



T.C.
UFUK UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT

**THE WRITTEN PERCEPTION OF NORTH AMERICAN ENGLISH
(NAE) LONG VOWELS BY NON-NATIVE ENGLISH FOREIGN
LANGUAGE INSTRUCTORS IN TURKEY**

MASTER'S THESIS

Melek ÇAKIRCALI

**SUPERVISOR
PROF. DR. MEHMET DEMİREZEN**

Ankara, 2021

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BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kâğıt ve elektronik kopyalarının Ufuk Üniversitesi Sosyal Bilimler Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

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180770098

Melek ÇAKIRCALI

03.02.2021



*To my beloved mother and
father*

ACKNOWLEDGEMENT

It would not have been possible to write this master thesis without the help and support of the kind many people around me, to only some of whom are given particular mention here.

Above all, I would like to thank my parents Fatma and Fuat akırcalı for their personal supports and great patience at all times. Both mom and dad have given me his unequivocal support throughout, as always, for which my mere expression of thanks likewise does not suffice.

This thesis would not have been possible without the help, support and patience of my supervisor, Prof. Dr. Mehmet DEMİREZEN, Department of English Language Teaching (ELT), Graduate School of Teaching, Ufuk University. Working under his auspices has been really blissful and productive in the perspective of his toleration, knowledge, and unfaltering support throughout the process of pursuing this endeavor.

Similarly, I would like to thank for the contribution of the lecturers in the courses, and encouragement through the course of the studies. Besides, I would like to thank the member of the examining committee, Asst. Prof. Dr. İsmail Fırat ALTAY and Asst. Prof. Dr. Ceyhun KARABIYIK for his precious constructive feedback that he has provided me with in my jury.

Lastly, I also would like to express gratitude to my friends especially Burcu HASBAY and AYŞENUR AYDIN for their patience, affection and for being a constant source of inspiration in the course of my thesis.

ABSTRACT

ÇAKIRCALI, Melek. The written perception of North American English Long Vowels (NAE) by non-native English Foreign Language instructors in Turkey, Master's Thesis, Ankara, 2020-2021.

The aim of this research is to analyze the underlying phonetic process that non-native Turkish Foreign Language teachers go through in producing long vowels in North American English (NAE). Therefore, the target of the study is to concentrate on the written phonetic perception of long vowels by Turkish Foreign Language teachers who mainly work at preparatory departments of universities and teach adults the NAE. Based on the concepts of perception, the purpose of this thesis is to unearth the degree of knowledge of EFL non-native teachers about the long vowels in North American English (NAE) along with their awareness through the written test. 40 non-native teachers who work at universities took place in the study. The participants are EFL teachers who work at preparatory schools of different universities. In order to collect data, a range of tests were conducted in terms of the written test as the main instrument. After the implementations of the pre and post-test, the analysis was obtained through SPSS package program. The findings are expected to reveal whether the EFL non-native teachers at universities will be successful in the written phonetic test or not. According to the results of the written test, the most problematic long vowel sound will be tried to be found after the comparison between the pre and the post test scores that will enable non-native English teachers to improve the abilities of long vowels in NAE.

Keywords: Long Vowels, perception, pronunciation, diphthong, North American English.

ÖZ

ÇAKIRCALI, Melek. Amerikan İngilizce'sindeki uzun ünlülerin Türkiye'deki İngilizce Yabancı Dil Okutmanları tarafından yazılı algılanışı, Yüksek Lisans Tezi, Ankara, 2019-2020.

Bu araştırmanın amacı, ana dili Türkçe olmayan Yabancı Dil üniversite öğretmenlerinin Amerikan İngilizcesindeki uzun ünlülerin telaffuzunu gerçekleştirdikleri fonetik süreci analiz etmektir. Bu nedenle çalışmanın amacı, üniversitelerin ağırlıklı olarak hazırlık bölümlerinde çalışan ve yetişkinlere Amerikan İngilizcesi öğreten Türk Yabancı Dil öğretmenlerinin uzun ünlülerin yazılı fonetik algılarına yoğunlaşmaktır. Algılama kavramlarına dayanarak, bu çalışmanın tezin amacının, anadili olmayan İngilizce olmayan Türk Yabancı Dil İngilizce öğretmenlerinin Amerika İngilizcesindeki uzun ünlüler hakkındaki bilgi düzeylerinin ve farkındalıklarının yazılı test aracılığıyla ortaya çıkarmaktır. Araştırmada üniversitelerde görev yapan yerli 40 Türk öğretmen yer aldı. Katılımcılar, farklı üniversitelerin hazırlık okullarında çalışan Yabancı Dil İngilizce öğretmenleridir. Veri toplamak için, yazılı test ana araç olarak kullanıldığı bir dizi test yapılmıştır. Ön ve son test uygulamalarının ardından, analiz SPSS paket programı aracılığıyla elde edilmiştir. Bulguların, üniversitelerdeki ana dili İngilizce olmayan Türk Yabancı Dil İngilizce öğretmenlerinin yazılı fonetik testte başarılı olup olmayacağını ortaya koyması beklenmektedir. Yazılı sınav sonuçlarına göre, ana dili İngilizce olmayan öğretmenlerin Türk İngilizce öğretmenlerinin Amerikan İngilizcesindeki uzun ünlülerin telaffuzunda yeteneklerini geliştirmelerini sağlayacak ön ve son test puanları arasında karşılaştırma yapıldıktan sonra en sorunlu uzun ünlü ses bulunmaya çalışılacaktır.

Anahtar Sözcükler: Uzun Ünlüler, algılama, telaffuz, çift ünlü, Amerikan İngilizcesi.

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LIST OF ABBREVIATIONS

AAM	: Audio-Articulation Method
EFL	: English as a Foreign Language
ELL	: English Language and Literature
ELT	: English Language Teaching
ESL	: English as A Second Language
IPA	: International Phonetic Alphabet
KR-20	: Kuder and Richardson Test - 20
L1	: First Language
L2	: Second Language
NAE	: North American English
SLA	: Second Language Acquisition
SLM	: Speech Learning Method
PE	: Pre-test
PO	: Post-test
SPSS	: Statistical Package for the Social Sciences
TETs	: Turkish English Teachers

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CHAPTER 1

INTRODUCTION

1.1. The Background of the Study

The purpose of this research is based on the analysis that the non-native Turkish EFL instructors involve through the process in the perception and pronunciation of North American English (NAE) long vowels. Within this context, the participants of the study are chosen from American English rather than British English (BrE).

In recent years, the difficulties in the English language pronunciation of the Turkish learners have been a great concern in Turkey. Despite many reasons considered behind this thought, two reasons are mainly propounded. The first one is about the lack of transparency in the orthographic and phonetic systems of two different languages and the second reason is related to learners' personal factors such as age, motivation, the exposure level to the target language, and the competence of learners in L2 (Aliaga, 2007). Yet, some researches have been made to investigate the common reasons for this and it could be disclosed that teaching pronunciation with other speaking skills is reckoned as time-consuming because it means dedication and excessive time process for the EFL teachers in the teaching L2 pronunciation period. What's more, one reason is asserted as "the inadequacy of clear instructions and rules in coursebooks" (Griffiths, 2004, p.30). Aside from this, "lacking a mental map to lead learners to the unfamiliar pronunciation part in L2" (Underhill, 2010, p.489-490) is also put forward as one of the causes for having learners an inaccurate pronunciation in the target language. Lastly, it could be noted that most EFL teachers are not self-assured to teach the pronunciation of a foreign language since they have insufficient knowledge or training to teach the pronunciation process in the L2 teaching (Dixo-Lieff & Pwo, 2000).

After all these above-mentioned issues, there have been some studies introduced to overcome the challenges that the Turkish ESL teachers come across during the teaching of English pronunciation. In this sense, Demirezen (2007, p.85-86) examined "the fossilization in the Turkish ESL teachers' pronunciations and proposed a new method audio-articulation method (AAM) to rehabilitate the utterance of teachers." Another study explored by Bekleyen (2011) focuses on factors that find out the pronunciation problems

for the Turkish ESL teachers and the improvement of teachers' speaking skills in the English language teaching. Except this, the research on the fossilized pronunciation errors is carried out by Hişmanoğlu (2007) by attributing Demirezen's (2005, p.18) study including AAM for curing those pronunciation errors that have been fossilized by the TETs. Şenel (2006) has also argued the factors having impacts on the Turkish English language learners' pronunciation in his study by highlighting the importance of audio-articulation method. As a result, all these studies draw attention to the efficacy of Audio articulation method (AAM) and others that are connected to communicative approach, which is a methodology targets the advancement of learners' speaking skill for the ideal pronunciation of the English language sounds (Larsen-Freeman, 2002).

From this point of view, the high-quality input is seen as the prerequisite that simplifies complex parts of a language in the learning process with the accurate and fluent accent. For this purpose, the study carried out by Demirezen (2010) presents that the incorrect pronunciation of words and sentences by a great number of Turkish English teachers brings about the inaccurate comprehension of learners' pronunciation. Besides, many TETs are seemed to be reluctant to rehabilitate their mispronunciation that has a detrimental effect on learners owing to the lack of correct input. To access the level of a native-like, it is explained that one should take into account intonation, stress, juncture, tone, length which are the fundamental components of the suprasegmental of a language (Anderson-Hsieh & Johnson & Koehler, 1992).

In the ELT field, phonetics has been seen to be a fertile area for studies in which many researchers have become deeply involved in the pronunciation problems of words as well as sounds composing of consonants and vowels of the target language. The difficulties resulted in long vowels are one of the topics of discussion by phoneticians and researchers, which makes long vowels a debatable subject for years in ELT. The foreign language learners of English are seen to have difficulty with vowels, which has caused studies to become necessary in this field. (Lin, 2010). In other words, the objective of this thesis is to make learners gain much better control of vowels by providing them better pronunciation patterns in learning English as a foreign language, which requires a piece of good knowledge and control in the education of the non-native EFL teachers. Also, vowels play important roles in forming the stress phonemes as well as the meaning of words. For this reason, the proper pronunciation of vowels especially long vowels should be mastered by the non-native Turkish English teachers (TETs). Henceforth, it directly

brings about problems in the articulation and pronunciation problems in the speech that may impede the development in their profession.

1.2. The Theoretical Background of the Study

The topic of the NAE long vowels has been problematic for many groups of learners in Turkey, but this subject has not been studied on Turkish English teachers who are seemed to have an indisputable impact on students. At that point, the prerequisite of the correct pronunciation in sounds for English teachers should be highlighted, which enables their students to obtain proper communicative skills (Akyol, 2012). Moreover, gaining the near-native like pronunciation sound in the foreign language learning is another essential concern that provides fluent and intelligible speaking in communication. Actually, “intelligible is tried to be referred as the core of the pronunciation, which was defined by Abercrombie as ‘comfortably intelligible’ (Leather, 1983, p.212). According to this definition, intelligibility explained in terms of the understanding of the pronunciation without any conscious effort on the part of the listener. Confirming his idea, some phonologists have supported the concept by stressing that “language learners need no more than a comfortably intelligible pronunciation” (Dalton & Seidlhofer, 1994, p.157). The other explanation provided as “The communication of one person by conveying his or her message accurately through the apprehensive pronunciation in regard of a certain time and situation requires the accuracy of the pronunciation of the particular sounds like vowels and diphthongs for the intelligibility in speaking a foreign language” by Kenworthy (1987, p.73).

Long vowels are the sounds based on the vowel duration that makes a powerful acoustic feature for the perception of the voicing. In other saying, the possibility of a response in the foreign language speaking is directly connected to the vowel duration (Raphael, 1972). When it is examined in detail, common and different long vowels could be easily recognized between British English (BrE) and North American English (NAE). However, it can be asserted that there are no long vowels phonologically in Turkish (Yavuz & Balcı, 2011). Due to this reason, the non-native TETs are supposed to have difficulty during the articulation of long vowels in a proper way especially in verbal speech and they aren't fully aware of these different sounds. Except this, most of them are seen to be unaware of the difference of the sounds based on their phonological term which is largely

corresponded with short (lax) and long (tense) vowels since these sounds can be perceived as confusing and intricate to identify and recognize one by one. As a result, the improper pronunciation of the NAE long vowels could be expressed as an obstacle for the non-native Turkish ESL teachers who are expected to be at the level of at least near native-like speakers in the ELT field. This obstacle is thought to be caused by the mother tongue interference of the Turkish teachers that is inevitable in the English learning process.

The accuracy in the pronunciation of the NAE long vowels has still been a controversial subject depending on the similarities and the differences between the sound systems of English and Turkish languages. Precisely related to this topic, Odlin (1989) underscored the impact of the great association of the mother tongue and the second language brings into being the easiness for learners in regards to the common features and characteristics in the foreign language by bringing forward a different idea about the relations of languages, which is given in the quotation below; “Transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired” (Odlin, 1989p. 27). Moreover, the process of transfer is described not unidirectional but bidirectional and simultaneous by Pavlenko and Scott (2002), which indicates the degree of the complexity in the relation of one’s mother tongue and foreign language.

When English and Turkish languages are analyzed in this respect, it could certainly be explained that the Turkish vowel system involves eight vowels which are separated into four groups in the name of front and back as it follows: two front rounded vowels; /ü/, /ö/ and two front-unrounded vowels; /i/, /e/ and two back-rounded vowels; /u/, /o/ and lastly two back-unrounded vowels; /ı/, /a/ that is provided by Toklu (2007). All the vowels can be identified as just single vowels in contrast to the vowel structure of North American English, which consists of different vowel sounds. Whereas some vowels are depicted as double ones that are used to form diphthongs like /eɪ/, /aɪ/, /ɔɪ/, /oʊ/, /aʊ/, the other vowels are classified into short /e/, /æ/, /ɪ/, /ʊ/, /ʌ/, /ə/ and long /ɑ:/, /i:/, /u:/, /ju:/, /ɔ:/, /ɜ:/.

From another perspective, the discrepancy between Turkish and English languages studied by Varol (2012). In his study, the distinctive features of two languages are tried to be underlined, which can be justified through an example about “he, she, it” pronouns, specific genders are attributed in English but there are no particular pronouns used in the Turkish language. Under the circumstances mentioned above, several Turkish learners of English are seen to experience difficulties in the foreign language learning period.

Furthermore, the dissimilarities in phonological concepts, there are linguistic differences that bring about problems in English teaching and learning as well. In one of his studies, Demirezen (2005) stated that the TETs have some dilemmas about the proper articulation and the pronunciation of the NAE long vowels. Rather than /wa:nt/, the teachers are seen to prefer /wɒnt/, which is underlined by the similarity with the Turkish vowel sound system. The inclination of the improper sound is thought to stem from the lack of the sound in the Turkish language, which is defined by Demirezen (2010, p.130-131) through this sentence in one of his studies as it follows in the quotation “A wrongly articulated phoneme is matched with an easily and correctly pronounced phoneme, a vowel or consonant”.

Another concern has been highlighted by Bhela (1999), which focuses on the tendency of learners’ use of the structures in their mother tongue during the communication of the foreign language that is on the learning process. When there is no correlation between L1 and L2, errors are seemed to be inevitable in the target language, which is emphasized in the interlanguage hypothesis by Gass and Selinker (2008). According to this view, interlanguage is defined as the system of rules by one that is associated with a range of processes consisting of the impact of the mother tongue, the contrasting interference from the L2, and the overgeneralization on the new rules of the L2 (Crystal, 2003). At the initial process, the target language is observed to become a blend of the mother tongue and the phonological elements of L1. Herein, the non-native Turkish ESL teachers can be regarded to tend to articulate long vowels the same as short vowels like in the example given through the word “music”. The proper utterance of the word is /'mju:zɪk/. On the contrary, the word is seemed to be pronounced as /'mjʊzɪk/, which is related to the interlanguage articulation that could be observed neither in English nor in Turkish and vice versa. Indeed, the connection between perception and production is attempted to indicate, which has been undeniably seemed to affect the L2. This is inferred from many studies rather than being believed, which is proposed by Isbell (2001).

As it is understood from all studies mentioned above, the relation of the perception and the production is more than being a connection in foreign language learning, which is defined as complicated and interwoven term. To put it another way, it could be underscored that the better perception of the NAE long vowels is directly proportionate to the more accurate articulation of these sounds in the pronunciation aspect, which shows the interactive impacts of perception and production on each other. Therefore, the author

of this thesis aims to present the written perceptual and productional progress about the NAE long vowels by the non-native Turkish ESL university teachers and in what percentage those participants are familiar with the long vowel sounds and whether they could articulate them properly. The dissimilarities in the results of the pre-test and the post-test will clarify the subject and probably the participants of this study will have a much better-written recognition level on the NAE long vowels in the end.

1.3. The Statement of the Problem

In foreign language teaching in Turkey, it can be certainly seen that the pronunciation process is generally disregarded at universities and other educational institutions by focusing on grammar structures more, which has been believed to be rooted in many reasons. The pronunciation together with the culture of the English language has been neglected by many Turkish ESL teachers and a few of them could be said to emphasize the importance of the articulation and pronunciation of the target language on the belief of insufficient curriculum in the teaching process. On the other hand, a great number of the Turkish ESL teachers are recognized not have enough knowledge about the accented speech. They could be said “to ignore the significance of the pronunciation of the target language, which also involves the articulation of diphthongs and the NAE long vowels.” (Demircioğlu, 2013, p. 2986)

Actually, it could be stressed that the non-native Turkish foreign language teachers have experienced some problems in the articulation of the long vowel sounds, which is supposed to bring about the Turkish sound repertoire. There are two causes lied behind this view: The former one has relied on the incompetency of the ESL teachers about the articulation of the vowel sounds. The latter is linked to English teachers’ unawareness of them despite their phonology education during the undergraduate years. Therefore, these two reasons have impacted not only on the teachers but also the pronunciation skills of their students, which makes the pronunciation subject a primary concern to provide a proper way of modeling in the teaching target language.

This research, it is aimed to present the analysis of the written perception level of the NAE long vowels by the non-native Turkish English teachers who are on-the-job at universities. For this purpose, it tries to scrutinize the perceptual level of the long vowels

in the NAE by the Turkish ESL teachers. Besides the perceptual aspect, the appropriate articulation and pronunciation of /ɑ:/, /i:/, /u:/, /ju:/, /ɔ:/, /ɜ:/ and the comparison of the diphthongs /eɪ/, /aɪ/, /ɔɪ/, /oʊ/, /aʊ/ in addition to the difference from the short vowels /æ/, /ɪ/, /ʊ/, /jə/ according to International Phonetic Alphabet are other significant parts of the research in this study, which has not been examined in detail on the TETs at universities before.

As a result, it can be inferred that there is a gap connected to the perceptual in addition to the productional period of North American English long vowels. Through this study, the inquiry about the NAE long vowels perception and production will be sought to be elucidated. The other objective of the research is to demonstrate how the non-native Turkish ESL teachers articulate North American English long vowels and the process of their improvement in true articulation and pronunciation skills as well. Moreover, the target of the study could be stated to illustrate whether the university English foreign language teachers have in dilemma between the NAE long vowels and diphthongs since “there are no long vowels and diphthongs in the same phonological transcript in the Turkish language.” (Yavuz & Balci, 2011). As it is reported in their study, it could be easily expressed that vowels are categorized with regards to their height, backness, and rounding whereas other languages are noticed to employ other parameters for the classification of vowels, which is supported with the example from the American English like in the word “eat” that has a phonological transcription “/i:t/” but the pronoun “it” is transcribed as “/ɪt/”. Herein, the term “tense-lax” can be used to identify the separation of two different vowels in words given in the examples. For the TETs, it could be certainly assumed that lack of the Turkish long vowels phonologically leads to the inappropriate articulation of the NAE long vowels.

Also, it should be remarked that the distinction of long vowels and diphthongs have been a predicament for the Turkish ESL university teachers due to their articulation similarities. However, North American English long vowels are /i:/, /ɜ:/, /ɔ:/, /u:/, /ɑ:/ and /ju/ are transcribed by International Phonetic Alphabet (IPA), which are seen to be in the opposite of the diphthongs that consist of the lengthening of short vowels.

1.4. Research Questions

The following questions will model the study:

Table 1.

Research Questions and Instruments

1.	What is the readiness of the Turkish ESL university teachers about the written phonetics of the NAE long vowels?	Pre-test
2.	What is the rate of success in the written phonetics of the NAE long vowels in the post-test process?	Post-test
3.	Which long vowels in the NAE are problematic by the Turkish EFL university teachers in the pre-test process?	Pre-test
4.	Which long vowels in the NAE are still seemed to be problematic in the post-test stage of the research?	Post-test
5.	Is there a significant difference between the results of pre-test and post-test for the Turkish ESL university teachers?	Pre-test, Post-test

1.5. The Purpose and the Significance of the Study

In the English Language Teaching field, pronunciation has been one of the most controversial topics for Turkish ESL teachers over years. When it is considered in detail, many reasons have come to light like syllabus, curriculum, the undergraduate background of the teachers, the mother tongue of students as well as the target learners vice versa, which was suggested by Pennington (1994). Notwithstanding all these argumentations, the prevalent reason could be asserted the tendency of the non-native Turkish English teachers to regard the pronunciation as a part of the linguistics instead of the most essential component of fluent communication, which has been supposed to have arisen from the choral dissimilarities of Turkish and English languages (Yavuz & Balcı, 2011).

From this point of view, the articulation of long vowels together with the NAE long vowels is found out to be a basic element. In the aspect of gaining near native-like pronunciation skills in teaching English, the appropriate articulation of the NAE long vowels as well as the fluency in speaking and the accuracy in the written perception, could be an opportunity for the improvement of TETs working at universities through the study of this thesis. It is not very easy to sound native-like in a foreign language and it can be asserted that few adult learners could be regarded to be successful in the native-like

pronunciation but a few learners are affirmed to have a very level of proficiency in resonating the sounds in the L2 like a near-native when the significant input, the appropriate atmosphere, and the intrinsic motivation are provided (Bley & Vroman, 1989).

This subject has been studied by many researchers and it has been seen to be supported in the same way, which is mentioned in the study of Nemati & Taghizade (2013). According to their hypothesis, less than few L2 learners could achieve to be in the level of a near-native like speaking ability whereas more than half could be stated to fail in the near-native like competence in the L2 communication. At that point, one of the studies carried out by Gregg (1976) put forward an idea as a futile attempt to achieve a fully native-like skill in a foreign language, which has been also supported in another research conducted by Selinker (1972). In both two studies, it is tried to be signified that pronunciation is the most meaningful part of the process of L2 learning, which makes the speech intelligible at the level of a near-native like. However, this view is exactly not only conveyed by a reason of a comprehensible communication, but it also attempts to clarify the necessity of the accurate articulation and pronunciation of the long vowels and the diphthongs in American English, which has been suggested by Varol (2012).

Even though this subject has been investigated by several researchers for many years from different aspects, it could be claimed that the topic of this study has never been studied with a group of Turkish ESL teachers having the American English accent and working at universities in Turkey. With the help of this study, the written perception and the pronunciation of the NAE long vowels will be regarded through the TETs at universities coming from different backgrounds. The results are expected to enhance the pronunciation skills of the teachers in addition to change their written perception of the long vowel sounds in American English.

