ending in \[\varepsilon\] (part 2), from Kohler (1999:88)

According to Peter Roach The centering glide towards the a schwa vowel as the symbols indicate.

Example word: beard I an :France

The starting pointer is a little closer that in ‘pin’

Example word: aired, cairn, (scare) this diphthong begins with same vowel sound as thee of ‘get’
The closing diphthongs have the characteristic that they all end with glide at words closer vowel. Because the second part of the diphthong is weak, they often do not reach apposition that could close.

The important thing is that glide from a relatively more open to words relatively more close vowel is produced.

Three of the diphthong glide to word as described below:

Example word: "paid", "pain", "face.

The starting point is the same as the of "get", "may"
Example word “time”, nice”) this diphthong begin with an open vowel which is between front and back, it is quite similar to the a of word “cut” “bun.

Example word: “void” “loin” voice the first part of this diphthong has the same equality as ɪ in “ought”

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

Example word: “loud” “home”, ”most”) e

The vowel position of the beginning of this is the same as for the” schwa” vowel/ə, as found in the first syllable of the word “about” the lips may be
slightly round in anticipation of the glide two words ø, for which there is quite noticeable lips rounding.

Example word:” loud”, ”gown”, ”house” )this diphthong begins with vowel similar to a since this is an open vowel, a glide to ø would necessitate a large movement. usually in English the glide towards ø begins but is not completed, the end of the diphthong being somewhere between close _mid and open _mid e in tongue height. there is only slight lip rounding.

.(English phonetics and phonology – peter roach_200).

According to (p d f created with p d f factory pretrial vision www.p d factory .com (13) diphthong is close combination of two vowel element pronounced as one vowel with gliding articulation. a diphthong from are syllable. As there are no diphthongs in Ukrainian student often find it difficult to pronounce English diphthong. Are generally divided falling and rising.
Those diphthongs, the first element of which is strongly than the second that is the initial tension of articulation falls towards the end, are called falling. Those diphthong the second element of which is stronger than the first, that is the terns ion of articulation grows towards the end, are called rising. There are no rising diphthong in English. They also exists a group of level diphthong the two element of which are equally strong. But level diphthong are very and are not met in the English language.

All English diphthong are falling. I,e the beginning of the English diphthong s (the nucleus) is strong, clear, and distinct. The second element (the glide) is very weak.

There are eight diphthong in the English language: [ei], [el], [oi], [iq], [eq], [vq], [av], [qv]. Some linguists consists consider that there are nine diphthong in English. The ninth being [oq].

English diphthongs may be divided into three groups:
1-three of them [iq], [e], [vq] called centering, the second element of these diphthong a mixed vowel [q].
2-the second group include diphthongs the common glide of which is Towards the English [i]. They are three [ei], [ai] [oi].
3-the third group include the following diphthong [a], [qv]. I,e the glide of these diphthong is towards a weak unstressed [v].

There nucleus of the diphthong differ to greater or lesser extent from the English pure vowel. Thus, there nucleus of the diphthong [av] is more advanced than [R] or event [A] more over. Within the same group of diphthong differ to greater or lesser extent from than [a] in [al] is much more advanced than [av]. The nucleus of the diphthong [o] is intermediate in quality between [p] and [l]. The nucleus of diphthong [ei] is more open than the English [e].

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in this diagram we found all the diphthong:

![Diagram of vowel sounds]

**Part -2 previous studies:**

**First study:**
Osman Fujimura, (2003) Conducted a search on Dynamics in diphthong). The acoustic and perceptual characteristic of F2 movement in the diphthong [ai] in amide-western variety of American English are examined. The a caustic pattern of preconsonantal lengthening in ‘bide’ is investigated applying an ERB-based segmentation technique, which utilizes a constant A f. Listeners’ response to dynamic information in the diphthong on glide and off glide is tested. Data indicated that the diphthong [ai] in this variety of American English has a bipartite structure, consisting of a target and a glide part. The terminal frequency values of the diphthong are not essential characteristics, as evident from the acoustic lengthening pattern in ‘bide’ and from perceptual response to the formant frequency change in this frequency rang.
This study is similar to our study in terms of dipthong and characteristics of dipthong. This study difference in talking about dynamic in dipthong but our study is talking about problem of learning dipthong.

**Second study:**

Romeo Milner (2011) conducted research on paper pronunciation of English dipthong by speakers of Serbian acoustic characteristics. The Serbian language does not have dipthong, while they are frequent and very important in English. In this paper, we discuss the physical properties of the English diphthongs, as pronounced by the Serbian freshmen student. The pronounced of eight diphthong, in its long and short variants was analyzed after recording 15 female test speakers, and compared with the data form a referent RP speaker. The focus in the results showed that the ratio of dipthong lengths in the Serbian speaker from 85% to 112% for the long, and between 79% and 63% for the short variants. We also compared the length of the dipthong with the length of the word within which they were pronounced: less than 8% differences was observed in the short variants, while the long variants had the differences between 10% and 17%. The formant measurements and the comparison of the change between the first and the second vowel within the diphthongs showed that the students had the same values for $f1, f2$ and $f3$ in long/ao/, /æ/, and short/ei//i e//. Seven variants had matches in the first two formants, while four variants (short/o e/, /æ/, long /i e/, o e/) had the most prominent mismatches in the three formants the formant magnitude, calculated by using the Euclidean distance, showed 95% similarity in the long/i/, while the lowest value was recorded.
for the short /ao/, 58%. The paper proves that the starting hypothesis about the problems Serbian speakers might have in diphthongal realization of the English vowels is valid, and offers directions for possible further research, while suggesting which parts of the English vocal space should receive more attention in the teaching of English.

This study is similar to our study in both of them talking about diphthong. It difference in this study these study talking about physical diphthong but our study talking about learning diphthong and the problem students of using diphthong.

**Third Study:**

Acquisition of the Closing Diphthongs /əʊ/ and /eɪ/ in English L2 and Jamaican Creole A Comparative Study

This study investigates the claim that the strategies used by second/foreign language learners are, more or less, the same as those used by speakers of pidgin/creole languages. To this end, the speech of two speakers of the well-known Broad Jamaican Creole is compared with the performance of Saudi learners of English, with respect to the pronunciation of the closing diphthongs /əʊ/ and /eɪ/. The results show that the above claim is valid. Also, the behavior of the two groups corroborates that of child language, which will be taken as external evidence that adds to the existent literature of the logical problem of language learning. The behavior of the speakers in the three domains (i.e., L1, L2, and pidgin/creole languages) goes hand in hand with norms of historical change. That is, the two diphthongs have historically developed from the monophthongs used as substitutes. In addition, the centrality component in these diphthongs is a marked parameter, which is yet to be set before they...
could be mastered. The substitutes made by the speakers of Jamaican Creole and by Arab learners are the same chosen by the child.

In phonetics, a diphthong is a vowel in which there is a noticeable sound change within the same syllable. (In contrast, a single or simple vowel is known as a monophthong.) ... The process of moving from one vowel sound to another is called gliding, and thus another name for diphthong is gliding vowel.

This study is similar to our study in both of them talking About diphthong and take same sound of diphthong in the research.

It difference in this study these study talking about Acquisition of the Closing Diphthongs….but our study talking about learning diphthong and talk about all the diphthong sound.
3.1 Introduction

The Previous chapter presented review of problem of learning diphthong. We discussed this chapter introduces methodology of the study tool of the study population sample of the study reliability.

3.2 Methodology of the study tool:

The researcher chose the experimental approaches to test. The tool use for collecting data and the information needed for the study was test, universe city for science and technology second year’s student will be tested. Sudan

3.3 Population and sample of the study:

The original population of this study is Sudan universe city for science and technology English department, the sample of study (second years) 30 students have been tested.

3.4 Reliability and validity of test:

As mentioned in the reliability and validity of the test we mean by the reliability of any test, to obtain the same result if the same measurement is used more than on time under the same conditions. Also the reliability means when certain test is applied on one number of individual and the marks of every one were contend ,then the same test applied another time on the same group and the same marks were obtained, then were can describe this test as are liable.
CHAPTER FOUR

Data Analysis

4.1 Introduction:

In this chapter, the researcher describes the method and procedures followed in the implementation of this study. This includes a description of the study community and its sample, the method of preparation of its tools, the procedures taken to ascertain its validity and stability, the method followed for its application, the statistical treatments, and the course includes a description and description of the study methodology.

Society and sample of the study

The study community is the total group of elements that the researcher seeks to generalize the results related to the problem studied. The original study community consists of 30 students from Sudan university of science and technology, second level.

The sample of the study was randomly chosen from the study community. The researcher distributed (30) questionnaires to some student in sudan university of science and technology and (30) individuals responded (100%). Of respondents, who returned the questionnaires after completing all the required information?

To obtain the most accurate results possible, the statistical program SPSS was used, which refers to the Statistical Package for Social Sciences.
### 4.2 Data Analysis

**Table (4.1) Degree**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>9.53</td>
</tr>
<tr>
<td>Median</td>
<td>9</td>
</tr>
<tr>
<td>Minimum</td>
<td>4</td>
</tr>
<tr>
<td>Maximum</td>
<td>16</td>
</tr>
</tbody>
</table>

*Source*: Preparation of the researcher from the field study, 2017

It is clear to the researcher from Table (1) that the average grade of students in the exam was (9.53), which means that the average success of the students in this exam was very weak.