Furthermore, this research will depend on the experimental analysis of the Turkish ESL teachers' pronunciation of the NAE long vowels on the purpose of the evaluation whether the NAE long vowels are problematical or not. Through the quantitative data from the participants of the research, the study is aimed to lead the way to examine the written perception and the pronunciation of the long vowels in American English for other researchers.

1.6. List of Terms and Definitions

In this study, the following terms will be suggested.

Ash: A type of vowel sound that is transcribed as the near-open or near-low front unrounded vowel used in the spoken language. The symbol represents this sound in the International Phonetic Alphabet is [æ].

Diphthongs: “Diphthongs are the sounds that have a glide from one vowel to another” (Roach, 2009).

Error: It is the use of a word, speech or any grammatical items in such a way that causes a significant incomplete learning.

Fossilization: The process that the inaccuracy of the linguistic features is seemed to be continual part of the way in the speaking and writing skills of a new language.

Long Vowels: Long vowels are the sounds which are pronounced considerably longer than other vowels (usually around 1½ to double length) and represented in the IPA with the diacritical mark for that is identified as a macron (¯), but this sign (/:/) initially suggested by Roach (2009). Also, the name “Free Steady State” is attributed to the long vowels.

Mistake: The deviation in one’s speaking skill in the foreign language based on the learning competence, especially it appears as a failure to perform the rules that have been already familiarized.

Monophthong: A monophthong is a pure vowel sound, which does not glide up or down towards for a new position of articulation.

Phoneme: It is described as the smallest unit making a difference in meaning. (Trask, 1996).

Phonemic contrast: A minimal phonetic difference in speech sounds that differentiates the sound perceived by listeners and results in different mental lexical entries for words.

Phonetic transcription: The visual representation of speech sounds or phones by means of symbols. (It is also known as phonetic script or phonetic notation). The most common type of phonetic transcription is the International Phonetic Alphabet.

Short vowels: Short vowels are only relatively short, which can have quite different lengths in different contexts.

Vowels: The description of the speech sounds articulated when “a voiced airstream is shaped through the movement of the tongue and the lips to form the overall positions of the mouth” (Karim & Nassaji, 2013, p.119).



CHAPTER 2

LITERATURE REVIEW

2.1. The Description of Long Vowels in North American English (NAE)

In the English language, vowel sounds are used in each syllable; that is to say, vowels are the core of syllables. However, some consonants such as /n/, /l/, and /r/ are also turned into a syllable in themselves due to their stretched pronunciation through a process called syllabic consonants.

Rather than consonants, vowels undergo to show much more changes based on American English (AmE) or other varieties in English language. Depending upon this reason, the dialects in the English emerged which is directly linked to the changes of vowels (Yoshida, 2012).

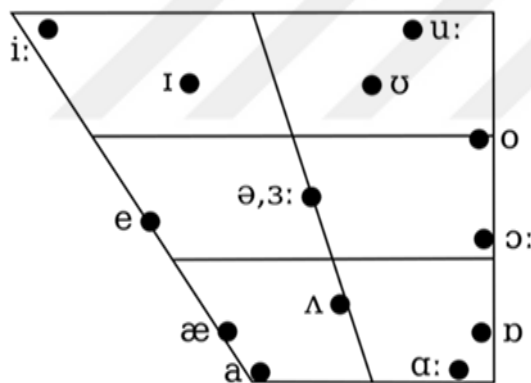


Figure 1. The Short and Long Vowels of the American English by Roach (2009, p.18)

Generally, five vowel sounds are described in English: /a/, /e/, /ɪ/, /o/, /u/, but it can easily be said that this is exactly a misconception. The reason why this belief is seen as a misunderstanding lying behind this description: “These vowels are letters, not vowel sounds because one vowel letter can refer to more than one sound.” (Yoshida, 2012, p.25).

As an example, the letter “a” can be given. In the word, “hat” the letter “a” actually refers to /æ/, but in the “hate” word, /eɪ/ is attributed to the same letter. Besides, when “car” is analyzed, the “a” letter is described /ɑ:/, and yet in the word “care”, it is represented by

the sound /e/. Similarly, the sound “i” can be referred to /i:/ in the “seen” word, but in “sin”, the same sound is transformed and pronounced as /ɪ/ while in a different word “piece” the sound is attributed to /i:/ (Yoshida, 2012). Indeed, what can be understood from the examples given above is that there is not absolute conformity between values and sounds. It should be emphasized that there are more vowel letters than vowel sounds which can be easily found when the syllables in English are analyzed in detail.

In North American English, fourteen or fifteen vowel sounds are usually given containing vowel-like sounds. At that point, the significance of the phonetic symbols of vowels should be explained which can be observed in the table below (Yoshida, 2012).

Table 2:

Vowels of American English

Examples	Symbols	Examples	Symbols
bit	/ɪ/	book	/ʊ/
week	/i:/	group	/u:/
bold	/oʊ/	grass	/æ/
ignore	/ɔ:/	dark	/ɑ:/
cook	/ʊ/	her	/ɜ:/
cute	/ju:/	hour	/oʊ/

When the table is analyzed, it is easily understood that words are directly associated with their vowel sounds, which is the results obtained from various textbooks including the different use of the phonetic alphabet through vowels attributed to different symbols. In words, vowels are written in terms of symbols that represent a great deal of American textbooks. Also, it should be certainly emphasized that the sound symbols are written in American English, which refers to different phonetic alphabetic sounds derived from British textbooks and similar texts to British ones. In the list, the symbols are shown for the long vowels mentioned above (Yoshida, 2012). The following figures demonstrate the places of articulations of some NAE problem- causing vowels:

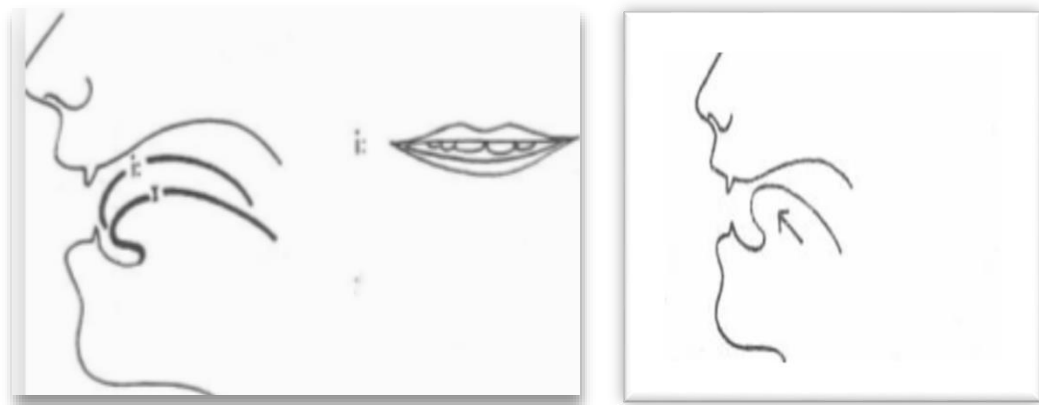


Figure 2. The articulation position of the /i:/ sound (Adapted from Baker, 1991, p. 7).



Figure 3. The articulation position of the /a:/ sound (Adapted from Baker, 1991, p. 8).

In this respect, the position of tongue is the core in the articulation of vowels sounds that is also tried to be depicted in the table. In the process of the production of vowels, the tongue is positioned freely floating around the mouth without touching any parts in the vocal tract which is exactly difficult to explain the situation of the mouth seen for each sound. Based on this reason, the vowels in English are described in terms of tongue position as well as lip rounding (Baker, 1991).

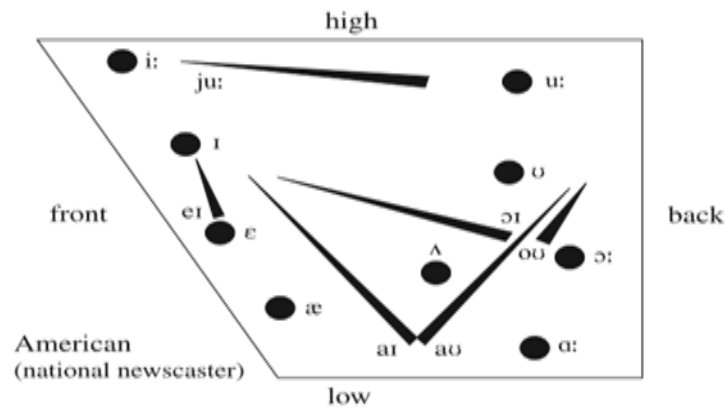


Figure 4. The diagram of American monophthongs and diphthongs by Ladefoged and Johnson (2010, p.97)

To pronounce each vowel with its proper sound quality, the tongue position should be pointed out depending on its move and how it is being shaped with a slight change occurring in the position of the tongue can bring about a great variation in the vowel sounds (Ladefoged & Johnson, 2010)

The diagram named as the vowel quadrant can be seen above. With the aid of the diagram, how the different vowels are produced through the tongue position is tried to be shown. When the vowel quadrant is studied, it can be understood that vowels being close to another in the vowel quadrant should be pronounced in tongue positions, which must be near to each other to make the sounds like to one another. Due to this similarity, the vowels which can be described as far away pairs will be easy to pronounce rather than the former vowels mentioned above in Figure 2.

To set an example, the word *sheep* /i:/ and *ship* /ɪ/ are hard to be differentiated from each other because of the adjacency of their vowel whereas the word *shop* /a/ and *sheep* /i:/ are simply pronounced in different ways (Baker, 1991).

2.2. The Examination of Studies on the NAE Long Vowel Sounds

There have been a great number of studies about the long vowels in North American English that elucidate this research despite some differences in regards to the participants and the settings.

Aside from the pronunciation of words directly associated with the spelling, the dissimilarities of the articulation of words in the target language is another crucial factor having an impact on the pronunciation of learners. With the example of the word *yacht*, it is tried to be clarified. Whereas the transcription of the native American English speakers is /jɑ:t/, it can be exactly understood that non-native speakers of English tend to pronounce as /jɔkt/, which is argued in the findings of the study of Richards & Platt (1985). Furthermore, the comparison of the English long vowels /a:/, /i:/, /u:/ with their identical shorter ones /a/, /i/, /ʊ/ rooted in the perception of the native Shona ESL teachers who have inadequate expertise about the pronunciation in the second language teaching by cause of the interpretation of their L1 has been declared by Richards & Platt (1985).

An alike examination was suggested by Otomo & Carol (1992), which concentrates on the male and female acoustic description in the English vowel production process of a normal standard phonetic context. In the evaluation of the study, it is discovered that the participants are lack of separation on English long vowels from their shorter counterparts, which is found through the substitution of vowel cases. Besides, it is ascertained that the duration of the vowels in the voiced pairs are elongated compared to the voiceless parts and vowels articulated by males are seen to be longer in contrast to the female partakers.

A study suggested by Zhao (1995) concludes that the Malay participants are incapable of distinguishing the two long vowels /i:/, /u:/ from their short equivalents /i/, /ʊ/, which has also been reported in the same way by a parallel study set forth by Zhao (1992). In the study, these two sets of English vowels have reviewed as /i:/, /u:/, /i/, /ʊ/ in twenty English words involving twenty (Received Pronunciation) RP vowels. Like in the previous study, this research also relies on the Malay English L2 learners who are supposed to produce the four above mentioned vowels.

Another similar research in a longitudinal way suggested by Alonso (2006), which intends to inquire about the acquisition of the American English vowels /i:/, /i/, /u:/, /ʊ/ by the EFL Spanish learner. In the study, the Spanish L2 learner was expected to pronounce the words in a list given in a naturalistic classroom but it could be noted that the words were picked by the researcher of the study rather than listing the words to make the participants read during the natural teaching process. The findings have indicated that the pronunciation of the learner in the L2 directly depends on his L1 perception, which has

been justified through the phonetics of the vowels /i:/ and /ɪ/ described high front, vowels and /u:/, /ʊ/ that have high back utterance. In other words, the participants have been realized to fail to separate the short vowels /ɪ/ and /ʊ/ from the longer equivalents /i:/ and /u:/ because of the ignorance of the length in the production of the latter ones.

In the same aspect, the perception of the native English and Spanish speakers about the /ʊ/, /i:/, /ɪ/, /u:/ vowels are tried to be explored, which displays the difficulty of the non-native English speakers of Spanish participants during the articulation of the long English vowels /i:/ and /u:/ in the study of Hellerman & Vergun (2007). Likewise, the experienced Serbian EFL learners are asked to produce the same two categories of vowels and it is ended with a report that all Serbian partakers prefer to utter the short vowel /ɪ/ in the place of the longer one /i:/ stemmed from the similarity of vowels in their L1 language, which has been implemented Makino (2012). From the interpretation of this study, it could be notified that the Contrastive Analysis Hypothesis is significant in regards to conveying items from one language to another, which may be emerged from the correlations of forms in the L1 and L2 of learners (Gass & Selinker, 2008).

Beyond this, a different study has been introduced the contrast between dissimilar languages has also been investigated by several researchers in the ELT field. One of those studies proposed by Feest & Swingley (2011), which centers around a word transcription task to diagnose the vowel length interpretation of the Dutch and the English speakers. The finding of the research stands on the misperception of the Dutch speakers about lengthening short vowels and shortening long vowels owing to the impact of “the coda voicing” on the English vowel duration asserted by Denees (Feest & Swingley, 2011, p.59-60).

Another study about the NAE long vowels alleged by Zein (2013). In her study, the problem centers around the pronunciation problems of the EEL Saudi university students about the long vowels in the English language. The reason has been supposed to have arisen from the inaccurate perception of the students about the length of the English vowels. By the virtue of the reason, the adverse effects have been seen to come forward and the unintelligible in the pronunciation is noted to the misunderstanding that could be added to change the forms completely, which is presented with an example through the transcription of two words: “pick” and “peak”. In the study, the Saudi L2 learners are

discovered to articulate /ɪ/ in the word “pick” like sounding of the word “peak”. This research has been emerged after the outcome of the researcher who has expertise with university students in the teaching English Department at a university for years. As a result, the research could be affirmed to conclude about the Saudi L2 learners’ inevitable tendency to change the pronunciation of the English long vowels.

In the same viewpoint, another research on /u:/, /ʊ/, /i:/, /ɪ/ vowels are administered by Abdalla & Ali (2012) with the intent of the vowel length distinction of the L2 Sudanese English learners. The instrument of the study consists of the English words formed in these two groups of vowels. Instead of the perception of the participant, this research could be claimed to scrutinize the long vowel production of the Sudanese learners. Therefore, it is found that there is a tendency of the participants to sound the short vowel /ʊ/ by voicing and prolonging much more than its longer counterpart /u:/ vowel.

Moreover, the acoustic dissimilarities of the English long vowels produced in the articulation of the native English speakers and the Chinese English learners are analyzed by (Cheng, 1998). In the end, it is deduced that the Chinese L2 learners of English are inclined to shorten the front vowels, which set off the mispronunciation of words “bought” /bɔ:t/ as “bot” /bɒt/ and “boot” /bu:t/ as “boat” /bəʊt/. Meanwhile, the participants are supplied the general information about their L1 to the pronunciation in the target language to become the teachers acquainted with the partakers’ native language vowel sound system of Brown (2000) to help the ESL teachers to identify the problems properly.

Corresponding to the above-referred study, the research of Ivanova (2016) centralizes the revelation of the predicaments in the acquisition of the American English monophthongs by ESL Russian learners. In the study, the Speech Learning Model designed by Flege (1987) is attributed as the core of the research. The cause lied behind the use of SLM is to highlight the acquiring of the phonemes of the target language by the learners of the EFL and ESL in a shorter time than the other phonemes that resemble the ones in their mother tongue languages. The research of the study is about the incorrect interpretation of the discrepancy between /i:/-/ɪ/, /ɛ/-/æ/, /u/-/ʊ/ and /ɑ/-/ʌ/ with each other involved in the American English phonemes by the ESL Russian learners.

Lastly, a study conducted by Nurweni & Read (1999) could be remarked to investigate which English vowels were the most challenging ones for the Indonesian university ESL learners at a university in the academic year of 2015-2016. The pronunciation errors of the participants are sought to be categorized through the data collected by the research and it is deduced that the errors in the pronunciation of the American English vowels were separated into three groups to identify the most difficult vowels in the articulation of the native Indonesian English learners, which has emphasized on the highest errors related to the short American English vowels since the lengthening of the vowels by virtue of the similarities in their L1.

2.3. The Difficulties of the Long Vowels in North American English

Learning a foreign language has always been up for discussion in the linguistics and phonetics area since vowels are seen to lead to some problematic or intricate situations. During the acquisition of L2, the pronunciation can be attributed as the cornerstone of learning the language properly. Thus, vowels (especially long vowels, and other components of vowels like diphthongs) have become incomprehensible for ESL learners because of their confusing and ambiguous features although the native language of some learners may have resembling patterns.

On account of this objective, vowels are found out being the most essential part of a language and long vowels are frequently seemed to bring about much more problems rather than short vowels. In other words, long vowels are normally accentuated to some extent (approximately 1½ to double length) than the cardinal vowels in IPA, which is shown with /:/. Now and then, the symbol of long vowels could be signified by a macron like ē in the lexicography of the American English.

With this respect, an article written by Hago & Khan (2015) concentrates on the pronunciation problems based on English vowels. The hardships experienced by Saudi EFL learners at secondary schools indicate the thing that Arabic has accepted as the origin of the Semitic language family Badr (2019). On the whole, there are various types of Arabic dialects used in Arabic-speaking countries. Nevertheless, the language of the media and education is named “Modern Standard Arabic”. Beyond disputes, it should be highlighted that there is numerous linguistic dissemblance between a range of Arabic

dialects and Standard Arabic relied on syntax, morphology and phonology. Compared to English, Arabic language consists of /a/, /i/, /u/ three vowels functioning either long or short vowels. To put it differently, the length is determined in accordance with the position of the tongue. By Saadah (2011), several parallel types of researches carried out on vowel systems have been attempted to meet them on common ground by drawing attention to two vowel phonetic parameters by referring to “vowel quality and quantity”.

Apart from the study of Hago & Khan (2015), a similar examination led by Maniruzzaman (2006) aimed attention at troubles that experience the native Bengali EFL learners. At the beginning of the research, the five long vowels /i:/, /a:/, /ɔ:/, /ɜ:/, /u:/ are emphasized the basic problem of English speakers of Bengali through some sample words like *sheep*, *part*, *bird*, *short*, *cool*, which are deliberately chosen since there is not any phonetic equivalence of the NAE long vowels in the Bengali language. Instead, the vowels in the mother tongue of EFL Bengali learners can be said to be lengthened to some degree to enable the acoustic of long vowel quality, which creates a phonetic feature in preference to the phonological aspect taken place in English. Furthermore, it is found that some words including comparative vowels such as /ɪ/ in *ship* against /i:/ in *sheep* and the /ɒ/ vowel in the *pot* versus the /ɔ:/ vowel in *port*, /ʊ/ in the word *full* vs /u:/ vowel in *fool* and finally, /a:/ vowel in the word *bard* against the vowel /ɜ:/ in the *bird* is tried to be dealt with since they are thought to bring about serious problems for perceiving the pronunciation to the same degree with the speaker’s production process of long vowels.

To the greatest extent, it should be precisely underscored that the NAE long vowels are easily muddled up with diphthongs, which is the core of the research supervised by Abdalla & Ali (2012). In the paper, the primary objective is to investigate how the native Sudanese learners of ESL articulate diphthongs appearing to be a great challenge for EFL learners. At the end of the survey, the improper utterance of the Sudanese learners is completely connected to the interference of their mother tongue to the L2 learning; that is to say, the hypothesis of contrastive analysis is cited to indicate the attempts of the ESL Sudanese learners to convey some aspects of the L1 during the learning period of a foreign language, which may reveal apparent obstacles in their English pronunciation. However, the article has touched upon that the native Sudanese speakers of English experience not only the difficulties with diphthongs but some undistinguishable features of long vowels and diphthongs for the EFL Sudanese learners in English due to the L1 interference is

also mentioned. Besides, the probability of remedies for the errors derived from the fossilization is proposed in the article and the Sudanese EFL teachers are expected to improve learners' perception of the NAE long vowels and diphthongs with their knowledge in English phonology since it is believed that the pronunciation could be developed in the light of practices either inside and outside the classrooms by Abdala & Ali (2012).

Being similar to the previous article, another paper can be cited to give priority to the palatal and palatalized consonants that are formed a phonetic characteristic with /j/, /ɪ/, /i:/ English sounds (Demirezen, 1987). As a result, it could be stated that many Turkish learners of English articulate such English words as *huge*, *human*, *humid*, *cute*, *cube*, *popular*, *human* vice versa improperly (Demirezen, 2005). The aim of this study is literally to find possible cures for errors along with means of exercises and the pronunciation of English sounds and words improperly by the native Turkish EFL teachers, which are believed to have a wrong impression about the articulation of vowel sound over learners of English. For this purpose, a corpus that is the basis of the paper, formed, and some various types of activities like dialogues, idioms, minimal pairs, tongue twisters, recognition exercises, reading aloud exercises are prepared in the accordance with the corpus.

What's more, a parallel study engaging in the training of the accurate perception of the /ɔ:/ long vowel and /oʊ/ diphthong by the Turkish ESL learners are aimed to be explored by Hişmanoğlu (2007) because the distinction of both sounds cannot be comprehended, which caused to the failure in pronunciation. Upon some analysis, it is recognized that the stress on the /ʊ/ vowel at the end of diphthong is not achieved whereas the /ɔ:/ vowel is emphasized by the dwelling on it. As a matter of fact, it is wrong and named as a fossilized error, which is very hard to find a feasible remedy. Thus, the audio articulation method introduced by Demirezen (2003) was adopted and opened a range of activities to be prepared in the sense of the exercise found in the audio articulation method of Demirezen (Hişmanoğlu, 2007).

A wide range of arguments about the mispronunciation of long vowels and diphthongs are observed to be caused by fossilization, yet the main motivation cannot be exactly determined. In this direction, some goals are set forth, which is derived from the lack of appropriate feedback Han (2004). Under phrases, sentences, words, facial expressions

and tone of voice, the feedback is supposed to reflect at the last stage of the learning process. The quality in the significant intake could be depicted as the second principle, in which a learner is presumed to be exposed to accurate and apprehensible input to articulate long vowels and diphthongs of the English language. The last criterion is linked to the impact of “learning inhibiting learning” theory, which grounds from the learners’ interference of their mother tongue language since it has anticipated and this situation leads to some challenges taking a long time to build new neural connections in terms of the intake encouraged by the environment according to Brown (2000).

Contrary to what is believed, the inadequacy to perceive the new stimuli is regarded as another ambiguous thing that may be preventable for L2 learning since the ESL learners are noticed to become disinterested in the progress of the learning in EFL. Furthermore, the impacts of affective filters on the foreign language learners’ emotional state should also be ascribed by Han (2004). In other words, the affective filters are considered to affect the appropriate articulation of long vowels and diphthongs. Even if all factors are not completely as discerned being relevant to one another, it can be concluded that every factor has contributed to fossilization.

Except for, the L2 is intervened by the effect of the ESL learners’ native languages. During the improvement of the main skills like writing or speaking in the target language, learners are recognized to use their L1, which comes out errors occurring in the EFL learning. Hence, a great deal of dissimilitude in the grammar structures, vocabulary and phonology between L1 and L2 creates mistakes that turn into errors or repeated errors that become fossilization (Bhela, 1999).

Lastly, all articles highlight the challenges that have been experienced during the researches of the NAE long vowels by the ESL learners around the world and when the reasons lying behind the main problems are attempted to be explored, the dissimilar language structures, the inefficacy of the learners’ phonetic knowledge and the L1 interference of ESL learners, etc. are seen to come to the forefront.

CHAPTER 3

AN ANALYSIS OF NORTH AMERICAN LONG VOWELS AND DIPHTHONGS

3.1. The Analysis of English Vowels

In the world, English has been the widely spoken language for years, which brings into the sound system consisting of consonants and vowels. The same as the other languages, vowels in the English language are taken into consideration as the most difficult part in the period of learning (Crystal, 2003). When it is considered what makes English hard to be learnt and taught, it can be clearly stated that the articulation of the vowel pronunciation is generally seemed to make learners learn and speak English as a foreign language (Crystal, 2003).

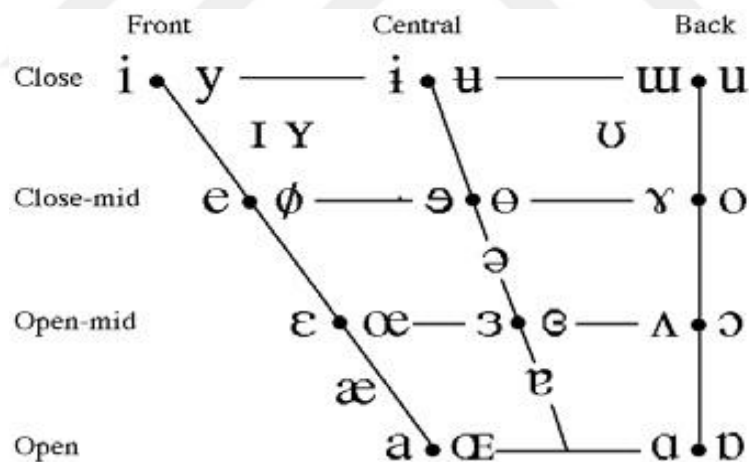


Figure 5. The IPA English vowel quadrilateral

(https://www.researchgate.net/figure/The-International-Phonetic-Alphabet-IPA-vowel-quadrilateral_fig1_280245811)

From this point of view, the types of English vowels should be analyzed that is given in the table above. By and large, vowel sounds of many languages are stated as long or short or silent. On the one hand, a great deal of vowels consists of a long sound or a short sound or both long and short sounds together.

On the other hand, lots of vowels involve two or more than two pronunciations (Roach, 2009). Herein, the most basic example can be given about /r/ which is always pronounced after vowels in North American English whereas there is the underemphasis of the pronunciation of these two letters in British English (Roach, 2009). Hence, the nature and the articulation of vowels should be analyzed which is assumed to enlighten the purpose of the chapter. The following figure indicates the structure of English vowels:

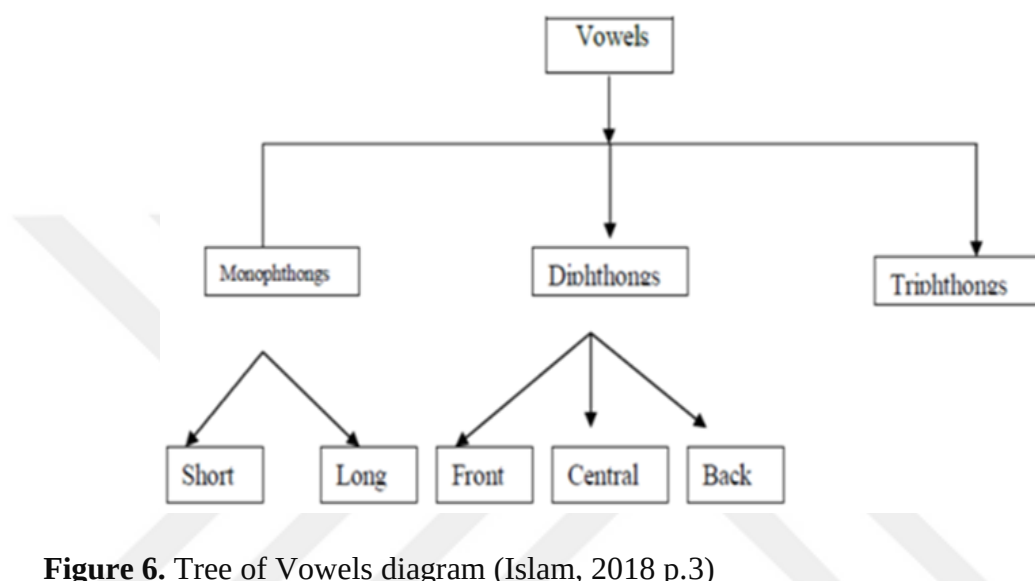


Figure 6. Tree of Vowels diagram (Islam, 2018 p.3)

When the English vowels are researched in detail, the first thing that should be done is the examination of vowels into 3 categories (that is presented in Figure 5 in the table above). Parallel to lengths, long vowels and diphthongs are not discriminated from each other not only by L2 English learners but also by the TETs due to their length sameness.

The most outstanding distinctiveness lies on the quality of the English vowels. Thus, vowels are described as long or short vowels that are formed on the tongue shape, tongue position, and lip position (Roach, 2009). The length is illustrated with the length mark that is symbolized by the two dots (:) (Roach, 2009). The two dots are presented in the examples given here such as teen /ti:n/, seat /si:t/, heard /hɜ:ɹd/, noon /nu:n/, boot /bu:t/, music /mju:zɪk/, hard /hɑ:ɹd/, dark /dɑ:rk/, horse /hɔ:ɹs/, ignore /ɪɡnɔ:ɹ/, board /bɔ:ɹd/, card /kɑ:ɹd/ (Roach, 2009).

And yet, the “short” vowel sounds, which must be followed by a consonant, are established at the end of a syllable in English. Resulting from that point, the English short vowel sounds are called “checked” vowels by phonetics the same as long vowels of North

American English: /ɑ:/, /i:/, /u:/, /jʊ:/, /ɔ:/, /ɜ:/, which are also named as “Free Steady State vowels” (Hamann & Schmitz (2005, p.12).

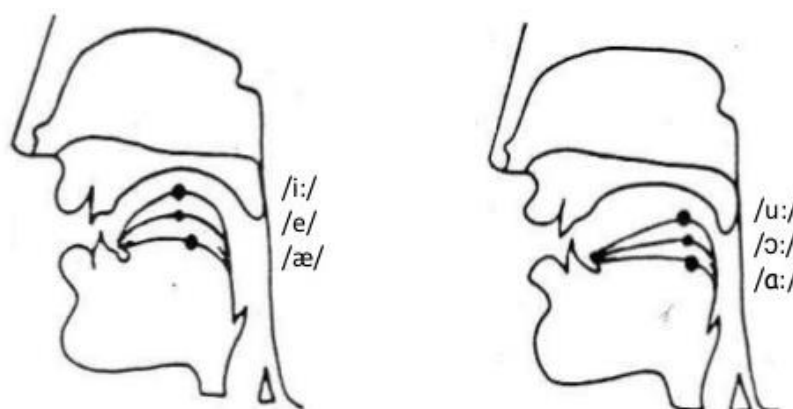


Figure 7. The height position of the mouth in the articulation of long vowels by Thomas (1976, p.57) adopted from Hamann & Schmitz, 2005, p.15

Originally, there is a smooth airflow of a vowel sound produced in the movement of the tongue through getting help from the throat and the mouth without making any pause, which can be demonstrated above in the table that is particularly focusing on some vowels. In another saying, no obstruction is created during the flowing of the air out of from the mouth (Hamann & Schmitz, 2005). This is the general description of the articulation of the vowels and the vowel sound system in the English language. Besides, it can be certainly underlined that the articulation of different vowel sounds is possible when a speaker changes the place of the articulators created through the shape and the movement of the mouth and the throat. During the production process of each vowel, it can be mentioned that every English vowel is created by the position of the vowel in a syllable along with the letters that accompany or precede or follow after it (Hamann & Schmitz, 2005).

3.2. The Difference of Long and Short Vowels in English

A similar point that has been being engaged above, the English vowels are classified into three major groups, which is started with monophthongs consisting of short and long vowels that are assigned with regards to acoustic characteristics of vowel sounds. At that point, another factor playing a significant role is related to lip-position, tongue height and

the front and back aspects of vowels. First and foremost, there are various positions and shapes of the lip based on the production of vowels, yet three lip-positions are deliberately carried out for the purpose of researching short vowels.

From Roach's (2009) point of view, the general norm about the English vowels is upheld, which depends on that English language has a large number of the vowel sounds and they are gotten into two groups: short vowels and long vowels. In this place, short vowels are ones to be searched for in detail. Moreover, Roach (2009) has introduced the symbols for those short vowels are: /ɪ/, /e/, /æ/, /ʌ/, /ɒ/, and /ʊ/ on basis of the cardinal vowels.

In fact, the separation of short and long vowels is important for ESL, which has also been mentioned as "Becoming proficient in the vowel sounds and the pronunciation of the target language should be the first concern speaker of English" (Chongning, 2009, p.39). Another reason has been proposed by Chongning (2009, p.43) through the emphasis of intelligibility as it is given in the quotation "Intelligibility in the pronunciation of a foreign language learning is a fundamental component for acquiring communication competence". What is more, Chongning (2009) described pronunciation as the only way to form speech sounds in the mouth that gives stress more on the way of sounds produced by the audience. Therefore, pronunciation becomes a priority in the English learning process that obviates misunderstanding about the meaning of the utterance (Chongning, 2009).

From this point of view, it could be asserted that misunderstanding mainly depends on the mispronunciation and or the inaccurate intonation of some words. When it is clarified through examples such as the pronunciation of words such as *fit and feet*, *cut and cot*, *pull and pool* with no differences relatively, it could be easily understood that misunderstanding is inevitable (Hamann & Schmitz, 2005). In ESL learning, students are also seen to have experienced some pronunciation problems based on the dissimilarities of the intonation and utterances of words in the English language. Upon the pronunciation of the words like "she" /ʃi:/ and "thin" /θɪn/, students are observed to pronounce say /seɪ/ and /tɪn/.

According to Hamann & Schmitz (2005), the factual problem in the pronunciation occurs when learners articulate the accurate sounds difficultly. At that point, the comparison of the pronunciation of the sound /u:/ in "fool" word to the sound /ʊ/ in the word "full", or

/ɪ/ sound in “hit” word and the sound /i:/ in the word “heat” could be stated because the difference between the English long and short vowels are not perceived by learners in general.

Taken the International Phonetic Alphabet or IPA into consideration (Ogden, 2009), vowels are separated into three main groups as monophthongs, diphthongs and triphthongs. The first group; in other words, monophthongs are divided into two groups which are named “short vowels /ɪ/, /e/, /æ/, /ʌ/, /ɒ/, /ʊ/ and “long vowels /ɑ:/, /i:/, /u:/, /ju:/, /ɔ:/, /ɜ:/ in English language.” (Roach, 2000, p. 14-19). In order to explain the dissimilarity between long and short English vowels, Ogden (2009, p. 42-43) has proposed a definition as it follows, “Vowels are articulated with a smooth and clear airflow in the tongue position and the differences in the vowel quality are formed through the different shapes of the oral cavity”. In fact, what is tried to be mentioned is about the height of vowels, which has been asserted in the quotation “The independence of vowel height is a determining factor based on the front position of the tongue” by Ogden (2009, p. 44).

From all studies that have been mentioned above, it can be inferred that the length of vowels is a distinctive feature and proper pronunciation plays an important role at that point. Mostly, problems about short vowels could be said to have been resulted from the vowel sound length, which is tried to be emphasized through the studies that have been given examples. In order to understand the EFL learners’ pronunciation of English vowel sounds, it should be expressed that all researches in the studies carried out their researches especially focusing on short and long English vowels. In the studies, many standard types of measurement were conducted such as pitch changes for listening, the stress of words in the sentences, meaningful minimal pairs proposed by Brown (2000). In addition, the researchers in all studies could be asserted to analyze the quality and how EFL learners articulate the short vowels and the factors which bring about the problems in pronunciation of those short vowels. Overall, the difficulties which the ESL students experience can be emphasized to be caused by the dissimilarities between their first language and the foreign language that they have been learning (Swan & Smith, 2001). However, the linguistic problems of students should be taken into consideration through three categories as phonological aspects, social perspective and other related problems to these aforementioned categories throughout the learning process, which was suggested by Swan & Smith (2001).

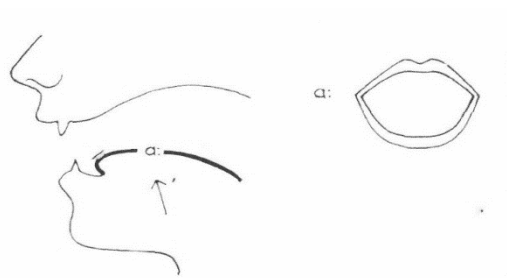
In order to summarize the part, it should be drawn attention to the utterance of the short English vowels either by native speakers of English or non-native speakers connected to the practice of the sounds. This must be done especially via various multi-modal activities that are intentionally prepared to make learners repeat the sounds as well as enable some examples of short vowels in some specific words for using the words including short vowels in their speaking well, which facilitate the difference between long and short vowels in NAE.

3.3. The Long Vowels in the North American English

Since this chapter examines the study the long vowels in NAE, the focus is given to the North American English long vowels rather than short vowels in English language. Long vowels are described to contain single vowel sounds which should be lengthened in their articulation. Due to this reason, the perceived duration of a vowel sound is determined by the vowel length in English phonology. In some dictionaries, the diacritical mark for a long vowel is named as a macron (¯), but this sign (/:/), which is firstly suggested by Roach (2009) is primarily used in dictionaries. Taking the long vowels in NAE, which are /i:/, /ɑ:/, /ju:/, /u:/, /ɜ:/, /ɔ:/ into consideration, it can be found out that the length is the distinctive point for the American long vowels. However, these characteristic features of vowels can directly be associated with the unique nature of each vowel in terms of their articulation (Roach, 2009).

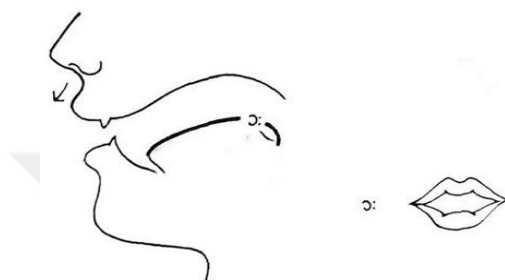
Taking its entirety, the pronunciation of the North American English vowels appears to be easy to produce for either the non-native Turkish English speakers or the Turkish ESL teachers, yet it can exactly be asserted that these NAE long vowels cannot be articulated properly in terms of the same or the contrasting characteristics between the mother tongue and English vowel system of the Turkish L2 learners. In the following figures, the North American English long vowels will be displayed, which has been prepared by way of the contribution of Collins (2003) IPA (International Phonetic Alphabet) symbols with the Oxford Advanced Learner's Dictionary word samples.

By the vowel quadrilaterals, the descriptive features and examples of the North American English long vowels are shown below.



/ɑ:/ is a low, mid and linear North American long vowel. Examples: article: /'ɑ:rtɪkəl/, sovereignty: /sa:vɹənti/, card:/kɑ:rd/

Figure 8. The range of /ɑ:/ long vowel adopted from Baker (2006, p.109)



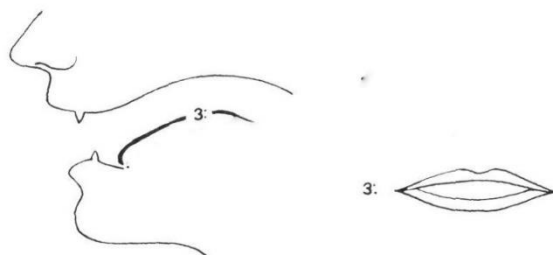
/ɔ:/ is central, back and lip-rounding long vowel in NAE. Examples: forward: /fɔ:rwərd/, course: /kɔ:rs/, horse: /hɔ:rs/

Figure 9. The range of /ɔ:/ long vowel adopted from Baker (2006, p.108)



/i:/ is a high, central sand slightly spreading North American long vowel. Example: field: /fi:ld/, hygiene: /'haɪdʒi:n/, peace: /pi:s/

Figure 10. The range of /i:/ long vowel adopted from Baker (2006, p.25)



/ɜ:/ is a middle, neutral and central long vowel in NAE. Examples: turn: /tɜ:rn/, word: /wɜ:rd/, surface: /'sɜ:rfɪs/

Figure 11. The range of /ɜ:/ long vowel adopted from Baker (2006, p.108)

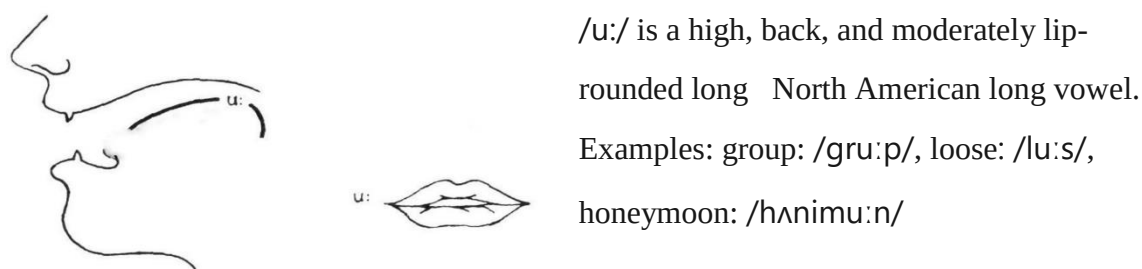


Figure 12. The range of /u:/ long vowel adopted from Baker (2006, p.81)

Aside from five long vowels of North American English, /ju:/ is also regarded as a long vowel despite being taken into account as a diphthong by some phoneticians. This sixth long vowel of NAE is referred to “yod”, which is perused in the sense of its characteristic features through this paper. Originally, this vowel sound has been being changed in various ways by being omitted or being removed the sound following the letter previous to the /ju:/, which recognized “yod dropping” conforming to a rule. In the beginning, the sound /j/ goes ahead of /r/, /l/, /u/ or a palatal or a consonant, which brings /j/ into Ø by Glain. (2012). Having the equal idea, the same rule was expressed with examples that are directly tied to this principle. In his study, Kwon (2009) tried to highlight this rule by giving examples such words as “blue and flue” etc. Unlike Kwon (2009), “blu and flu” words are pronounced with a long vowel /u:/ in place of /blju/, /flju/ build upon its weird utterance by Wells (1982).

Next in order, there is the palatalization of yod that is appeared in some words like /sju/, /zju/, /s/ and /z/. Furthermore, /ju:/ palatalized into /ɪʃu:/ and /əʒu:m/, which can be observed in words “issue and assume” (Glain, 2012, p. 13-14). Apart from this situation, Hannisdal (2006) stressed another thing by concentrating on some alterations in the simplification progress of languages.

According to Hannisdal’s (2006) emphasis, the reduction of words enables learners to utter words more smoothly and instantly. At that point, some examples given from American English words demonstrate the change of /ju:/ long vowel pronunciation into /u:/, /ue/ or /ew/. As well as, further words, which can be taken as the most common and appropriate examples to what Hannisdal (2006) has suggested, are provided by

Gebhardt (2010) in virtue of those words music /mju:zɪk/, beauty /bju:ti/, rescue /reskju:/, pure /pjʊ:r/.

3.4. The Analysis of North American English Diphthongs

Diphthongs are sounds structured by two vowels that one sound proceeding the another taken place in the same syllable owing to the movements in the process of the articulation created from the tongue by mouth producing short and long spaces upon giving the stress of the first vowel sound rather than the following second one (Roach, 2009).

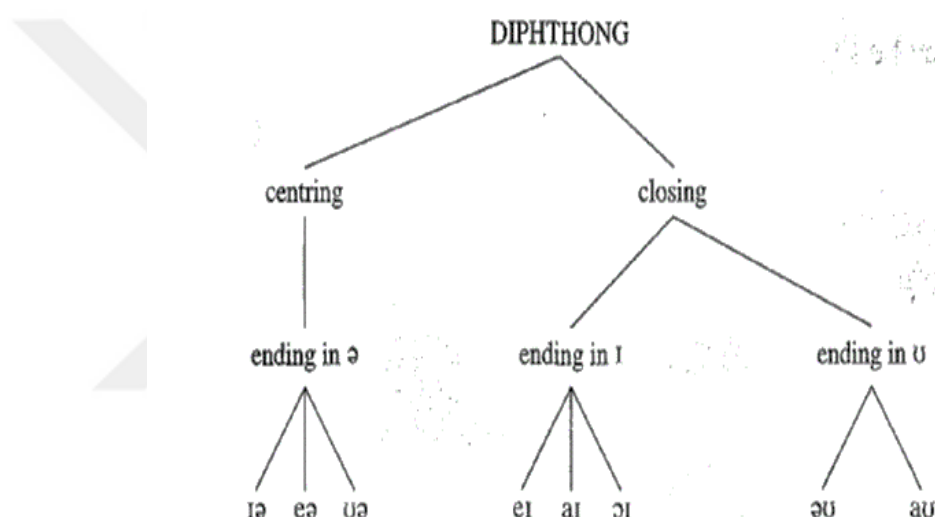


Figure 13. Centering and Closing Diphthongs by Roach (2009, p.20)

As seen in the figure given above, the introduction of eight diphthongs in all and these diphthongs have been separated into two groups named as two as centering and closing diphthong (Roach, 2009). The main category is shaped under two groups, which explains the reason why closing and centering features are given importance. The characteristics of closing diphthongs are related to the ending position of diphthongs. In other words, the position of the mouth changes according to open and closed vowels. In the pronunciation of /aɪ/, /ɔɪ/ and /aʊ/ diphthong sounds, the movement of the mouth is clear, direct and long even though /eɪ/ and /əʊ/ diphthongs are uttered in s shorter and slight movement of the mouth (Roach, 2009).

Since diphthongs have been categorized primarily in two major groups according to English accents, the British English (BrE) includes not only centering but also some of

closing diphthongs whereas North American English (NAE) is merely composed of closing diphthongs (Roach, 2009).