**Table (4.2) The frequency and percentage of The students**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td>Five</td>
<td>3</td>
<td>10.0%</td>
</tr>
<tr>
<td>Sex</td>
<td>3</td>
<td>10.0%</td>
</tr>
<tr>
<td>Seven</td>
<td>2</td>
<td>6.7%</td>
</tr>
<tr>
<td>Eight</td>
<td>5</td>
<td>16.7%</td>
</tr>
<tr>
<td>Nine</td>
<td>5</td>
<td>16.7%</td>
</tr>
<tr>
<td>Twelve</td>
<td>2</td>
<td>6.7%</td>
</tr>
<tr>
<td>Thirteen</td>
<td>4</td>
<td>13.3%</td>
</tr>
<tr>
<td>Fourteen</td>
<td>2</td>
<td>6.7%</td>
</tr>
<tr>
<td>Fifteen</td>
<td>2</td>
<td>6.7%</td>
</tr>
<tr>
<td>Sixteen</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total</td>
<td><strong>30</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
The table and the figure above show that the majority of the sample of the study have scored 8 out of 20 degrees, where the number of (5) individuals by (16.7%) and equally with individuals who scored 9 degrees out of 20 degrees, Followed by individuals who scored 13 out of 20 degrees, where they numbered (4) individuals by (13.3%). The sample also included (3) individuals (10.0%) who scored 5 out of 20 scores, who scored 6 degrees out of 20 degrees. Two individuals (6.7%) had scored 7 out of 20 scores and those who scored 12 degrees out of 20 and those who scored 15 degrees out 20 degrees, one individual and by (3.3%), they have made one degree out of 20 degrees and also 16 degrees out of 20 degrees.
CHAPTER FIVE
Findings, Recommendation, Summary and Suggestion
For Further Student

5.1 Introduction
This chapter contains a brief summary of the study. It gives a general idea about the research problem, investigation and the result. Then it states the conclusion obtained from the study on certain principles of pronunciation awareness.
Finally the research reveals the recommendation.

5.2 Finding:
1. The mispronunciation leads to misunderstanding the meaning as a result of the absence of teaching diphthongs.
2. The difficulties in pronunciation leads to misunderstanding diphthong.

5.3 Recommendations
Base in the above the researchers offer the following recommendation:
1. Students should spend more time in studying phonetics.
2. Students should pay attention in learning diphthongs.
3. The teachers should encourage students to learn more about diphthongs.
4. The teachers should be take more course about diphthong.

5.4 Suggestion for Further Studies:
1. The researchers should focus on the meaning of word and utterance in correctly way.
2. The Students can do more studies on the phonetics
5.6 Summary:

Chapter five presented the finding and recommendation of the study the finding provide answers to the hypotheses also recommendation were offered and suggestion for further research.
REFERENCES


5. (The study of language — George Yule - Third and fourth editions © George Yule 2006, 2010-Cambridge University Press The Edinburgh Building, Cambridge CB2 8RU, UK)
Dear student,

This test has been directed to the students, the purpose of this test is to discover the problems of learning diphthong at Sudan University of science and technology –second year student.

Your contributions and responses is highly needed and important for the anonymous and will be treated with us most confidentially.

Thank for your participation in this research.

**Question one:**

Circle the letter of the sound which found in the word given brackets:

1) word(high)sound:
   A) ʊ ʌ
   B) i ʌ
   C) ʌ i

2) word(there)sound:
   A) e i
   B) a i
C) e∅

3) word(g0)sound:
A) ∅ u
B) a u
C) ∅ i

4) word (here)sound:
A) u ∅
B) i ∅
C) e i

5) word(dear)sound:
A) e i
B) i ∅
C) u ∅

6) word ( Air ) sound:
A) i i
B) e ∅
C) u ∅

7) word (cares) sound:
A) e ∅
B) u ∅
C) a u

8) word (home) sound:
A) Ɔ i
B) e i
C) ∂ u

9) word (oil) sound:
A) ∂ u
B) Ɔ i
C) a i

10) word (no) sound:
A) a u
B) Ɔ i
C) u ∂

*Question two:*

Underline the word which shares the same sound given:

1) Sound (a i) words:
   A) Oil
   B) Go
   C) My

2) Sound (u a) words:
   A) Boor
   B) Caw
   C) Voice

3) Sound (e i) words:
   a) Sure
b) Say

c) Dear

4) Sound (e ə) words:
   A) There
   B) Voice
   C) Caw

5) Sound(i ə) words:
   A) May
   B) Voice
   C) Near

6) Sound (a ə) words:
   A) Say
   B) Oil
   C) How

7) Sound (ә i) words:
   A) Time
   B) voice
   C) Dear

8) Sound (i ə) words:
   A) Near
   B) pair
   C) time

9) sound (ʊ ə) words:
   A) near
B) scans  
C) sure  

10) sound (i ɬ) words:  
A) here  
B) voice  
C) may