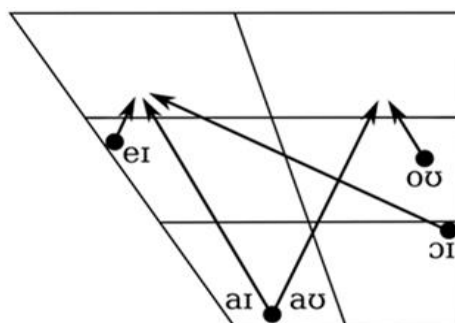
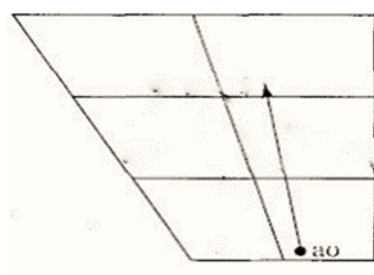


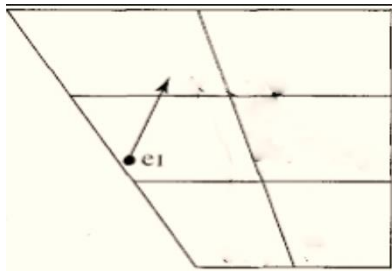
Figure 14. North American English Diphthongs by Wells (1982, p.486)

Being proposed in the figure, the five diphthongs of the North America English are seen. When the quadrilateral is examined, it can be exactly understood that three diphthongs have /ɪ/ sound ending while the other two of them are seen to end with /ʊ/ sound. All over, the NAE diphthongs are /aɪ/, /eɪ/, /ɔɪ/, /aʊ/ and /oʊ/ (Wells, 1982). However, there is not a specific principle for which diphthongs are hard to be enunciated. Thus, it can be easily deduced that the key factor demonstrating the degree of diphthongs from the easiest to the most difficult one is based on the essential correlations and contrasts between a learner's mother tongue and English vowel system (Wells, 1982). Consecutively, North American English diphthong figures will be displayed with their typical aspects and examples by getting assistance from the Collins (2003) IPA (International Phonetic Alphabet) symbols added to the Oxford Advanced Learner's Dictionary word samples.



The /aʊ/ diphthong begins with a rounded and low back and rounded /a/ vowel proceeded by the /ʊ/ sound that is a vertically. Examples: gown: /gaʊn/, loud: /laʊd/, around: /əraʊnd/

Figure 15. /aʊ/ diphthong in oral cavity adopted from Roach (2009, p.21)



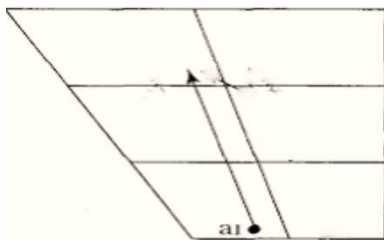
The first sound /e/ is a mid-front vowel softened by the high front vowel /ɪ/, which makes the movement is short but slight. Examples: airplane: /erpleɪn/, paid: /peɪd/, nature: /neɪtʃər/

Figure 16. /eɪ/ diphthong in oral cavity adopted from Roach (2009, p.21)



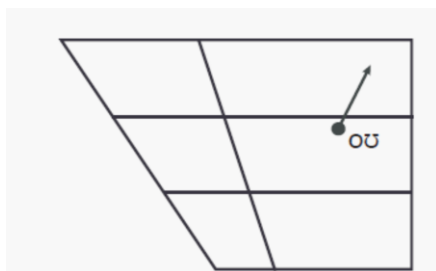
The /ɔɪ/ diphthong starts with a back and rounded but low-mid vowel /ɔ/ moving towards /ɪ/ that is defined a closed high front vowel. Examples: employ: /ɪmˈplɔɪ/ void: /vɔɪd/, noise:/nɔɪz/

Figure 17. /ɔɪ/ diphthong in oral cavity adopted from Roach (2009, p.21)



The initial vowel /a/ is low front having much more stress than the ending high front vowel /ɪ/. Examples: tide: /taɪd/, flight: /flaɪt/, frighten: /fraɪtən/

Figure 18. /aɪ/ diphthong in oral cavity adopted from Roach (2009, p.21)



The /oʊ/ is defined a closing diphthong that smoothly shifts from the rounded, mid-back vowel /o/ to the high and back vowel /ʊ/ in a short time at the back of the mouth. Examples: loud: /laʊd/, tomato: /təˈmɑːtoʊ/, most: /moʊst/

Figure 19. /oʊ/ diphthong in oral cavity adopted from Roach (2009, p.22)

Beyond those distinctive aspects, Greenbaum (1996) has proposed /y/ and /w/ vowels identified invisible consonants that make speakers articulate the North American English diphthongs easily. At that point, it should be certainly underscored that /y/ is observed in /aɪ/, /eɪ/, /ɔɪ/ diphthongs, which can also be supported with some words “flight, examination and employ” provided by Yoshida (2012). Indeed, what Yoshida emphasized on is that the /y/ consonant in diphthongs is hearable though it's not represented in pronunciation. From this point of view, it can be affirmed that there are not any written forms of /y/ and /w/ consonants in English phonetics although the two consonant sounds are seemed to be somewhat audible in diphthongs, it can be affirmed that there are not any written forms in English phonetics (Yoshida, 2012).

Apparently, the centering diphthongs should be referred because it is one of the debatable subjects. On the grounds, it should be cleared up that the NAE does not involve any centering diphthongs ending with /ə/ shwa sound like /ɪə/, /ʊə/, /eə/ (Yoshida, 2012). Seeing that there are not any existing diphthongs consisting of an /ə/ (shwa) sound at the end, it is preferred to be changed with /r/ consonant sound rather than /ə/ (shwa), which is also provided through the examples below: the word “there” is enunciated in regards to /ðer/ in North American English notwithstanding in BrE. With knobs on, another word “pure” is pronounced /pjʊr/ in the NAE. However, it has a different utterance /pjʊə/ in British English (Yoshida, 2012).

3.5. The Distinction of the North American Long Vowels from the Diphthongs

A diphthong is produced when there is an obvious change in the shape of the lip and also the tongue. Another saying, there should be a slide that is expected to achieve in the pronunciation of the vowel sounds by not breaking (Roach, 2009). Contrary to the English language system, there is not a diphthong sound system in the Turkish language. Based on this reason, long vowels are mostly used rather than diphthongs which require one syllable that consists of two vowels with a clear glide or only a slight glide. What makes diphthongs difficult is the production part as the tongue should be both in a vertical-horizontal position whereas the pronunciation of long vowels that include a stable position of the tongue. At that point, Roach (2009) emphasizes that learners of English as

a second language have difficulty of production of diphthongs in contrast to monophthongs, which can also easily be observed in Turkish learners' speaking. This problem is caused by TETs since most of the non-native English teachers have also difficulty in separating diphthongs and long vowels from each other.

Despite there are some similar analogies between North American English long vowels and diphthongs, the nature of long vowels is different in terms of their long and intense utterances in addition to their spans. In order to define long vowels, the name long vowel is also used. On this basis, the name also suggests that the production process of vowels need to make speakers' mouths steady and stable (Roach, 2009). What is more, Roach (2009) attributes the use of a symbol representing the length mark (/:/) for the pronunciation of long vowels to enable learners to understand explicitly. Thanks to this length mark for vowels, learners have the awareness of the difference between vowels in terms of their length. The long vowels have some other distinctive features described by Collins and Mees (2003) which is about the last syllable of words including long vowels rather than short vowels.

Besides, the acoustic analysis of the long vowels in NAE can be seen as the fundamental descriptive feature that makes them different from short vowels as well as diphthongs, which Zsiga (2013, p. 18-19) mentions in her book, "In English, especially the pronunciation of vowels is problematic, so diphthongs and long vowels cannot be recognized due to their similarities in their length feature." Therefore, one should focus on in order to present the discrimination between long vowels and diphthongs, which can be supported by Prinsloo's study (2000) that centers around the acoustic comparison of long vowels and diphthongs of South African English by African speakers. In the study, Prinsloo (2000) asserted that two vowels shown as /e:/ and /o:/ are recognized as diphthongs by learners of English although they are identified as long vowels by phoneticians.

Likewise, Demirezen (2019) made research on Turkish English instructors. In his study, the aim is to figure out the awareness of 30 ELT Master Degree participants about the difference between the long vowels and diphthongs depending on the written questionnaire. As it is stated in the research of Prinsloo (2000), the result of this study also made clear the same issue that is about the difficulty of 30 English foreign language instructors perceiving long vowels rather than the diphthongs included in the written

perception test. From the result of the study, it can be stated that the diphthong /ou/ has been observed to be the most complicated sound for the test takers.

In English phonology, some vowels can be grouped as short or long vowels. Vowels are one of the debatable issues in terms of their categorization. In general, there are two measures used. The first one is related to the sounds of the vowel length during the pronunciation. At that point, the diphthongs should be emphasized to separate them from long vowels. As long vowels and diphthongs are parallel to each other in terms of many aspects, there should be a comparison between them in order to give a proper analysis of the NAE long vowels. For non-native English language teachers, it can be easily said that there is not certain discrimination between long vowels and diphthongs in North American English which brings about some misconceptions in teaching pronunciation. However, the short vowels are said to be easier to identify. In the pronunciation of long vowels, the longer utterance and the tense of the sounds during the production is crucial. In the production of vowels, long vowels are produced through both holding the position of the lips and the tongue steady.

Turkish foreign language teachers perceive diphthongs as long vowels since diphthongs have a different sound structure requiring one syllable that consists of two vowels having an outstanding slide with a soft skip in the production. As a result, long vowels are mostly considered as easy to be produced where the tongue should be steady whereas diphthongs can be created in an upright and smooth way, which makes a great number of TETs intermingle diphthongs with long vowels in English. In his book, Roach (2009) emphasizes another point that is thought to be caused by the situation mentioned about teachers. According to his study, learners are observed not to be successful at the production of diphthongs as much as monophthongs and long vowels, which is one of the problems observed in Turkish learners, too.

Depending on this reason, another study has been carried out about how the North American English long vowels and diphthongs are perceived by English speakers. Gottfried, Miller & Meyer (1993) aimed attention at this subject, in which artificial speech tests are used to present transitional duration rather than changing onset and offset points. In the questionnaire, the American English diphthongs /ɔɪ/, /aɪ/, /aʊ/ are especially given importance in two stages. In addition to the diphthongs, the NAE long vowels are chosen deliberately and presented to experts for stating the names of phonemes in the

diphthongs in the first stage. In the second process, the study is aimed to observe the effective descriptive features of diphthongs that separate them from long vowels. Lastly, Gay (1970) concluded that the distinctive point is the frequency change in terms of differentiation of long vowels from diphthongs (Gottfried, Miller & Meyer, 1993).

Analyzing the North American English long vowels, L2 perception is the one of crucial things that should be highlighted since it is stated as one of the obstacles that not only non-native ELT teachers have experienced but learners also have struggled with the acquisition of long vowels in the second foreign language (Gottfried, Miller & Meyer, 1993). According to many studies about L2 phonology perception, the most fundamental point can be inferred as “experience” that identifies the crucial factor of the comprehension of new sounds in the second language. However, this situation is slightly similar in terms of vowels and sounds in the perception of the target language (Gottfried, Miller & Meyer, 1993).

At that point, one study can be cited that is conducted by Bohn and Flege (1990). In their research, German learners who have previous experience in English are seen to be more successful to comprehend some long vowels more properly than other Germans who are described as less experience in English. Among long and short vowels in North American English (NAE), inexperienced German English learners are discovered to challenge with especially /a:/ and /æ/ vowels as there are no phonemic correlations of those English vowels in the German language. In this respect, experience is given as an effective factor for the perception of those two vowels, but it can be figured out that the experience has no effects on other vowels except for two vowels. In Bohn and Flege’s study (1990), the discrimination of /i:/ and /ɪ/ vowels cannot be diagnosed by learners having practice or learners not having any practice in English although the German language contains parallel phonemics in terms of these two English vowels have phonetic differences.

Another factor associated with North American English long vowels is based on the dissimilarity of long vowels to diphthongs. The paper concentrates vowel dispersion that Peterson (2016) aims to measure in the study. He used a strange method on his participants to get data through Flemming’s (2004) vowel dispersion theory inventory framework. As a measure, a script including an extract from a work named as ‘‘Arthur the Rat’’ is given to participants who are expected to find diphthong vowels by separating from long vowels. As a result, participants seem to have unsuccessful in perceiving long

vowels and diphthongs as well as pronunciation, which is contrary data to all previous studies having two targets in a diphthong that tends to enlarge distance.

Aside from the factor stated above, the other important subject relies on the pronunciation of long vowels in North American English in the production of long vowels. On this basis, there is a study conducted by Demircioğlu (2013) that addresses the problems brought about by native Turkish English learners' pronunciation in the articulation of long vowels and diphthongs in North American English. In the paper, the aim is to show the causes of incorrect production of long vowels and diphthongs by stressing the discrepancy between them. Furthermore, this paper targets to give significant tips for learners to improve their skills in the articulation of the Free Steady State vowels in North American English as well as diphthongs. For this reason, a new technique has been claimed to be invented for English learners by Demircioğlu (2013). Indeed, the technique is associated with the proper production of diphthongs not of long vowels in NAE but it can also be inferred that the articulation of long vowels in NAE is learnt implicitly, which is one of the important parts mentioned in the study.

Putting an emphasis on the articulation of Free Steady State vowels in NAE is the core of this paper, which explicitly affects the acquisition of a second language that has been thought as simple as the mother language. The essential point is directly linked to the speaker's perception and articulation of the sounds of the mother tongue. In other words, if someone learns a foreign language, it can be certainly stated that he/she will confront problems with the sounds especially those that have no phonetic equivalent in the mother tongue. In order to find a solution to this general problem of learners who want to acquire a foreign language, Noll & Collins (2002) targeted to research about this subject by highlighting a list of problems of vowels that native Hindi speakers have experienced. From that point of view, the most difficult sounds that are seemed to be problematic by natives are /e/, /ɜ:/, /ɑ:/.

Lastly, the Speech Learning Method (SLM) should be introduced for the comparison of the North American English diphthongs and Free Steady State Vowels. Up to now, a great deal of studies has been tested to present the efficacy of the SLM and the related hypothesis related. In other words, the purpose of the study aims to show the phonetic categories that will be possible to create new L2 sounds than the similar sounds in the second language. According to the results of this study, which seems to have a parallel

outcome to many other studies like the one suggested by Aoyama, K (2004). It can be assumed that the second language learners challenge with much more perceptual complications in the L2 sounds having equal phonological features with the mother tongue. Besides, Dalton (2002) attempts to analyze the Speech Learning Method theory through the native North American English speakers trying to handle the phonemic obstacles that are brought about in articulation of the German back rounded vowels /u:/, /ʊ/, /o:/, and /ɔ/, which correlate phonetically in their native language despite the fact that the vowel articulation of German and the North American English are dissimilar in specific aspects. For example, the rounding vowels /u/, /ʊ/, /o/, and /ɔ/ in North American English cannot be described as having the distinctive features for being short or long vowels in the NAE.

Any other way, the vowels identified as rounding ones in the German language are produced in the back and front movement of the tongue, which is a differentiating side of front vowels (e.g., /i:/-/y:/). Last but not least, the native speakers of the North American English are seemed to articulate the German monophthongs in the respect of their pure vowel quality despite their stressed positions. On the other hand, a number of the North American English monophthongs together with the long vowels have been tried to be diphthongized by the native German speakers during the English learning process. (e.g., /ɪ/ becomes /i:/, /o/ becomes /oʊ/) (Ladefoged, 2001). Having presented how the vowels and the long vowels in the NAE as well as the vowels of the German language, this chapter concentrates on the general difference between the North American English long vowels and diphthongs in the target language.

Up to now, there have been many articles focusing on North American English long vowels conducted by plenty of researchers and academicians around the world, but there are not enough studies concerning the written perception and the production of NAE by Turkish English instructors in Turkey.

CHAPTER 4

THE ANALYSIS OF ENGLISH AND TURKIS VOWEL SYSTEM

4.1. Turkish Vowel System

Turkish and English come from two different families of languages; therefore, their phonological inventories. Some of the English long vowels are problematic for Turkish learners of English. First things first, while there are three vowel heights (high, mid, and low) in English, Turkish has two (high and low). This case produces recognition problems. In addition, such a long vowel like /ə:/ does not exist in Turkish. The non-existence of English long vowels is problematic for Turkish learners of English.

In contrast to consonants, vowels are defined as pioneering sounds that smoothly generate infinite phonemes by linking vowels without any limitations in a great number of languages. When the Turkish vowel system is taken into consideration, it could be easily figured out that there are eight short vowel sounds composing of /a/, /o/, /u/, /e/, /i/, /y/, /ɯ/, /ø-œ/ (Topbaş, 2007).

Beyond these above-mentioned vowels, the Turkish vowel system is expressed to consist of an inventory system including four front and four back vowels and four rounded and four unrounded and lastly four high and four low ones by Kılıç and Öğüt (2004). In regards to their height, their backness in the tongue movement and the lip position, the Turkish vowels are classified as unrounded or rounded (Csato' & Johanson, 2015).

For a better understanding, a figure is suggested below, which clearly describes the Turkish vowel sounds system. As it is shown in the table, /e/, /ø-œ/, /o/ are categorized into mid vowels while /i/, /y/, /ɯ/, /u/ are grouped in the high vowels and /a/ is expressed a low vowel based on the height of the tongue movement in the oral cavity.

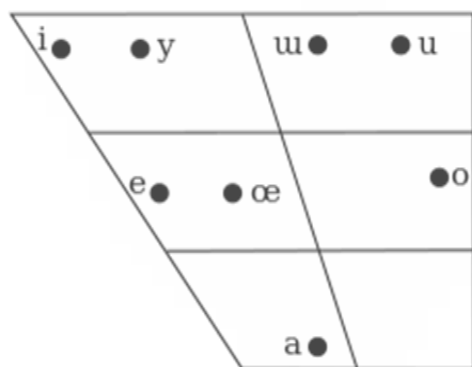


Figure 20. Turkish Vowels chart adopted from Zimmer and Orgun (1999, p.155)

Providing the English definitions of words, some Turkish words are given as examples below:

/a/ is depicted a central, but low and unrounded vowel.

karga (crow), bardak (glass), tarak (comb).

/e/ is defined a mid, front and unrounded vowel.

melek (angel), perde (curtain), nefes (breath)

/i/ is expressed a front, high and unrounded vowel.

çizik (scratch), iyilik (favor), kirli (dirty).

/o/ is stated a mid but back and rounded vowel.

tok (full), boş (empty), koltuk (armchair).

/u/ is represented high, back and rounded vowel.

ucuz (cheap), çubuk (stick), yudum (sip),

/y/ is transcribed a front, high and rounded vowel.

kütük (log), güçlü (strong), bülbül (nightingale)

/ʉ/ is described a high but back and unrounded vowel.

kıymık (splinter), bıyık (moustache), yırtık (torn)

Finally, the last vowel /ø-œ/ is referred as a front but mid and rounded. Originally, the vowel is generated between /o/ and /ø-œ/ in the first syllable of words but rare situation may occur in loan words (Göksel & Celia, 2005).

4.2. A Comparison of American English Long Vowels and Turkish Vowels

Considering the previous chapter about the Turkish vowel sound system, it should be exactly affirmed that the North American vowel system is disparate from the Turkish language relied on vocabularies, syntax and morphology. In general, Turkish words are pronounced in the same as they are written while the words in the English language could not be asserted to have any connections to the orthography of the words (Balpınar, 2006). Owing to the dissimilar writing system, it could be inferred that the interpretation in the articulation of the accurate English sounds is problematic for the ESL learners. Besides, the English vowel sounds and letters are mainly unrelated to one another in the orthographical term whereas it could be easily found out that there is common relevance between Letters and sounds in the Turkish language.

From one study of Varol (2012), it is claimed that the dissimilarities of the vowels in Turkish and English systems of sounds bring about the incorrect pronunciation of the Turkish ESL learners. Despite the inadequacy of some Turkish consonants, the predominant factor centers around the perception and pronunciation of English vowels by native Turkish speakers. At that point, the theory of language should be a prerequisite for the explanation of the contrastive effects of L1 and L2 of learners.

In compliance with the language learning theory, being familiar with both the affinities and differences of the sound systems in the native language and L2 is implied to turn into an advantage or a disadvantage depending on some situations (Brie're, 1966). The research carried out by Brie're (1966) involves the participants of the native English learners of the French, Arabic, and Vietnamese vowel sounds that have no parallelism with the English system of the vowel sounds. In advance of the research, it is believed that the associated vowel sounds could be comprehended better and articulated properly. However, the results of the study demonstrate that the unfamiliar or new sounds that are not found in the English language were pronounced easily. Due to this reason, it could be

precisely deduced that this subject has still been disputable since it is directly connected to the indistinguishable interactions and disparities generating the accurate perception and utterance of the vowel sounds or causing the language learning process more challenging.

Another hypothesis is linked to the resembling of the sound systems of L1 and L2, which paves the way the foreign language learners in the right way (Miller, 1989) by virtue of the acoustic features of the native and target languages could be distinctive. Although there are inequalities in the acoustic features of one's mother tongue and the foreign language in the learning phase, it is challenging for language learners to comprehend the new sounds (Flege, Schirru & KacKay, 2003). This phenomenon is described by Flege (1987) with the theory of the equivalence classification. Compared to the study of Brie're (1966), the research conducted by Flege and Port (1981) has been asserted to concentrate on the simplicity in the utterance of the newly encountered vowel sounds in the L2 acquisition rather than the similar ones in learners' mother tongue.

Table 3 .

Turkish vowel phonemes

	<u>Front</u>		<u>Central</u>		<u>Back</u>	
	Unr.	Rnd.	Unr.	Unr.	Rnd.	
<u>Close</u>	<u>i</u> _ː <u>i</u>	<u>y</u>			<u>u</u>	<u>u</u> , <u>u</u> _ː
<u>Mid</u>	<u>e</u> _ː <u>e</u>	<u>ø</u>				<u>o</u>
<u>Open</u>					<u>a</u> , <u>a</u> _ː	

Retrieved from Zimmer & Orgun (1999, p.156)

Moreover, it could be declared that there are some common vowels between Turkish and North American English but those vowels are recognized to be a dilemma for the Turkish speakers of English due to their closeness to the English diphthongs with the Turkish vowel sound system. There are eight vowel sounds existing in Turkish: /i/, /y/, /u/, /u/, /e/, /ø-œ/, /a/, /o/, which are short vowels. However, /a/, /e/, /i/, /u/ vowels could be considered long especially in non-native words like 'adalet (a-da:-let, justice), badem (ba:-dem, almond) (Wictionary, 2020). Indeed, these are not long vowels because the words given below are not Turkish. They are derived from the Arabic or Persian language.

In this study, Albaşlar (2015) has made a comparison of Turkish and English vowel sound systems through some examples like 'ay' (moon) that is transcribed as /aɪ/ with a diphthong not with a long vowel in contrast to the perception and pronunciation of learners. At that point, it is deduced that the language syllable structure makes a language-specific despite the similarity or just a slight difference between English and Turkish in terms of this example.

Turkish is an orthographic language, which is thought to mislead learners and cause them to think that there are long vowels in Turkish. Instead, two vowels following each other in Turkish, keep their specific features as it can be seen in the words like 'saat (clock), aile (family), inşaat (construction), şiir (poem). When the word 'saat' is taken into consideration, /a/ is followed by the other /a/ but they belong to distinct syllables because this word is composed of two syllables: 'sa-at', which is constructed through an airflow between the syllables. It is neither a diphthong nor a long vowel.

Similar to these abovementioned examples, Geylanioglu (2017, p. 20) defined the distinctive feature of the Turkish vowel system with another word and "vowel plus vowel structure" by giving an example 'şair'. The word 'şa:-ir' is divided into two parts when it is pronounced but it doesn't have the characteristics of /a:/ NAE long vowel. For a sound considered a long vowel, the vowel sound needs to be in the same syllable with its acoustic equivalent.

4.3. Difficulties of the Long Vowels in the North American English

Learning a foreign language has always been up for discussion in the linguistics area as much as phonetics since vowels are seen to lead to some problematic or intricate situations. During the acquisition of L2, the pronunciation can be attributed as the cornerstone of learning the language properly. Thus, vowels (especially long vowels, and other components of vowels like diphthongs) has become incomprehensible for ESL learners because of their confusing and ambiguous features even though the native language of some learners may have resembling patterns.

On account of this purpose, vowels are found out to be the most essential part of a language and long vowels are frequently seemed to bring about much more problems

rather than short vowels. Actually, the long vowels are normally accentuated to some extent (approximately 1½ to double length) than the cardinal vowels in IPA, which is shown with /:/. Besides, the symbol of long vowels could be signified by a macron like ē in the lexicography of the American English. All of these symbols are offered to differentiate long vowels from short ones.

Being similar to the previous article, another paper can be cited to give priority to the comparison of the /oʊ/ diphthong and /ɔ:/ long vowel by Demirezen (2005). The aim of this study is literally to find possible cures for errors along with means of exercises and teaching the improper pronunciation of English sounds and words by the native Turkish EFL teachers, which is believed to have a wrong impression about the articulation of vowel sounds during the learning process of ESL learners. For this purpose, a corpus that is the basis of the paper, formed, and some various types of activities like dialogues, idioms, minimal pairs, tongue twisters, recognition exercises, reading aloud exercises prepared in the accordance with the corpus to provide the probable remedy the /oʊ/ diphthong and its distinctiveness from /ɔ:/ NAE long vowel. Within this plot, learners are attempted to acquire a near native-like accent.

What's more, a parallel article engaging in the perception of the /ɔ:/ long vowel and /oʊ/ diphthong by the Turkish ESL learners is explored by Hişmanoğlu (2007). Owing to the fact that the distinction of both sounds cannot be comprehended, it should be mentioned that it causes a failure in pronunciation. Upon some analysis, it is recognized that the stress on the /ʊ/ vowel at the end of the diphthong is not achieved whereas the /ɔ:/ vowel is given emphasis by the dwelling on it. As a matter of fact, it is wrong and named as a fossilized error, which is very hard to be found a feasible remedy. Thus, the audio articulation method introduced by Demirezen (2003) is adopted. In this sense, a variety of activities are prepared and a number of relevant exercises are provided with some assignments.

A wide range of arguments about the mispronunciation of long vowels and diphthongs are observed to be caused the fossilization, yet the main motivation cannot be exactly determined. In this direction, some assumptions concentrate on the lack of appropriate feedback, which is set forth by Han (2004).

Contrary to what is believed, the inadequacy to perceive the new stimuli is regarded as another ambiguous thing that may be preventable for L2 learning which causes the ESL learners to become disinterested in the progress of the learning in EFL. Furthermore, the impacts of affective filters on the foreign language learners' emotional state should also be ascribed by Han (2004), which impacts the appropriate articulation of long vowels and diphthongs. Even if all factors are not completely discerned as being relevant to one another, it can be concluded that every factor has contributed to fossilization.

Except for the L2 is intervened by the effect of the ESL learners' native languages. During the improvement of the main skills like writing or speaking in the target language, learners are recognized to use their L1, which comes out errors occurring in the EFL learning. Hence, a great deal of dissimilitude in the grammar structures, vocabulary and phonology between L1 and L2 creates mistakes that turn into errors or repeated errors that become fossilization (Bhela, 1999).

Lastly, all articles highlight to show the challenges that have been experienced during the researches of the NAE long vowels and diphthongs as well by ESL learners around the world. When the reasons lying behind the main problems are attempted to be explored, the dissimilar language structures, the inefficacy of the learners' phonetic knowledge and the L1 interference of ESL learners are seen to come to the forefront.

4.4. The Affiliation Between Perception and Production

The paper genuinely depends on the examination of the perception and the production of the long vowels in North American English. This part may be regarded as the core of the chapter because these two concepts are interwoven with each other. In other saying, there is a serious engagement with perception and production in the learning of L2. Notwithstanding, there has been a great deal of disputes about whether perception goes ahead of production or vice versa. Thus, this episode involves lots of researches who have been carried out to indicate the affair between the two mentioned above, which is still argumentative whether perception outperforms production or not.

A lot of studies concerning L2 speech perception could be classified into 2 groups: cross-language perception and categorical perception. These two inquire into how L2 sounds are comprehended by the foreign language learners in the sense of types in phonetics of

the target language, which has been seen in the article about the native North American English speakers' comprehension about German sounds in terms of German phonetics (e.g., Jacewicz, 1999; Kingston, 2003; O'Brien, 2003; Polka, 1995). The assessment part in the categorical perception section is stated to be the essential point for the learners of L2 whether new and successful phonetics groups have been formed or not, which consists of two methods linked to identification and discrimination tasks. Herein, the latter one is thought to be more significant since learners are expected to recognize sounds (Strange, 1995).

Herein, another importance concentrates on the categorical perception of language learning, which is mentioned in the research of Kingston (2003). The paper engages in the native speakers of the NAE about the categorical perception of German vowels owing to the front rounded feature of German vowels such as /œ/, /ʏ/, /ø:/ and /y:/ observed to be comprehended in a hard way by the North American English speakers. Besides, a study is practiced to survey over the English speakers' competency to differentiate the contrasts of /y:/-/u:/ and /ʏ/-/ʊ/ German vowels (Polka, 1995) attempts to investigate the lax contrast /ʏ/-/ʊ/, which is regarded with less than native-like accuracy (86.9%) and the tense /y:/-/u:/ contrast, which is recognized with native-like accuracy (98.6%). Furthermore, the examination is based on the comprehension of /i:/, /y:/, and /u:/ vowels by the native Americans. In the study, participants are divided into 2 groups and half of the participants are people studying German in Germany and another group consists of people who have studied German in the United States. O'Brien (2003) presents the results by highlighting that there is a slight dissimilarity between the perception of vowels /i:/ and /u:/ compared to much closeness of the two American groups about the perception of vowel /y:/. Moreover, a very much alike article by Kingston (2003) can be cited that focuses on the rounded and unrounded vowels and how the /i:/, /ɪ/, /e:/, and /ɛ/ vowels are recognized by the North American English speakers who have not experienced the German language. The goal of the paper is to search for assessing the accuracy of the NAE participants who are noticed to differentiate vowel pairs of having unequal heights that is different from vowels sharing the same feature in tenseness, which are /i:/-/e:/ and /y:/-/ø:/.

All methods, articles or studies that have been discussed up to now deliberately offer to underscore how the perception pioneers a production. Aside from all previous papers, a few types of researches should also be touched upon like the study accomplished by Baker (2002). In reference to this notion mentioned above, Baker investigates the improper articulation of the /æ/ and /e/ vowels in English by the native German participants, which illustrates the reason for the error stemmed from a misconception of the vowel sounds in regards to the distinctiveness of these two English vowels from the L1. A similar study supervised by Gass & Selinker (2001) shows that the L2 learners who experience the perceptual skills about the articulation of the proper production of sounds are successful in the pronunciation of the L2 vowels. By considering this factor that grounds on the necessity of a correct perception on the intention of full production is a significant advantage for L2 learners in the utterance of vowels throughout the production process of learning a language.

In conclusion, it could be inferred that there is a strong interaction between perception and production, which makes these two terms interwoven to one another in spite of the fact that some changes can be noticed in some studies. Due to this reason, a few obstacles are stated to be experienced in separating them from each other, like the relationship of perception and production and some problems revealed from them are tried to be analyzed by underlining the renovation aims, which could be added to the phenomenon that perception outperforms production on the account of repetition activities emerged from the teaching the proper recognition to make the ESL teachers more conscious about the NAE long vowels, learners' receptive skills that are thought to be beneficial.

CHAPTER 5

METHODOLOGY

5.1. The Setting of the Study

The study was carried out with participants who work at various universities during the 2020-2021 academic year in Turkey. In the survey, there are more than 3 universities that include volunteer participants, who are teaching either at private or public ones. Also, the participants in the study work at the preparatory schools or the academic English departments in universities.

A pre-test was administrated to the participants who had no prior teaching from the researcher. By means of the pre-test, a general overview of the participants on the thesis topic was optioned. Thus, teaching and practice materials were also designed with respect to the success of general background of them on the thesis topic.

After the pretest, the teaching material that are given in the appendix were administered to the participants. The teaching of the NAE long vowels took place four-hours' training in different times on online platforms like Microsoft Teams and Zoom.

After a two-weeks break, the post-test was applied to all participants. The conductor of this study is the researchers who is a non-native ESL teacher. The same subjects and practices were taught to all partakers during the sessions. At that point, it should be emphasized that the post-test is definitely the same as the pre-test.

5.2. The Participants in the Research

This study was carried out through 40 non-native Turkish ESL teachers who work different private or public universities Ankara/Turkey. It should be easily understood that all partakers prefer to speak American English. Among the participants, 28 of them were females whereas 12 of them were males.

Table 4.*The gender of the participants*

Gender	F	%
Female	28	70
Male	12	30
Total	40	100

Depending on their departments being graduated from, the academic background of all participants was also provided, which varies from each other: 23 of the partakers graduated from English Language Teaching of the universities, 13 of the participants completed their bachelor degree in English Language and Literature and 3 TETs had a bachelor degree in Applied Linguistics and 1 person graduated from Translations and Interpretations department.

Table 5.*The academic background of the teachers*

	F	%
English Language Teaching	23	57.5
English Language and Literature	13	32.5
Applied Linguistic	3	7.5
Translations and Interpretations	1	2.5
Total	40	100

Table 6.*The years of teaching experience of the teachers in the study*

	F	%
0-4 years experience	3	7.5
5-9 years experience	17	42.5
10-14 years experience	13	32.5
15-19 years experience	3	7.5
20-24 years experience	4	10
Total	40	100

In the research, another reference is given to the years of the teaching experience that differs from 1 year to 21 years.

5.4. Instrument

Throughout the research, there is only one instrument chosen to be used to evaluate the perception of all participants in the study about the North American English long vowels. A demographic information form is given to get information. Then, a written phonetic test is included as the instrument in the study. Besides, the six long vowels of the North American English have been determined as a stimulus during the research while the written test is being prepared.

In accordance with this purpose, some non-native ESL teachers who are stated to prefer American English as a medium of instruction helped to collect data from the participants in the study. The North American long vowels that are attempted to be explored in detail are /i:/, /ɑ:/, /ju:/, /u:/, /ɜ:/, /ɔ:/.

The purpose of this survey was to investigate whether the non-native Turkish ESL teachers could have perceived the written form of the NAE long vowels on paper along with the correct articulation of the long vowel sounds.

5.4.1. The Internal Consistency and Reliability Instrument (KR20)

The aim of this part is to show the KR-20 pre-test and the post-test results, which enables the interpretation of the test reliability based on the mean of the items, the mean difficulty of the items, the index of the mean discrimination and their Alpha values.

KR-20 (Kuder–Richardson Formula 20) is an index of the internal consistency reliability of a measurement instrument, such as a test, questionnaire, or inventory. Although it can be applied to “any test item responses that are dichotomously scored, it is most often used in classical psychometric analysis of psychoeducational tests and, as such, is discussed with this perspective” (Salkind, 2012, p.57).

“Values of KR-20 generally range from 0.0 to 1.0, with higher values representing a more internally consistent instrument” (Salkind, 2012, p.68) According to the table, the KR-20 for both the pre-test and post-test could be stated to indicate the reliability as the measurement of the study.

Table 7.

KR20 Values of the Written Pre-test & Post-test Scores

Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
,587	30	,683	30

By using the KR-20 instrument, the pretest and post-test scores of 40 participants has been analyzed to indicate whether there is an advancement. According to the result, the significance of the pre-test and the post-test will also be compared. With the help of KR-20, the internal consistency and the reliability of the test items in the study has been examined.

5.4.2. The Written Perception Test

In the beginning, a demographic questionnaire was administrated for all participants in order to obtain information about their age, gender as well as their academic backgrounds and teaching experience. The demographic form was prepared as the first step of the survey.

Besides, it has been determined that more questions should be included in the research based on a questionnaire to find out the interest of all participants about the English phonology and pronunciation of the North American long vowels. For this purpose, the written-test was created and outlined as the second step of the research after the demographic and the consent forms. The written-test was composed of words involving the NAE long vowels, which is the second phase of the study followed by the demographic form.

In the written test, there are multiple-choice questions in which /i:/, /ɑ:/, /ju:/, /u:/, /ɜ:/, and /ɔ:/ of the North American long vowels are inserted as options. In the items, 5 equal questions are supplied for each long vowel. Moreover, every word of the written test is prepared in terms of frequency level and daily usage of words. Herein, it could be

definitely stated that many of the words are daily used by the non-native Turkish ESL teachers at universities, which removes the unfamiliarity with the words. Also, it may be considered to have an impact on the validity and the reliability of the research in the study. Besides, the syllable of the words is varied from one to three in the test. In other words, the NAE long vowels can be observed in the initial or middle or final syllable of the words.

Afterward, a corpus was formed out for the selection of written test items of the study. Throughout developing the items in the corpus, it should be mentioned that the frequency, the daily use and the academic usage of all words were examined in detail.

For this reason, it could be stated that there is no distraction about the difficulty, the validity and the reliability of the items in the written test of the study. Each vocabulary items were determined in accordance with their frequencies from coursebooks. The lowest frequency point was stated as 3000 by the researcher who chose all vocabulary item for the six NAE long vowels. Table 7 illustrates some correct answers from the NAE long vowel items in the written test with the corpus frequencies.

Lastly, all the six NAE long vowels included in the corpus of the research were checked in advance via American English Corpus of Cocoa before being used in the written test. (American English Corpus from <http://corpus.byu.edu/coca/>). The followings are the written test vocabulary items.

Table 8.

The Frequency of Some Words from the Corpus

NAE Long Vowels	Words	Corpus Frequency
Vowel /i:/	reason	2.773.689
Vowel /i:/	scheme	551.311
Vowel /u:/	food	107.728
Vowel /u:/	include	103.650
Vowel /ju:/	tube	503.275
Vowel /ju:/	value	3.805.921
Vowel /a:/	garlic	248.561
Vowel /a:/	grandfather	126.225
Vowel /ɜ:/	occurred	462.958
Vowel /ɜ:/	expert	697.813
Vowel /ɔ:/	horse	497.668
Vowel /ɔ:/	small	5.602.730

Before conducting the NAE long vowel written perception test, the views of two experts and from English Applied Linguistics and one professor from English Language Teaching Departments working at different universities took place as a committee. Depending on the feedback taken from them, the test items for each NAE long vowels were edited and selected.

5.5. The Written Phonetic Training

In parallel with the purpose of the subject matter of this study, a written phonetic training session in terms of phonemic transcription on the six NAE long vowels was administered to the participants after the application of the pre-test period. The teaching process was adopted with the use of a lesson named “The Teaching of the Pronunciation of the six NAE long vowels via Distance Education.” The lessons were given by the researcher herself, which lasted 40 minutes in the length of four-hour lessons. This special phonetic training session was arranged on the basis of the Audio Articulation Method (AAM) and phonemic transcription techniques.

The Audio articulation method (AAM) was introduced by Demirezen (2010) to obviate the fossilized errors and improve new solutions to recover those error with different activities and exercises. For the purpose of rehabilitating the mistakes in pronunciation, it has been used by a lot of linguistics as a teaching method, which is described as a special technique to remedy the defects in phonology. Based on Audio articulation method (AAM), a range of exercises and activities were applied to participants starting with a piece of general information consisting of a corpus of words almost between 50-100 phonemes followed by a diagnostic test, tongue twisters, minimal pairs, contextual clues.

After the administration of the pre-test, there was a two-week break before the training session, which was followed by our 40-minutes lessons applied to all participants via Zoom and Microsoft meetings. All partakers had already been to be familiar with the virtual classes. Thus, there was no uneasiness during the four-subsequent lessons. The researcher first began with phonetic diagram visuals that are related to each NAE long vowel sounds. Then, the corpus was provided that was followed by minimal pairs as it can be seen in the examples below:

Table 9.

The List of Some Minimal Pairs Prepared for the Treatment Session

Many **SHORTS/SHIRTS** were sold in the shop.
Did you **FEEL/FILL** the box?
I have a **CAT/COT** in my room.

Subsequently, a diagnostic test was implemented on the participants to take their attention on the mispronounced phonemes. It must be noted that in the following phonological transcriptions of the minimal pairs, /ɹ/ phoneme stands for the retroflex (back-bounded)-rhotic /r/ phoneme in in NAE.

Table 10.

The List of NAE Long Vowel sounds and Words Prepared for the Treatment Session

/ɑ:/ vowel sound	/æ/ vowel sound
mop /mɑ:p/ → /ɑ:/	map /mæp/ → /æ/
pocket /'pɑ:kɪt/ → /ɑ:/	packet /'pækɪt/ → /æ/
ox /ɑ:ks/ → /ɑ:/	axe /æks/ → /æ/

/u:/ vowel sound	/ʊ/ vowel sound
fool /fu:l/ → /u:/	full /fʊl/ → /ʊ/
pool /pu:l/ → /u:/	pull /pʊl/ → /ʊ/
suit /su:t/ → /u:/	soot /sʊt/ → /ʊ/

/i:/ vowel sound	/ɪ/ vowel sound
beat /bi:t/ → /i:/	bit /bɪt/ → /ɪ/
deep /di:p/ → /i:/	dip /dɪp/ → /ɪ/
feel /fi:l/ → /i:/	fill /fɪl/ → /ɪ/

/ɔ:/ vowel sound	/ɒ/ vowel sound
store /stɔ:ɹ/ → /ɔ:/	star /stɒɹ/ → /ɒ/
court /kɔ:ɹt/ → /ɔ:/	cart /kɒɹt/ → /ɒ/
port /pɔ:ɹt/ → /ɔ:/	part /pɒɹt/ → /ɒ/

/ɜ:/ vowel sound	/ɔ/ vowel sound
burn /bɜ:ɹn/ → /ɜ:/	born /bɔɹn/ → /ɔ/
fur /fɜ:ɹ/ → /ɜ:/	four /fɔɹ/ → /ɔ/
shirt /tʃɜ:ɹt/ → /ɜ:/	short /ʃɔɹt/ → /ɔ/

/ju:/ vowel sound
beautiful /'bjʊ:təfəl/
continue /kən'tɪnju:/
interview /'ɪntəʋju:/

Afterwards, idioms or well-known words including the relevant NAE long vowel phonemes were presented to make 40 partakers read loudly to utter the words correctly by themselves. In all NAE long vowel sounds, tongue twisters were implemented that were supported with minimal pairs involving two similar words expected to be chosen by participants. A couple of sample tongue twisters are;

Feel

A goose

Feel the breeze

A cute goose

Feel the deep breeze

A cute huge goose

Feel the deep breeze on the peak

A cute huge goose of Judy

Door

The garden

Four doors

The dark garden

Four doors on the floor

The dark garden in a farm

*Four doors on the floor in the store
farm*

The dark garden in a starry

The skirt

Beautiful

The fur skirt

Beautiful university

The fur skirt of the girl

Beautiful university view

*The fur skirt of the girl in the church
in Cuba*

Beautiful university view

Before the assignment, the contextual clue parts including words that contain NAE long vowel sounds were supplied from same or similar words illustrated in each vowel corpus in order to make 40 Turkish EFL university participants to revise and internalize the NAE

long vowel phonemes properly. There is an example extracted from the training session such as:

“WASH the WALLET with WATER.”

“The GIRL has a PEARL PURSE.”

At the end of the teaching session, a short story based on the finding the related long vowel sound was applied to the participants as an assignment. The story about /a:/ the NAE long vowel is provided as a sample below:

“One day, Fay and Jane were at the garden in the dark. They saw a strange car parking their garage. Fay started to run to the path of the yard and called his father. His father wanted Fay and Jane to calm down and said “It is your mom’s new car”.

Upon preparing the training session, the most important part is to write the phonemic transcriptions of each NAE long vowel sounds. For this purpose, Longman and Cambridge dictionaries were made use of. All NAE long vowel phonemes were written manually since some of them have no symbols in their transcription online. Also, the American [ɹ] symbol for “r” sound was coded in the transcriptions of long vowels with the help of dictionaries.

By giving an emphasis to the research, it can be pointed out that the procedure is seen to be applicable with the help of the Audio articulation method (AAM). Therefore, the training sessions of the study are arranged in accordance with the method but it can be stated that the Written Phonetic Training session was employed the Audio Articulation Method (AAM).

As a result, the repetition is the fundamental point for the emphasis the subject of the study in all activities, which was followed by a short story designed as an assignment was implemented for the sake of the subject of the research and to enrich the functions of all exercises prepared in terms of the objective of the NAE long vowels training.

5.6. Data Collection Procedure

The research that has been undertaken in this study is carried out through pre-test and post-test, which are defined as experimental testing designs. Both pre-test and post-test

have been prepared to obtain data from the partakers. The aim of the designs of the pre-test and post-test is seemed to practice for the research in behaviors. This process is based on presenting the difference between measuring data or groups taken from the experimental treatments (Dimitrov and Rumrill, 2003).

In the table given below, the procedure and stages are presented step by step. Below the table, all steps are expressed.

Table 11.

The procedure of collecting data

STAGES	INSTRUMENTS	HOW TO APPLY
STAGE 1.1.	Consent form and demographic information form	Hand out them
STAGE 1.2.	Written test	25–questions written multiple choice test
STAGE 1.3.	Assessment-evaluation of the inputs	SPSS 23 (Statistical Package for the Social Sciences)
STAGE 1.4	A practice and teaching for 4 hours	Diagnostic test, exercises, minimal pairs, passages, tongue twisters, contextual clues etc.
STAGE 1.5.	2 weeks break to prevent interference	-
STAGE 2.1.(Post-test)	The same written test	25–questions written multiple choice test
STAGE 2.2.	An overall assessment and evaluation of the inputs	SPSS 23 (Statistical Package for the Social Sciences)

The testing design can be defined as triangular-action testing that involves 1 instrument. Also, it is composed of two- stages of design: Pre-test and Post-test, which is named in a subtitle as the written test.

Initially, partakers were applied to a consent form. Beforehand the written test, the objective of the research was planned to be practiced. The consent form enabled a withdrawal for the participants who were not volunteers to take part in the survey. Owing

to this condition, all testees in the study were expected to sign the form to participate in the study. Besides, the participants were informed to ask their questions about this study of the written phonetic perception of the NAE long vowels. After the procedure was described in detail and every question was answered one by one. Secondly, the demographic information form was given as handouts or sent online.

In order to get essentials for partakers' ages, their educational background and their phonology interest, several personal questions were prepared to be asked. Ultimately, the written test was implemented that defined as the first stage of the research. On the whole, 30 multiple choice questions are prepared in which 5 options are provided. There is only one word containing the accurate long vowel in options. Almost between 15 or 20 minutes, the written test was seen to be completed.

Having finished the pre-test, a training session was put into action. The training session can be defined as 4 hours teaching sessions that were carried out during different times via the Internet. The first stage in the study is the pre-test. After the result obtained from the pre-tests, the teaching sessions were developed in terms of the participants' answers. All exercises and the activities presented throughout the sessions of the teaching were planned according to the pre-test. In the sessions, there were broad explanations about the long vowels of North American English along with some phonemic information about diphthongs. Also, there was a corpus of words composed of the six NAE long vowels, some minimal pairs and tongue twisters as well as a variety of exercises, passages etc.

The second stage of the study was connected to the implementation of the instruments in the post-test process, which included the same items used in the pre-test period. In other saying, the instrument provided in the pre-test was applied for the second time to get a comparison about the outcomes between the two tests. The procedure adopted both in the pre-test and the post-test was absolutely the same, which was only based on the written test. Eventually, all the results of the tests and inputs were evaluated and assessed in SPSS 23 that is a statistics program concerning numerical and quantitative items. Moreover, the input of the study was processed and later research questions were formed out in terms of the outcomes obtained from the statistics.

5.7. Data Analysis

To analyze the data in line with the proposed research questions both descriptive and inferential statistics were utilized. To that end, IBM Statistical Package for the Social Sciences (SPSS) version 23 was used.

In the first question, the readiness of the Turkish ESL university teachers about the written phonetics of the NAE long vowels is analyzed. For this reason, the first research question sought to unearth the overall readiness levels of Turkish EFL university teachers about the written phonetics of the NAE long vowels. To that end, measures of central tendency (mean) and dispersion (standard deviation) were calculated. “For a continuous variable, it is easier to use Descriptive statistics since it provides the basic ‘summary’ statistics such as mean, median and standard deviation especially for such a multiple response test” (Pallant, 2016, p. 45).

The second research question is based on the rate of success in the written phonetics of the NAE long vowels in the post-test process. As a response, a similar descriptive analysis was applied to determine the overall rate of success of the participants in the written phonetics of the NAE long vowels in the post-test.

Another question is about the most problematic NAE long vowel by the Turkish EFL university teachers in the pre-test process. In the assessment of the third research questions, the descriptive statistics analysis was administered to each NAE long vowel sounds for getting students’ success in written phonetics of the NAE long vowels in the pre-test and post-test. On this purpose, a table is suggested with the pretest scores of the participants for six long vowels of North American English.

The fourth question is related to the NAE vowels that are still seemed to be problematic in the post-test stage of the research. The answer to this question is in parallel with the abovementioned one. Again, the descriptive statistics analysis was used for the data analysis. Herein, the protest results of the Turkish ESL participants are analyzed via Descriptive statistics by supplying mean, standard deviation and percentages of the six NAE long vowels.

Lastly, in the fifth research question, a paired samples t-test was utilized to see if there were any differences between the pre-test and post-test scores of the Turkish ESL university teachers after the treatment. “A paired-samples t-test (also referred to as

repeated measures) is applied when there is only one group of people (or companies, or machines etc.) and the collected data is based on two different occasions or under two different conditions. Pre-test/post-test experimental designs are an example of the type of situation where this technique is appropriate” (Pallant, 2016, p. 155). Through the paired-samples T-test, the difference between the pre-test and the post-test scores are tried to be analyzed after the training session. To clarify the results, a table is provided and the mean, median and standard deviation, probability value and lower bound and upper bound are illustrated in the table.



CHAPTER 6

FINDINGS

6.1. Research Question1: What is the readiness level of the Turkish ESL instructors about the written phonetics of the NAE long vowels?

The purpose of this section is to demonstrate the knowledge of the Turkish EFL university teachers about the NAE long vowels before the teaching training session.

Table 12.

The Descriptive Statistics of the Pre-test

Descriptive Statistics				
	N	Mean	Std. Deviation	Percentage
Pre-test	40	21,950	5,782	%55

As it is presented in Table 10, the pre-test was applied to all participants to figure out their written phonetic perception about the six long vowel sounds of NAE. The data were analyzed using both descriptive and inferential statistics. The first research question sought to unearth the overall readiness levels of Turkish EFL university teachers about the written phonetics of the NAE long vowels. To that end, measures of central tendency (mean) and dispersion (standard deviation) were calculated to understand the variability of scores for the pre-test via this table. The following are the results of this analysis; N = 40, M=21.95, SD=5.78 with the percentage of 55%.

6.2. Research Question2: What is the rate success in the written phonetics of the NAE long vowels in the post-test process?

This section targets to illustrate the participants' improvement about the written phonetic transcription of the NAE long vowels after the teaching training session.

Table 13.*The Descriptive Statistics of the Post-test*

Descriptive Statistics				
	N	Mean	Std. Deviation	Percentage
Post-test	40	23,500	5,382	%58,75

In regard to the post-test results, it could be emphasized that the NAE long vowels perception of the participants has been improved compared to the pre-test results. For the second research question, a similar descriptive analysis was carried out to determine the overall rate of success of the participants in the written phonetics of the NAE long vowels in the post-test. The analysis of the post-test is; N =40, M=23.5, SD=5.38. Unlike the pre-test score, the success rate is 58,75% and higher than the pre-test score, which explains that all partakers have better recognition of the written phonetics of the six long vowels in the North American English long rather than the pre-test period directly related to their readiness.

6.3. Research Question3: Which long vowels in the NAE are problematic by the Turkish EFL instructors in the pre-test process?

Throughout this research, there is only one test item applied, which is assessed in the form of pre-test and post-test separately. Since the same test having one function has been implemented, the sequence in the level of the test difficulty is not observed in spite of the different results seen in the tests. In the third question, the descriptive statistics for the data analysis were used to assess teachers' success in written phonetics of the NAE long vowels in the pre-test.

Table 14.*The scores of the written pre-test*

NAE long vowels	N	Mean (5)	Std.Deviation	Percentage
/i:/	40	5	1,839	%100
/ju:/	40	4,50	1,948	%90
/ɜ:/	40	4,07	1,542	%81
/ɔ:/	40	3,57	2,086	%71
/u:/	40	3,27	2,364	%65
/a:/	40	1,52	0,715	%30

After the analysis of the results, the order of the problematic NAE long vowels arrayed from the hardest one to the easiest one is /i:/, /ju:/, /ɜ:/, /ɔ:/, /u:/, /a:/. Herein, the /a:/ long NAE vowel (M=1.52, SD=0.71) in the written pre-test confirms this idea with its mean 1.52 and 30% the success rate to be the most difficult one for non-native Turkish English teachers in Turkey whereas /i:/ NAE long vowel sound with 100% the success rate. (M=5, SD=1.83). The results of the other NAE long vowels are arrayed as /ju:/ with its rate 90% (M=4.5, SD=1.94), /ɜ:/ is 80% (M=4.07, SD=1.54), /ɔ:/ is 71% (M=3.57, SD=2.08), /u:/ is 65% (M=3.27, SD=2.36).

6.4. Research Question4: Which long vowels in the NAE are still seemed to be problematic in the post-test stage of the research?

After the training session with the participants longing two and half hours, the overall scores for each NAE long vowels have raised in different scores and rates in the post-test results. The success order from the highest to the lowest one is seen to change slightly in contrast to the results in the pre-test, which can be given as follows: /i:/, /ju:/, /ɜ:/, /u:/, /ɔ:/, /a:/ and as it is seen as the most difficult and the easiest NAE long vowels have remained the same. In the fourth research question, descriptive statistics were used to assess students' success in written phonetics of the NAE long vowels in the post-test.

Table 15.

The scores of the written post-test

NAE long vowels	N	Mean (5)	Std.Deviation	Percentage
/i:/	40	4,72	0,905	%94,4
/ju:/	40	4,45	2,012	%89
/ɜ:/	40	4,30	1,324	%86
/u:/	40	3,67	2,280	%73
/ɔ:/	40	3,47	1,240	%69
/a:/	40	2,87	0,991	%57

According to the table, /a:/ is still the lowest one with its values (M=2.87, SD=,99). Compared to the pre-test results, the post-test score is different. The pre-test score of the /a:/ long vowel has been seen to be improved from 30% to 57% (M=1.52, SD=,71) when

the post-test score is taken into consideration (M=2.87, SD=0.99). Despite this situation, it could be easily interpreted that 40 participants were observed to get the lowest score in this NAE long vowel phoneme after the training session. The sequence of the other NAE long vowels results from the highest to the lowest are /i:/ (M=4.72, SD=0.99) with the success rate 94,4%, /ju:/ is 89% (M=4.45, SD=2.01), /ɜ:/ is 86 % (M=4.30, SD=1.32), /u:/ is 73% (M=3.67, SD=2.28), /ɔ:/ is 69% (M=3.47, SD=1.24).

6.5. Research Question 5: Is there a significant difference between the results of pre-test and post-test for the Turkish ESL university teachers?

In the study, there is only one test applied to analyze about the NAE long vowel perception of all participants in regards to the written items. For the fifth research question, a paired samples t-test was utilized to see if there were any differences between the pre-test and post-test scores of the students after the treatment.

Table 16.

Paired-Samples T-test

Paired Samples Statistics					
		N	Mean (30)	Std. Deviation	Percentage
Pair 1	Pre-test	40	21,95	5,782	%55
	Post-test	40	23,50	5,382	%58,75

In 16, it could be easily found out that the scores for the mean are different from one another depending on the evaluation of the pre-test and post-test results. The only test that is implemented to participants is the written test consisting of 30 question items. According to the table, the analysis of the pre-test is N = 40, M=25.6, SD=9.83 with the rate while the post-test results are N=40, M=29.8 SD=7.03. From that point, it could be figured out that there is a statistical difference between the two tests.

Herein, the key details that need to be mentioned are the name of the test, “the purpose of the test, the t-value, the degrees of freedom (df), the probability value, and the means and standard deviations for the pre-test and the post-test of participants.” (Pallant, 2016, p. 157). The results of the analysis conducted above could be presented as follows:

Table 17.*Paired-Samples T-test (2)*

Paired Samples Test								
	Mean	Std. Dev.	Std.Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence				
				Interval of the				
				Lower	Upper			
Pair 1 Pre-test								
Post test	-1,550	5,826	,921	- 3,413	,313	-1,683	39	,100

The paired-samples t-test was conducted to evaluate the NAE written phonetic perception of the Turkish EFL instructors and there is not a statistically significant between the values in the paired samples test. ($M = -1.55$, $SD = 5.826$), $t(39) = -1.683$, $p < .001$ (two-tailed)). The average increase in the written phonetic test has been 1.550 and the values have a 95% confidence interval of the difference between the values 3.413 and 0.313 calculated ETA squared statistics is (.67) as indicated a great impact.

CHAPTER 7

DISCUSSION AND CONCLUSION

7.1. An Evaluation of the Chapter

This chapter is the final part of the study. All sections are summarized. Also, some topics will be reviewed specifically including the implications of the study, suggestions for further studies, pedagogical implications and lastly the restraints of the study. Finally, the section will cover up the evaluation of this conclusion chapter.

7.2. The Summary of the Study

In the English Language Teaching field, pronunciation has always been a controversial topic for years since the major function of languages is to enable the exchanging of ideas between people. Depending on this reason, the communication should be properly facilitated in terms of the accurate articulation of distinctive consonants, vowels and sounds of a language.

The importance of pronunciation as the primary means of communication comes into view when learners feel the necessity for effective communication that is considered the basic focus of learning a language proposed by Yousif and Ameen (2018). For this reason, the intelligibility of the communication should be provided through the proper perception and the accurate articulation of the particular sounds in a language owing to the mutual relation of perception and production process of the target language. Herein, vowels are emphasized as having challenging and tricky aspects to be recognized and distinguished in contrast to consonants, which are stable in the speech rhythm (McCully, 2009). Relying on this purpose, this research examines to what level North American English long vowels are perceived in vocabulary items by Turkish EFL instructors.

In order to figure out the written phonetic perception of the NAE long vowels by participants, a written test was applied as the only instrument of the research. Besides, the data was collected with the help of the quantitative and qualitative research methods, which include the written perception test about the NAE long vowels and a demographic

information form. Thanks to the research questions mentioned in the previous chapters, the instrument and the research method of the study were formed out.

In this research, the total number of the participants is 40 and all of them are Turkish ESL teachers who work at the preparatory departments of different public or private universities in Ankara. At that point, it could be highlighted that 40 Turkish university teachers willingly took part in the research which was supported with the consent form handed out with the test in the pre-test process.

The research in this paper was carried out and completed in 4 weeks during the fall terms of the 2020-2021 academic years. After the research questions were developed, the written phonetic test involving the NAE long vowels was conducted as the only instrument of the study that had been approved and confirmed by 3 lecturers from different universities. Also, the demographic information form was given to all participants with the consent form. The written phonetic test that is the instrument of the study was multiple-choice tests including 180 words. Before creating the vocabulary for the corpus including North American English long vowels, a website for the word frequency named “cocoa” (<https://www.wordfrequency.info>) and some academic books written about the English language phonology were opted for to make participants familiarize with the stimulus with the words that were chosen among the most frequently used ones in the English language.

In the process of the data collection, a statistic package program ‘SPSS 23’ version was used to analyze the written pre-test and post-test results. After two stages of the NAE written phonetic test were completed, all numerical data was saved based on various analyses like frequency, paired-samples statistics and tests. Throughout this study, there was only one test implemented for data collection. The first and the only test that was applied to 40 participants was the written phonetic test. After the evaluation of the results, it could be mentioned that the success score has been raised compared to the mean and standard deviation of the pre-test and the post-test results. From this point, the results of the post-test indicate the efficacy of the teaching training centering around the correct articulation of the NAE long vowel sounds.

Furthermore, there is a meaningful and significant difference between the pre-test and the post-test stages. As it has been emphasized in the data collection chapter, the most problematic NAE long vowel is /a:/ that has also been approved with the results of both

the pre-test and the post-test. On the other hand, the NAE long vowels about which the participants have the most correct answers is /i:/ when the scores at the two stages of the written phonetic test are taken into consideration.

Despite the rise from the first to the second stage of the written phonetic test about the NAE long vowels, there are no orthographic similarities between Turkish and English languages in the vowel sound aspect, which could be claimed as a reason to explain the participants' difficulty in perceiving long vowels correctly on the written phonetic background. Another point that has been supposed to cause the challenge to the partakers of the study is thought to be diphthongs. Since some English learners have been observed to struggle with distinguishing the NAE long vowels from diphthongs.

Apart from these two reasons, the primary factor could be stated as the L1 interference on a foreign language in terms of the pre-test and the post-test results. During the learning process, learners construct the new language on their mother tongue due to the phonetics and the linguistics structures of L1. In other words, the Turkish ESL university teachers have seemed to recognize and perceive the written phonetics of the NAE long vowels easily, which is directly connected to the similarity of some vowel sounds in Turkish. However, it is difficult to perceive and articulate the vowel phonemes not having any familiarity with the mother tongue of the Turkish EFL teachers.

The dissimilarity between L1 and L2 is assumed to bring about interlanguage, and it is these dissimilarities that turns into fossilization. Although all participants are Turkish ESL university teachers, some of them do not have any knowledge about the NAE long vowels or describe these long vowel sounds as diphthongs. Therefore, the mispronunciation of the NAE long vowels is seen to occur since some of the partakers just ignore their errors. After getting meaningful input and necessary feedback about the long vowels of North American English, these participants become aware of their error and feel that they are well-informed about the NAE long vowels especially in their written phonetic forms. Thanks to the NAE phonetic teaching training after the pre-test process, the non-native like communication causing an unintelligible conversation is tried to be solved.

Lastly, it could be certainly pointed out that the NAE long vowels are always considered as diphthongs due to their length in the pre-test process of the research. Besides, those long vowels are also claimed to perceive and articulate more difficulty compared to the

English consonant sounds by some participants before taking the phonetic teaching training about the long vowel sounds in North American English.

7.3. Discussion of Findings

7.3.1. Discussion Regarding the readiness of the participants

For the written phonetic perception of Turkish EFL instructors in the pre-test process, the results of the pre-test data are evaluated in Descriptive statistics analysis. According to the results, the mean value has been identified as 21.95 in the pre-test. The standard deviation has been found 5.78. Besides, the pre-test percentage of the correct answers for the NAE long vowels was provided and it is 55%.

In this research, the participants are all non-native Turkish ESL instructors working at the preparatory departments of different universities. The number of the Turkish EFL university teachers taking part in the research is 40. Among all, 23 participants are from the English Language Teaching undergraduate department, 13 partakers have the English Language Literature bachelor's degree, 3 people are Applied Linguistics university graduate and lastly, 1 person is from the department of translation and interpretation in the study. When the abovementioned information about 40 participants was taken into consideration, it could be asserted that the pre-test percentage for the accurate answers about the six long vowels in North American English could be described as a medium since the percentage is 55% more than 50%. However, it could be stated as just an assumption because there is no score scale supplied to the assessment of the results for this research.

7.3.2. Discussion Regarding the rate of success in the post-test process

As it has just been emphasized above, Descriptive statistics is administered to the results of the post-test. With the table in the result chapter, the percentage of the post-test is provided as 58.75%, which underlines the success of the 40 Turkish ESL university test takers at this stage of the research. Herein, it should be understood that the participants are successful in the discrimination of long vowels in the NAE during the post-test in contrast to the pre-test process.

What lying behind this change is related to many various reasons based on orthography, a number of misunderstood instructions, participants' individual differences, the phonological knowledge as well as their pedagogical experience. Furthermore, the L1 interference of partakers in foreign languages could also be presented as one of the most fundamental causes of some Turkish EFL instructors' misperceiving the six long vowels in the NAE because there is a lack of long vowel sounds in the Turkish language.

The Turkish language generally consists of at least two vowel sounds in the written form, which leads learners to perceive a word including two vowels in phonetic transcription as correct. When it comes to the English vowel sounds system, learners are seemed to have recognized a word involving two vowels side by side as a diphthong. However, it is not the case at times.

As a consequence, it could be implied that Turkish ESL participants out of 40 in the research are not successful in the pre-test period, which has changed after the training session. The post-test results are higher than the pre-test results thanks to the training session providing the necessary phonetic transcription for the NAE long vowels.

7.3.3. Discussion Regarding the problematic NAE long vowel in the pre-test process

After the analysis of the results, the order of the problematic NAE long vowels arrayed from the hardest one to the easiest one is /i:/, /ju:/, /ɜ:/, /ɔ:/, /u:/, /a:/ with the help of Descriptive statistics analysis. Herein, the /a:/ long NAE vowel scores in the written pre-test confirms this idea with the mean 1.52 and the success rate as 30% to be the most difficult one for non-native Turkish English teachers in Turkey.

Although the /a:/ vowel sound seems to be the easiest one compared to the others, it could be figured out that a number of Turkish participants have problems in the phonetic transcription of this vowel because of the length in the articulation of the vowel sound. In addition, there is not any equivalence of the vowel in Turkish because there are not any long vowels in the Turkish language sound system.

Along with the first problematic vowel, the second most problematic NAE long vowel /u:/ with the rate of 65% should be mentioned. This high-rounded vowel seems to be difficult in terms of utterance. In fact, there is a Turkish vowel /ü/ that could be

considered to correspond to the NAE long vowel /u:/ as well as being the easiest one for the Turkish participants but they are not successful in the pronunciation of the vowel in the pre-test. At that point, it should be proposed that there is not an obvious transition between these two vowels even though there is a familiarity of two vowels based on having frontless and round features. This similarity causes learners to experience difficulty in distinguishing the slight transition between these abovementioned vowels.

The third most difficult NAE vowel sound for the non-native Turkish EFL teachers is /ɔ:/ in the results of the written pre-test. The mean score for this vowel is 3.57 and the percentage is %71. As it is figured out in the table, the success level for the NAE /ɔ:/ long vowel sound is expressed as the third problematic one for the Turkish ESL participants among the overall six long vowel sounds in North American English. Despite having an acoustic similarity to a vowel /ö/ included in the Turkish language system, this NAE long vowel sound /ɔ:/ is not easily perceived by the partakers in the pre-test process of the research.

Among these NAE six long vowel sounds, the fourth challenging one is /ɜ:/ when its mean with 4.07 value and the percentage is %81. Unlike the former long vowel mentioned above, the participants of the research are noticed to perceive the /ɜ:/ long vowel sound more easily. When the vowel is compared to the Turkish vowels, it could be asserted that the NAE long vowel /ɜ:/ is dissimilar in the phonetic transcription but it has more vocal similar features with Turkish sound /ö/ rather than the /ɔ:/ NAE long vowel sound, which underlines the reason for the success of this English vowel sound.

Before the highest scored long vowel in North American English, the fifth most difficult sound is /ju:/ with its mean value of 4.50 and its percentage of 90%. When the acoustic feature of the vowel is taken into account, there is a correspondence to the Turkish vowel /ü/, which has also been mentioned above in the phonetic transcription analysis of another NAE long vowel /u:/. Like the success level of the former vowel, the written pre-test results of the /ju:/ long vowel is not described as the most successful.

Lastly, the NAE long vowel that the participants got the highest score is /i:/. At that point, it could be reported that participants have been familiar with the /i:/ long vowel sound depending on its vocal similarity to the English diphthong /aɪ/ as well as the acoustic

resemblance in the Turkish sound having the phonetic transcription of /aj/. In addition, the /i:/ vowel which is a front high unrounded vowel, is audibly heard in such words as millî /mîlli:/ (national), sinem /si:nem/ (a proper name), didem /di:dem/ (a proper name), and nimet /ni:met/ (blessing).

Related to this vocalic familiar aspect, the partakers have easiness to perceive the NAE long vowel /i:/ with its percentage 100% correctly in the research. Indeed, there is a certain transition of these NAE long vowels between English and Turkish languages, which is explained by Odlin (1989). According to his point of view, the transfer is the effect that has appeared owing to the similarities and dissimilarities of the target language and any other languages that have already been acquired (Odlin 1989). When Odlin's explanation is adapted to this study, it could be found out that there is a positive transfer of the Turkish language to the English language since the participants are recognized to be successful by getting the highest score in the /i:/ NAE long vowel.

7.3.4. Discussion Regarding the most difficult long vowel sound of the NAE in the post-test stage

The highest scored long vowel in North American English is also the same, which is interpreted as the well perceived one in the pre-test results. At that point, the analysis made through Descriptive statistics shows that the participants get used to the long vowels in the NAE after the two-hour training, which enables them to distinguish the vowel sounds from others in vocabulary items owing to some orthographic reasons that are significant on the perception of the /i:/ vowel sound.

When the /i:/ is formed, it is generally perceived as a short vowel /ɪ/ by learners of the English language, which could be seen in the pronunciation of words like “tree, weekend, peach, three”. Therefore, orthography plays a crucial role in giving essential points and hints about the sound.

Having fundamental knowledge about these clues related to all NAE long vowels, the partakers of the research are observed to be determined to the correct option in the multiple-choice test. As a result, the post-test scores for other North American English long vowels are higher, which is the same as the pre-test results except for the /a:/ long

vowel showing how the Turkish ESL instructors are successful at the perception of the long vowels in the NAE.

7.3.5. Discussion Regarding difference between the results of pre-test and post-test

As it has been mentioned in the table at the previous chapter, a paired samples t-test is applied for defining the difference between the pre-test and the post-test results of this study. The pre-test success rate is lower than the post-test with 55% which means that the post-test scores of the participants are closer to each other compared to the pre-test results. However, the percentage of the post-test is 58,75% that expresses the close relations in the participants' scores compared to the pre-test results. Therefore, it can be certainly understood that the reliability of the study is higher in the post-test process than in the pre-test period.

Besides, the mean difference that has been resulted from both the pre-test and the post-test scores is an important point to be analyzed in this research. As it is shown in the table above, the mean difference is -4,20 which includes the value of the pre-test that is 25, 6 and 29, 8 the value in the post-test. Besides, the standard deviation is 3, 367 that expresses the standard deviation of different scores for all 40 partakers in the paired samples test table. The standard error mean of the test is 0, 61 and the significance value is less than 0, 05, which is described as a small number that is not more or equal but less than 0, 05 value.

In consequence, it can be asserted that there is a significant difference between the results of the pre-test and post-test, which has been supported by enough evidence as much the explanations in accordance with the table. Having relied on this reason, it could be stated that the null hypothesis is also rejected by claiming the idea that there is not a significant difference when the results of two tests are regarded.

7.4. Implications of the Study

This study was carried out with the Turkish EFL teachers working at preparatory departments of different public or private universities in Ankara. From that point, it could be concluded that the results of the research are just connected to the Turkish ESL

university teachers, but the scope could be extended to high and primary schools as well as different departments at universities.

In the thesis, the researcher conducts the study with 40 volunteer participants working at different universities, which underlines enough quantity of the scientific study. In order to raise the reliability and validity of the research, the number of participants could be increased. Moreover, the number of the instruments could be two or three but it should be clearly stated that it would have been more difficult to deal with the whole process especially in terms of time constrain. Therefore, there was one instrument applied during the data collection, which is the written phonetic test of the NAE long vowels. The tests could be diversified more as auditory and production tests concerning the same subject. A semi-formal interview or a short survey for the participants' points of view would be attached at the end of the study.

For the result chapter of the paper, the correlation between the long vowels of the North American English and participants' undergraduate degree was not asserted since there was no confirmed score scale for the Turkish ESL university teachers' written phonetic knowledge about the NAE long vowels. Also, the meaningful relationship between the ages of participants and the written perception of the long vowels in NAE was not observed in the study. When all these are taken into account, it should be certainly figured out that an in-depth study has been conducted about the long vowels in North American English.

7.5. Pedagogical Implications of the Study

As one of the most important factors in the learning language process, pronunciation has been under discussion owing to numerous reasons like orthographic systems, distinctive vowels and consonants of languages, the different phonetic structures, the inadequacy of learners' perceptual abilities and lastly being unwilling to improve their speaking skills etc.

From a different view, as indicated by Paulston & Burder (1976) pronunciation is described as the key element that is constructed on the competence of a sound system that prevents communication between speakers and listeners as proposed by Rivers (2018).

Also, pronunciation is explained as the ability to produce audible and meaningful sounds that are meaningful to a language.

The attitude of the ESL teachers plays a crucial role. Although most of the English language teachers has taken phonology or linguistics class in bachelor's degrees, they are seemed to be unwilling teach the speaking skill concerning on the proper pronunciation. The lack of pronunciation and the written phonetic transcription sections are the reasons for the misperception of the NAE long vowels.

Through the study in this thesis, it was the aim of this research to provide learners and teachers with the correct articulations of specific sounds in American English. It is hoped that not only the NAE long vowels, but also the other distinctive consonants and vowel sounds like /ʊ/, /ʌ/, /ə/, /ɛ/, /æ/ or diphthongs. By this means, it is possible to both draw students' and learners' attention on correct perception as much as the production of the NAE long vowel sounds. The intensity of this written phonetic training section has been expected to raise awareness about the correct articulation of the NAE long vowels and the other sounds. For instance, the most challenging long vowel sounds of the North American English for the Turkish EFL university teachers is /a:/ that has been noticed in the written phonetic test. While the reason is being explained, the familiarity of /a:/ sound in the Turkish vowel inventory system should also be indicated in order to clarify the participants about the long vowel sound. In addition, the essential components for the accurate pronunciation of the NAE long vowel sounds are given emphasis through the medium of the apprehensible and authentic input, the phonetic transcriptions and repetition activities.

Among 40 partakers, 23 of them having English Language Teaching (ELT) undergraduate degrees have been knowledgeable about the English language phonology whereas 13 participants graduating from English Language Literature (ELL) do not have any chances of getting the phonology class during their undergraduate education. Like the ELL participants, 23 ELT testees could be declared not to have any opportunities to improve their written phonetic skills professionally. The written phonetic training course given at the end of the study was observed to improve the Turkish ESL teachers' written phonetic perception of the long vowels in the North American English, which indicates the efficiency of the training.

7.6. Suggestions for Further Studies

This study only consists of a written phonetic test based on words including the vowels of the North American English. As an instrument, only a written phonetic test was used in this research. However, it is possible to use other instruments like an auditory and a production test could be added for further studies.

To start with, it is possible to apply a production section to learners for improving their pronunciation about the NAE long vowels. Apart from this, it is also probable to use some technical equipment to measure the stress in the NAE vowel phonemes through the recordings of learners for future researches. Despite the difficulty of the assessment and the evaluation parts during the recording sessions, the procedure could be better for language learners to acquire an intelligible communication skill in the L2 learning process. Also, video records could be taken into consideration in the production part.

For the next studies, just auditory input could be used to provide accurate articulation of the NAE long vowels. At that point, recording sessions could be accompanied with video recordings, which may enable to observe the utterance of the NAE long vowel sounds easily. Furthermore, participants' ages could be grouped. Later, the success levels of groups could be discussed in terms of the written, auditory and production tests in next studies.

Lastly, the gender of participants could be considered as a variable for further studies. The relationship between gender and the NAE long vowel sounds' perception and production could be studied. The significant difference between males and females could be analyzed separately after the necessary data is observed and obtained from three tests.

7.7. Limitations of the Study

The objective of this study is to show the Turkish ESL university teachers' written phonetic perception of the long vowels in the North American English. In spite of relevant inferences and proper answers to all research questions of the study, there are some limitations to be taken into account in detail.

To start with, the number of the participants in the research is a critical variable mentioning to what extent the results could be interpreted and explained. This study has

been carried out by 40 Turkish EFL teachers working at private or public universities. Therefore, it could be figured out that the participants who have taken part in this research have the similar educational settings, which makes the results specific for all English teachers with regards to their work placements. Nevertheless, it could be declared that it is possible to get a general idea of Turkish ESL university teachers' written phonetic perception of the NAE long vowels. The overall number of partakers is 40 and enough for a scientific study but higher participants could be better for the validity and the reliability of the research.

The design of this study is based on two stages. In other words, all 40 TETs went through the same test as the pre-test and post-test stages. For this reason, it could be supposed that participants may be acquainted with the questions after pre-test process. Nonetheless, the pre-test and post-test research designs are effective despite some disadvantages and limitations. The important point that should be highlighted is a two-weeks break after 2 hours phonetic training course about the NAE long vowels, which could be seen as an obstacle for participants' acquaintance with the questions in the written test.

Finding appropriate ESL teachers who voluntarily would like to be participants is another limitation of this research. Due to the design involving two phases that are followed by a phonetic training session as well, it was not easy to find partakers for the study about the NAE long vowels. The 1st and the 2nd test process were applied to all participants to collect data, which was time- consuming and a bit tiring to complete the tests. Although the Turkish EFL university teachers were informed in detail about the difficulty of distinguishing the long vowels in North American English, some of them seemed to be involuntary to participate in the phonetic training session as well as the post-test process. However, they were tried to be relieved about the study and only willing TETs were included in this study.

Another limitation depends on deciding the online application like Microsoft Teams or Zoom for the phonetic training in which a computer, speaker or a smartboard is necessary to be used to implement the training session properly. As it has been mentioned before, time constrains is said to be a limitation of the study. All 40 Turkish ESL teachers who took part in the study were not from the same universities. Moreover, they also had their classes for at least 16 hours a week. Therefore, it was a bit hard to arrange a certain time for the participants and the researcher to carry out the pre-test and the post-test as well as

the phonetic training course. At the beginning of the study, the timing was planned and a timeframe for the whole process was prepared, which was changed many times.

The other restraint is about the pre-test and post-test design to measure the degree of change at the end of treatment, but participants were not separated into groups. In other words, the lack of a control group could be supposed to create a drawback by preventing the comparison of treated ones and untreated teachers in the study. All of the participants were undergone the phonetic treatment between the pre-test and the post-test since it would be unethical to omit the untreated teachers. In this way, the intervention became practical for every teacher at the study.

The vocabulary items used as the stimulus is also thought to be a limitation of this study. Some words were adopted from a previous study although they were all based on the researcher's observations from the dictionaries, phonetic English books and other written materials with regards to the word frequency. Indeed, this process was created and preferred by the researcher.

7.8. An evaluation of the Chapter

The primary topics discussed in the last chapter consists of the summary of the study, implications of the study, which is followed by the suggestions. Also, suggestions for further studies, pedagogical implications were covered up along with the limitations of the study.

The most important negative limitation on the present thesis topic was the existence of the coronavirus, which forced the researcher to do this exploration on the internet base, not in a form of face-to-face basis. In face-to-face conduct, the results would have been different.

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APPENDICES

APPENDIX-1: CONSENT FORM



The Written Perception of North American English (NAE) long vowels by non-native English Foreign Language Instructors in Turkey

This study aims to explore the written perception of North American English (NAE) long vowels by non-native English Foreign Language Instructors in Turkey.

Name of the researcher: Melek ÇAKIRCALI Contact info:

The Declaration of the Participant

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason, have been given enough information about the study and agree to take part in this study.

Your information is confidential. Your answers will not be linked to your name and will be only used for this study.

Please write your name and surname by signing the form if you are willing to participate in this study.

Name:

Surname:

Date:

Signature:

APPENDIX 2: DEMOGRAPHIC INFORMATION FORM

DEMOGRAPHIC QUESTIONNAIRE

Dear English teachers,

This questionnaire is the first practice step of a master thesis in English Language Teaching Department in Ufuk University/ Ankara. It is composed of 8 questions which aim to learn more about the participants' background. Your personal information will be kept secret. You don't need to indicate your real name. You can write a nickname and surname that will be used in the post-test later on. Please contact me for any questions.

Researcher: Melek Çakırcalı

Please try to answer the following questions.

1-What is your gender?

a. female b male

2- How old are you?

3- Which department did you graduate from?

a.English Language Teaching b.Applied Linguistics c.English Language and Literature

4-How long have you been teaching English?

5-Where are you working as an English teacher now?

a.preparatoy department at university b.foreign language department at university

6-Are you interested in phonology/ phonetics?

a.yes b. no

APPENDIX-3: THE WRITTEN PHONETIC QUESTIONNAIRE

Please answer the following questions by choosing the correct option

In which of the following options is there an /i:/ sound? (1→5)

- | | | | | |
|-----------------|----------------|----------------|---------------|-------------|
| 1. a) sneakers | b) instinctive | c) babyish | d) diminish | e) snickers |
| 2. a) privilege | b) reason | c) proficient | d) exhibit | e) risen |
| 3. a) recording | b) significant | c) scheme | d) silicon | e) skim |
| 4. a) technical | b) sightseeing | c) significant | d) television | e) sigh |
| 5. a) periscope | b) permission | c) peaches | d) penicillin | e) pitches |

In which of the following options is there just an /u:/ sound? (6 →10)

- | | | | | |
|----------------|---------------|---------------|--------------|-----------|
| 6. a) shooed | b) livelihood | c) insurance | d) brochure | e) should |
| 7. a) building | b) who'd | c) accurately | d) curiosity | e) hood |
| 8. a) pedicure | b) population | c) super | d) premature | e) would |
| 9. a) cuisine | b) during | c) cultural | d) proof | e) pulled |
| 10. a) humor | b) guarantee | c) bookcase | d) football | e) cookie |

In which of the following options is there an /ju:/ sound? (11 →15)

- | | | | | |
|-----------------|--------------|----------------|---------------|---------------|
| 11. a) repute | b) behave | c) capsule | d) coconut | e) reputation |
| 12. a) journey | b) execute | c) exterminate | d) locomotive | e) executive |
| 13. a) domino | b) bookstore | c) accuse | d) bull's-eye | e) accusation |
| 14. a) bungalow | b) videotape | c) violence | d) argue | e) argument |
| 15. a) value | b) jockey | c) journalist | d) joyfully | e) valuable |

In which of the following options is there an /ɑ:/ sound? (16 →20)

- | | | | | |
|--------------------|------------------|----------------|----------------|--------------|
| 16. a) grandfather | b) granddaughter | c) grandchild | d) grandmother | e) granddad |
| 17. a) coconut | b) outbox | c) production | d) fanatic | e) outcast |
| 18. a) pollution | b) sabotage | c) polygon | d) uncover | e) polygraph |
| 19. a) cholesterol | b) wonderful | c) walnuts | d) jackpot | e) jackass |
| 20. a) jogging | b) immoral | c) implausible | d) irrational | e) jaggings |

In which of the following options is there an /ɜ:/ sound? (21-25)

- | | | | | |
|-----------------|-------------|------------|-------------|-----------|
| 21. a) occurred | b) shorten | c) hearsay | d) hesitate | e) accord |
| 22. a) bicycle | b) expert | c) highly | d) gifted | e) export |
| 23. a) partake | b) dignity | c) infirm | d) serial | e) inform |
| 24. a) cabbage | b) garbage | c) healthy | d) curse | e) course |
| 25. a) wordly | b) farthest | c) eager | d) rightful | e) former |

In which of the following options is there an /ɔ:/ sound? (26-30)

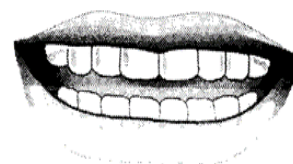
- | | | | | |
|--------------|----------|----------|-----------|----------|
| 26. a) horse | b) home | c) good | d) joy | e) local |
| 27. a) shop | b) short | c) shoot | d) drop | e) spot |
| 28. a) post | b) pot | c) cloth | d) home | e) spot |
| 29. a) close | b) most | c) soap | d) small | e) scope |
| 30. a) toll | b) tone | c) tooth | d) doctor | e) score |

APPENDIX-4: THE WRITTEN PHONETIC TEACHING TRAINING THE TEACHING OF THE /i:/ SOUND

The /i:/ sound also symbolized with the /iy/ sign in some books. The /i:/ is a high long rounded vowel, contrasting with the /ɪ/ phoneme which is a short vowel, as seen in the following English vowel charts.



Adapted from Baker (2006: 17)



Adapted from Gilbert (2004: 31)

SINGLE OCCURRENCE OF /i:/ SOUND

believe /bə'li:v/

beat /bi:t/

breeze /bɹi:z/

cheese /tʃi:z/

cream /kɹi:m/

deep /di:p/

each /i:tʃ/

east /i:st/

eat /i:t/

easy /'i:zi/

east /i:st/

feel /fi:l/

feed /fi:d/

feet /fi:t/

field /fi:ld/

free /fɹi:/

freezer /'fɹi:zər/

green /gɹi:n/

greet /gɹi:t/

heal /hi:l/

heat /hi:t/

keep /ki:p/

key /ki:/

knee /ni:/

leaf /li:f/

least /li:st/

leap /li:p/

leave /li:v/

mean /mi:n/

peak /pi:k/

peel /'pi:l/

people /'pi:pəl/

piece /pi:s/

real /ɹi:l/

receive /ɹi'si:v/

repeat /ɹi'pi:t/

seal /**si:l**/

seen /**si:n**/

ski /**ski:**/

steal /**sti:l**/

sweet /**swi:t**/

three /θ**i:**/

week /**wi:k**/

seek /**si:k**/

seat /**si:t**/

speak /**spi:k**/

stream /**stri:m**/

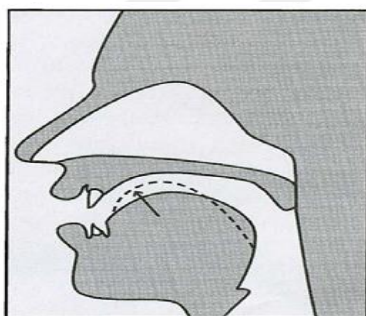
team /**ti:m**/

tree /**tri:**/

MINIMAL PAIRS

One approach to demonstrate the differences between short and long vowels is to highlight the difference presented in minimal pairs which pairs of words that have only one sound difference, in this case the vowel length, such as the examples given below: the learners can use the minimal pairs differences to model the different sounds for to copy the vowel length.

/i:/ vowel sound



beat /**bi:t**/

deep /**di:p**/

eat /**i:t**/

each /**i:tʃ**/

feel /**fi:l**/

feet /**fi:t**/

heap /**hi:p**/

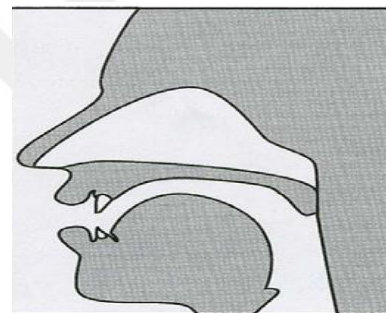
heat /**hi:t**/

heel /**hi:l**/

leap /**li:p**/

leak /**li:k**/

/ɪ/ vowel sound



bit /**bɪt**/

dip /**dɪp**/

it /**ɪt**/

itch /**ɪtʃ**/

fill /**fɪl**/

fit /**fɪt**/

hip /**hɪp**/

hit /**hɪt**/

hill /**hɪl**/

lip /**lɪp**/

lick /**lɪk**/

least /li:st/

leave /li:v/

peak /pi:k/

reach /ri:tʃ/

seek /si:k/

sheep /ʃi:p/

seat /si:t/

sleep /sli:p/

steal /sti:l/

list /lɪst/

live /lɪv/

pick /pɪk/

rich /rɪtʃ/

sick /sɪk/

ship /ʃɪp/

sit /sɪt/

slip /slɪp/

still /stɪl/

EXERCISES

A. In which of the following options is there an [i:] sound?

- | | | | | |
|------------------|------------------|------------------|-----------|----------------|
| 1.a) easy | b) ill | c) belong | d) absent | e) balcony |
| 2.a) mail | b) leaf | c) lime | d) phone | e) tune |
| 3.a) rain | b) stream | c) dine | d) coal | e) suit |
| 4.a) train | b) file | c) breeze | d) froze | e) use |
| 5.a) paid | b) feed | c) bite | d) coat | e) fume |
| 6.a) lead | b) lid | c) led | d) lent | e) led |
| 7.a) bit | b) sink | c) sell | d) silk | e) beat |
| 8.a) den | b) rail | c) need | d) grill | e) dim |

B. Read the following transcriptions of the names loudly

Mead /mi:d/ Lake Weekend/wi:k'end/ break Field /fi:ld/ hockey
Green /gri:n/ Giant Freezer /'fri:zə/

C. Repeat the following tongue twisters:

Sheep	Feel
Sheep leap	Feel the breeze
Sheep leap on the leaf	Feel the deep breeze
Sheep leap on the leaf at least	Feel the deep breeze on the peak

Field	The team
Green field	The team of the week
Green field in the dream	The team of the week is seen
Green field in a weird dream	The team of the week is seen on the field

Meet	Bees
Meet the team	Bees leave
Meet the team to eat	Bees leave the heap
Meet the team to the cream	Bees leave the heap on the tree

D. REPEAT the following sentences loudly

1. Don't worry! It will take us at least 30 minutes to get the airport.
2. I guess our team will win tonight.
3. Hello, may I speak to you?
4. I live in a field with some sheep.
5. The women leave the cheese in the freezer.

E. Repeat the following minimal sentences

1. I'm **HEATING/HITTING** the pan.
2. Did you **SLIP/SLEEP** on the floor?
3. The **BIDS/BEADS** look quite good.
4. When did Lilly **LEAVE/LIVE**?
5. Did you **FEEL/FILL** the box?

F. REPEAT the following sentences with contextual clues

1. The **PEACH** was **PITCHED** by **SHEILA**.
2. The **SHEEP** were found in a **SHIP**.
3. Let's **MEET** for a **MEAL**.
4. Spread the **CHEESE CREAM**!
5. Did you hear the **FEAST** in the **EAST**?

G. IDENTIFY the words including /i:/ long vowel in the short story

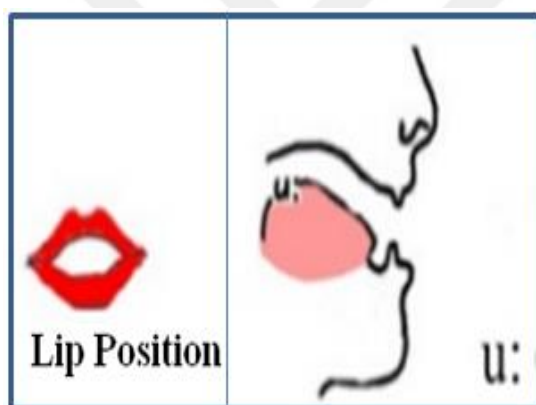
One day, Jim rides his bike and sees a hive. Bees live there and he wants to see them. Jim hits the hive three times and some bees fly out and see Jim. He runs to his bike in the field but the bees follow him. Jim is shocked and he starts to wait the bees to get away under a green tree.



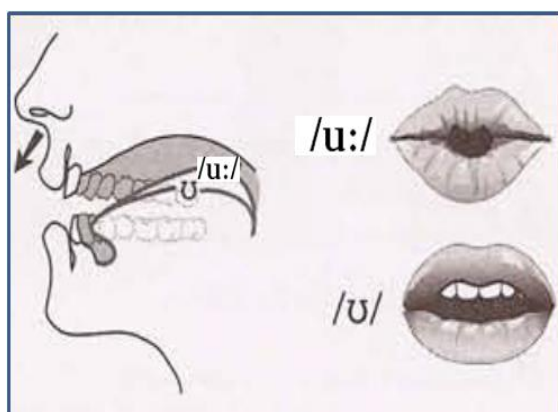
THE TEACHING OF THE /u:/ SOUND

The /u:/ sound also symbolized with the /uw/ sign in some books. The /u:/ is a high long rounded vowel, contrasting with the /ʊ/ phoneme which is a high short rounded vowel, as seen in the following English vowel chart.

	front	central	back
high	i: ɪ	ɨ	u: ʊ
mid	e ɛ	ə ʌ	o ɔ
low	æ	a	ɑ



Adapted from: <https://www.singwise>.



Adapted from Baker and Goldstein, 2007:51)

SINGLE OCCURRENCES OF THE /u:/ SOUND

absolute /'æbsəˌlu:t/	bloom /'blu:m/
blue /'blu:/	boot /'bu:t/
canoe /kə'nu:/	cruise /kru:z/
cool /'ku:l/	continue /kən'tɪnju:/
clue /'klu:/	duke /du:k/
duty /'du:di/	few /'fju:/
flew /'flu:/	fruit /fru:t/
food /'fu:d/	fool /'fu:l/
foolish /'fu:lɪʃ/	gloomy /'glu:mi/
goose /'gu:s/	group /gru:p/
include /ɪn'klu:d/	Inuit /'mu:ɪt/
jewel /'dʒu:əl/	juice /dʒu:s/
June /'dʒu:n/	Junior /'dʒu:njə/
kangaroo /ˌkæŋɡə'ru:/	loop /lu:p/
loose /lu:s/	moon /mu:n/
mute /'mju:t/	noon /'nu:n/
prove /'pɹu:v/	route /'ru:t/
rule /'ru:l/	rumor /'ru:mə/
school /'sku:l/	shampoo /ʃæm'pu:/
smooth /smu:ð/	suit /'su:t/
soon /'su:n/	soup /su:p/
soothe /'su:ð/	spoon /spu:n/
statue /'stætʃu:/	stew /'stu:/
student /'stu:dɪnt/	stupid /'stu:pɪd/
tube /'tu:b/	truth /tru:θ/
tool /'tu:l/	tooth /'tu:θ/
tune /'tu:n/	two /'tu:/
zoo /zu:/	zoom /zu:m/

DOUBLE OCCURRENCES OF THE /u:/ SOUND

bluetooth /'blu:tu:θ/

cuckoo /'ku:ku:/

foolproof /'fu:lpɹu:f/

MINIMAL PAIRS

One approach to demonstrate the differences between short and long vowels is to highlight the difference presented in minimal pairs which pairs of words that have only one sound difference, in this case the vowel length, such as the examples given below: the learners can use the minimal pairs differences to model the different sounds for to copy the vowel length.

cook /kʊk/ → /ʊ/

kook /ku:k/ → /u:/ (silly or crazy, informal)

full /fʊl/ → /ʊ/

fool /fu:l/ → /u:/

look /lʊk/ → /ʊ/

Luke /lu:k/ → /u:/

pulled /pʊld/ → /ʊ/

pooled /pu:ld/ → /u:/

should /ʃʊd/ → /ʊ/

shoed /ʃu:d/ → /u:/

nook /nʊk/ → /ʊ/

nuke /nu:k/ → /u:/ (RP)/

could /kʊd/ → /ʊ/

cooed /ku:d/ → /u:/

hood /hʊd/ → /ʊ/

who'd /hu:d/ → /u:/

pull /pʊl/ → /ʊ/

pool /pu:l/ → /u:/

would /wʊld/ → /ʊ/

wooded /wu:ld/ → /u:/

soot /sʊt/ → /ʊ/

suit /su:t/ → /u:/

wood /wʊd/ → /ʊ/

wooded /wu:d/ → /u:/

(<https://www.slideshare.net/anshumanmoda/phonetic-sounds-z>)

EXERCISES

A. In which of the following options is there an [u:] sound?

- | | | | | |
|----------------------|---------------|--------------------|--------------------|-------------------|
| 1. a) groom | b) sponge | c) grocery | d) poor | e) romantic |
| 2. a) propaganda | b) drowning | c) mobile | d) moisture | e) routine |
| 3. a) pillow | b) soak | c) dome | d) absolute | e) email |
| 4. a) abroad | b) coach | c) continue | d) sudden | e) bushes |
| 5. a) student | b) sugar | c) suggest | d) smoker | e) understand |
| 6. a) joker | b) George | c) junior | d) judge | e) justice |
| 7. a) yougurt | b) you | c) your | d) joyful | e) sorrow |
| 8. a) mother | b) brother | d) stop | d) statue | e) someone |

B. Read the following transcriptions of the names loudly

Julian /'dʒu:li:ən/	June /'dʒu:n /	Judy /'dʒu:di /
Sue /'su:/	Trudy /'tɹu:di/	Singapore /'sɪŋəpu:ɪ/
Suzy /'su:zi/	Suzan /'su:zən /	

C. Repeat the following tongue twisters

The statue	A goose
The statue of the duke	A cute goose
The humorous statue of the duke	A cute huge goose
The rude but humorous statue of the duke	A cute huge goose of Judy
The unity	Two
The unity of the rule	Two students
The unity of the rule in the school	Two humorous students
The pure unity of the rule in the school	Two humorous students at the university
The bloom	The cruise
The bloom of the tulip	The blue cruise
The bloom of the beautiful tulip	The blue cruise of the cuckoo
The huge bloom of the beautiful tulip	The blue cruise of the cuckoo in June

Fruit	The unique
Fruit juice	The unique Kangaroo
Fruit juice use	The unique Kangaroo using
Fruit juice use in shampoo	The unique Kangaroo using shampoo

D. REPEAT the following sentences loudly

1. The new zoo is too cool for the broom.
2. The blue goose flew to the moon.
3. The new rule is too rude.
4. Sue and June are too cool for the school.
5. The huge mute mule is in the cool zoo.

E. Repeat the following minimal sentences

1. Every family has at least one **KOOK/COOK**.
2. Am I a great **KOOK/COOK**?
3. Ronaldo **WOULD/WOOED**.
4. She had assumed the **POOL/PULL** was for his daughter.
5. They had the **POOL/PULL** filled.

F. Repeat the following sentences with contextual clues:

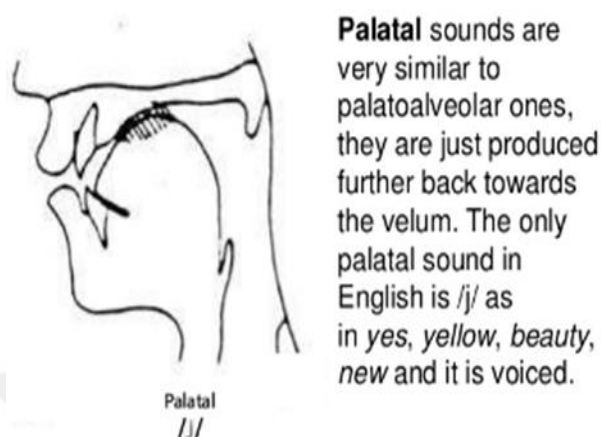
1. **SHOULD** the mules be **SHOED**?
2. **COULD** we have **COOED** with appreciation?
3. **WOULD** the cuckoo be **WOED** by its owner?
4. Please don't **PULL** me in a cold **POOL**.
5. The pigeon **COULD** have **COOED**.

G. IDENTIFY the words including /u:/ long vowel in the short story

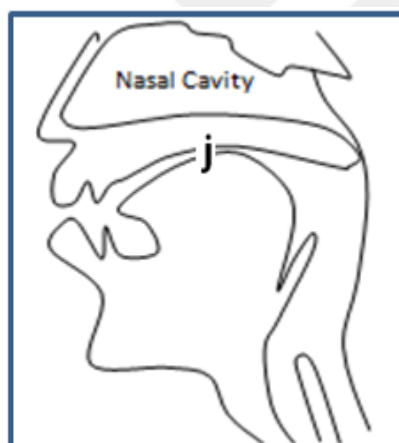
Jude has a jukebox and he likes to play it but it is not free. He says "The jukebox is not free. For cool tunes, you must pay." But Luke says "I am your dude. Must I pay for tunes, too?" "Yes, of course. My tunes are very cool" says Jude. "You are very rude. I won't listen to." says Luke. Wait. I am not rude but I am poor. It is true." says Jude.

THE TEACHING OF THE /ju:/ SOUND

The /ju:/ is a high long rounded vowel. In English, both in Received Pronunciation and in General American, the IPA phonetic symbol /j/ corresponds to the semivowel sound in words like “you”, “yellow” and “yes”. This sound is called “yod”.



(<https://www.google.com/search?q=articulation+of+the+%2Fj%2F+sound%2C+images&tbm=isch&ved=>)



The sequence /ju:/ is very common in English and it has special spellings: "u", "ue", "eu" and "ew". However, /j/ is normally spelled as "y" before other vowels like “kenya” /'kenjə/, yard /jɑ:rd/, yesterday/'jestədeɪ/.

(https://teflpedia.com/Voiced_palatal_approximant)

SINGLE OCCURRENCE OF /ju:/ SOUND

accumulate /ə'kju:mjələɪt/

beauty /'bju:ti/

continue /kən'tɪnju:/

cube /'kju:b/

argue /'ɑ:ɡju:/

beautiful /'bju:təfəl/

cuba /'kju:bə/

cucumber /'kju:kʌmbəɪ/

cute /'kju:t/	distribute /dɪ'strɪbjʊ:t/
few /fju:/	fuel /'fju:əl/
fume /'fju:m/	fusion /'fju:ʒən/
hue /hju:/	huge /hju:dʒ/
human /'hju:mən/	humane /hju:'meɪn/
humor /'hju:mə/	humorous /'hju:məɪəs/
interview /'ɪntəvju:/	mule /'mju:l/
music /'mju:zɪk/	museum /mju:'ziəm/
mute /mju:t/	mutiny /'mju:tɪni/
nephew /'nefju:/	perfume /'pɜ:ɪfju:m/
pew /pju:/	preview /'ɪ:vju:/
refuse /ɪ'fju:z/	review /ɪ'vju:/
revue /ɪ'vju:/	rescue /'reskju:/
skew /skju:/	tube /tju:/
tune /tju:n/	unicorn /'ju:nəkɔ:rn/
uniform /'ju:nə'fɔ:ɪm/	unique /ju:'nɪk/
unity /'ju:nədi/	union /'ju:njən/
universal /ju:nə'vɜ:ɪsəl/	university /ju:nə'vɜ:ɪsədi/
use /ju:z/	usually /'ju:ʒuəli/
utility /ju:'tɪlədi/	view /vju:/
youth /ju:θ/	you /ju:/

EXERCISES

A. In which of the following options is there an [ju:] sound?

- | | | | | |
|--------------|--------------------|----------------------|-----------------|-------------|
| 1. a) few | b) fill | c) bat | d) sell | e) fat |
| 2. a) vast | b) vain | c) wait | d) value | e) wall |
| 3. a) reject | b) refuse | c) red | d) rule | e) rock |
| 4. a) hall | b) hunt | c) hurt | d) huge | e) hull |
| 5. a) fume | b) full | c) fund | d) found | e) foam |
| 6. a) cure | b) cucumber | c) curve | d) dull | e) dumb |
| 7. a) autumn | b) aunt | c) accumulate | d) actual | e) audience |
| 8. a) museum | b) mount | c) mold | d) mull | e) monk |

B. Read the following transcriptions of the names loudly:

Museum /mju:ˈziəm/ of Mankind

European /ˈju:njən/ Union

Music /ˈmju:zɪk/ Hall

Youth /ju:θ/ Hostel

C. Repeat the following tongue twisters:

Music

Beautiful

Mute music

Beautiful university

Mute duet music

Beautiful university view

Mute duet music in the museum

Beautiful university view in Cuba

Nephew

The union

The cute nephew

The European Union

The cute nephew is humorous

The European Union is a unity

The cute nephew is usually humorous

The European Union is a huge unity

D. REPEAT the following sentences loudly:

1. Sandra bought a beautiful dress at the shop.
2. The manager usually arrives late.
3. Fossil fuel is an important source of energy.
4. Jim has a little sense of humor.
5. Our university has a beautiful view.

E. REPEAT the following minimal sentences:

1. There was a CUTE/CURE cat in the basket.
2. The VALE/VALUE of the painting is precious.
3. There is no FULL/FUEL in the car.
4. FEW/FEE students were at the school yesterday.
5. The PAW/PEW was made of the white pine tree.

F. REPEAT the following sentences with contextual clues:

1. The violin is the best MUSICAL instrument in this MUSEUM.

2. The **INTERVIEW** is just the **PREVIEW** of the **UNITY**.
3. My **NEPHEW's** **UNIFORM** is **USUALLY** ironed.
4. The **PERFUME** is in a **CUTE CUBE** bottle.
5. Don't **ARGUE** and **DISTRIBUTE** the papers.

G. IDENTIFY /ju:/ the long vowel in the sentences of the short story:

Last Tuesday, there was a beautiful piece of music coming from a cute window. The music was not usual but it was muted. It did not continue but it was a nice view for you and me and my nephew.

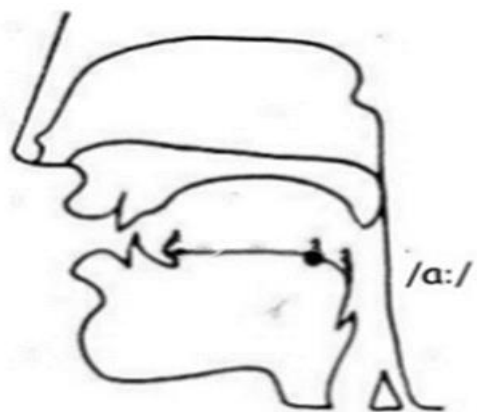


THE TEACHING OF THE /ɑ:/ SOUND

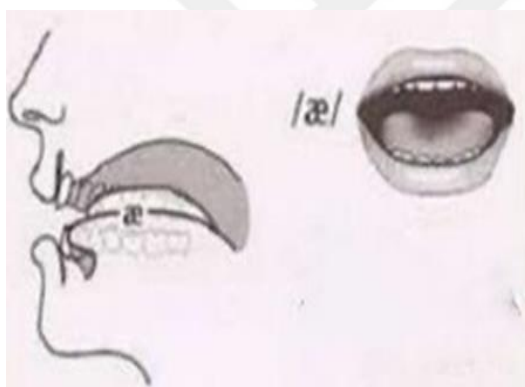
The /ɑ:/ is a high long rounded vowel, contrasting with the /ɜ/ or /æ/ phonemes which are short rounded vowels seen in the following English vowel charts.



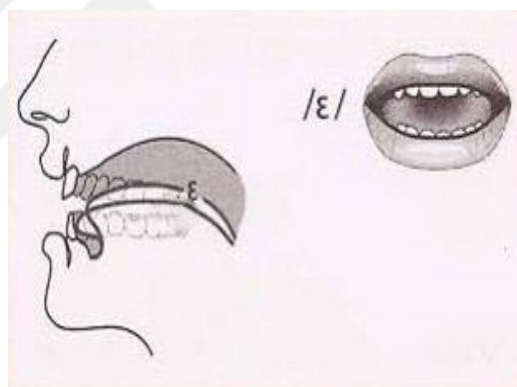
Adapted from Baker (2008: 31)
(2005: 15)



Adapted from Hamann & Schmitz



Adapted from Baker (2008:23)



Adapted from Baker (2008: 23)

SINGLE OCCURRENCE OF /ɑ:/ SOUND

arm /ɑ:ɪm/

art /ɑ:ɪt/

aunt /ɑ:nt/

bark /bɑ:ɪk/

blond /blɑ:nd/

body /'bɑ:di/

bond /bɑ:nd/

box /bɑ:ks/

calm /kɑ:lm/

car /kɑ:ɪ/

card /kɑ:ɪd/

cartoon /kɑ:ɪ'tu:n/

clock /klɑ:k/

collar /'kɑ:ləɪ/

college /'kɑ:lɪdʒ/

cop /kɑ:p/

cot /kɑ:t/

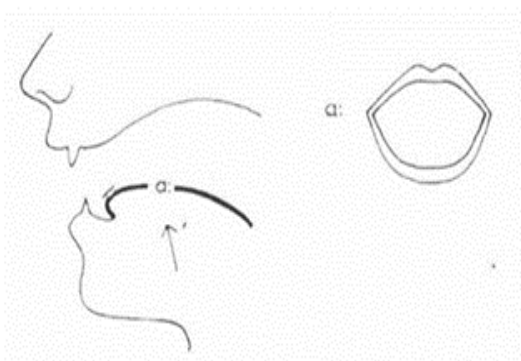
cottage /'kɑ:tɪdʒ/

dark /dɑːrk/	demand /dɪ'mɑːnd/
farm /fɑːm/	father /'fɑːðə/
flock /flɑːk/	follow /'fɑːləʊ/
garage /gə'ɑːʒ/	garden /'gɑːdn/
got /gɑːt/	hard /hɑːd/
harm /hɑːrm/	heart /hɑːrt/
honest /'ɑːnɪst/	hot /hɑːt/
large /lɑːdʒ/	lock /lɑːk/
log /lɑːg/	march /mɑːtʃ/
mop /mɑːp/	mosque /mɑːsk/
not /nɑːt/	object /'ɑːbdʒɪkt /
occupy /'ɑːkjəpaɪ/	odd /ɑːd/
opportunity /,ɑːpə'tuːnəti/	ox /ɑːks/
part /pɑːt/	party /'pɑːti/
past /pɑːst/	pocket /'pɑːkɪt/
pot /pɑːt/	rock /rɑːk/
scarf /skɑːf/	sock /sɑːk/
star /stɑː/	start /stɑːt/
stop /stɑːp/	top /tɑːp/
wallet /'wɑːlɪt/	wash /wɑːʃ/

MINIMAL PAIRS-1

One approach to demonstrate the differences between short and long vowels is to highlight the difference presented in minimal pairs which pairs of words that have only one sound difference, in this case the vowel length, such as the examples given below: the learners can use the minimal pairs differences to model the different sounds for to copy the vowel length.

/ɑ:/ vowel sound



cop /kɑ:p/

cot /kɑ:t/

mosque /mɑ:sk/

mop /mɑ:p/

pocket /'pɑ:kɪt/

pot /pɑ:t/

ox /ɑ:ks/

sock /sɑ:k/

/æ/ vowel sound



cap /kæp/

cat /kæt/

mask /mæsk/

map /mæp/

packet /'pækɪt/

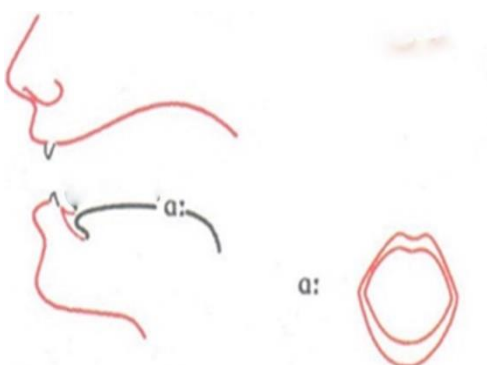
pat /pæt/

axe /æks/

sack /sæk/

MINIMAL PAIRS-2

/ɑ:/ vowel sound



blond /blɑ:nd/

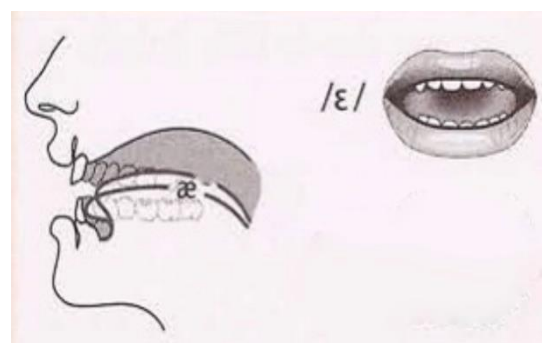
dot /dɑ:t/

got /gɑ:t/

pot /pɑ:t/

stop /stɑ:p/

/ɛ/ vowel sound



blend /blend/

debt /det/

get /get/

pet /pet/

step /step/

EXERCISES

A. In which of the following options is there an [a:] sound?

- | | | | | |
|---------------------|-----------------|------------------|------------------|-----------|
| 1. a) can | b) cat | c) calm | d) care | e) candy |
| 2. a) well | b) salt | c) start | d) tactic | e) accept |
| 3. a) ready | b) party | c) pen | d) real | e) pencil |
| 4. a) honest | b) have | c) hurt | d) ham | e) hang |
| 5. a) wreck | b) hack | c) peak | d) large | e) cage |
| 6. a) catch | b) coat | c) collar | d) sad | e) said |
| 7. a) paid | b) pack | c) pant | d) pocket | e) poll |
| 8. a) say | b) arm | c) ant | d) sand | e) sack |

B. Read the following transcriptions of the names loudly

John /dʒɑ:n/	Palm /pɑ:lm/ Beach	Bartender /'bɑ:r,tendər/
March /mɑ:rtʃ/	Cottage /'kɑ:tɪdʒ/ hospital	

C. Repeat the following tongue twisters

The water	Wash
The water in a car	Wash socks
The water in a car park	Wash large socks
The water in a dark car park	Wash large socks in hot
The garden	Follow
The dark garden	Follow John
The dark garden in a farm	Follow John and his father
The dark garden in a starry farm	Follow John and his father in the farmland
The pot	Stop
The hot pot	Stop the car
The hot pot in the box	Stop the odd car
The hard pot in the hard box	Stop the odd car in the garage

D. REPEAT the following sentences loudly

1. John said dark clouds gathered in the sky.
2. At home, I found hard to study.
3. The dog barked and followed the bartender to the backyard.
4. Pay the pocket by the card.
5. Lock the garage for the car.

E. REPEAT the following minimal sentences:

1. I have a **CAT/COT** in my room.
2. Brad needs a new **MOP/MAP** for his office.
3. The **MOSQUE/MASK** was new fifty years ago.
4. I bought a **PET/POT** for my mother.
5. Where is the **STOP/STEP** supposed to be?

F. REPEAT the following sentences with contextual clues

1. In the **PAST**, there were **PACKETS** in my **POCKET**.
2. I **SAW** a **STAR** on the sky last night.
3. **WASH** the **WALLET** with **WATER**.
4. Play **CARTOON CARDS** with **BART**.
5. **STOP** at the **CAR PARK**.

G. IDENTIFY /a:/ the long vowel in the sentences of the short story

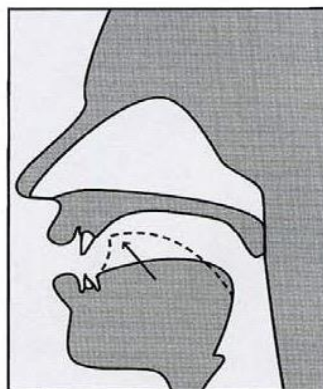
One day, Fay and Jane were at the garden in the dark. They saw a strange car parking their garage. Fay started to run to the path of the yard and called his father. His father wanted Fay and Jane to calm down and said “It is your mom’s new car”.

THE TEACHING OF THE /ɜ:/ SOUND

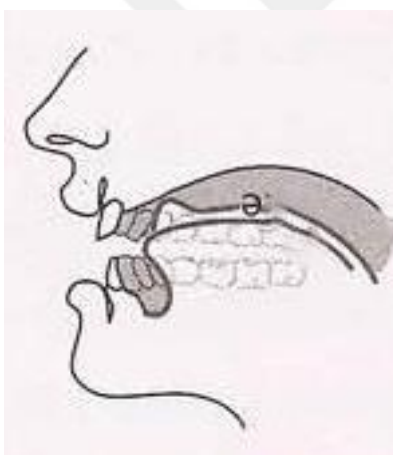
The /ɜ:/ is a high long rounded vowel, which is a sound derived of /ə/ or /ɔ/ vowels in the following English vowel charts.



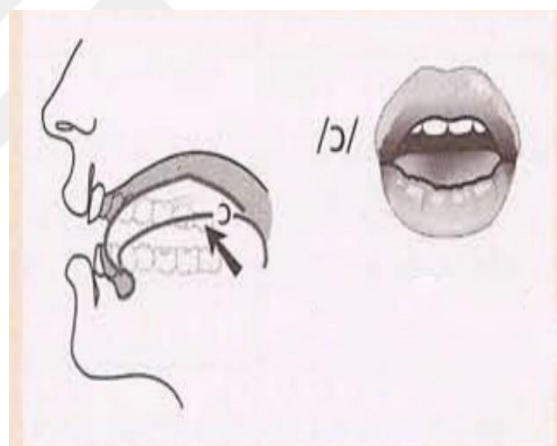
Adapted from Baker (2008: 35)



Adapted from Hamann & Schmitz (2005: 18)



Adapted from Baker (2008:33)



Adapted from Baker (2008: 33)

SINGLE OCCURRENCE OF /ɜ:/ SOUND

attorney /ə'tɜ:.ni/

bird /bɜ:.ɪd/

burn /bɜ:.ɪn/

certainly /'sɜ:.ɪtnli/

church /tʃɜ:.ɪtʃ/

circle /'sɜ:.ɪkəl/

curtain /'kɜ:.ɪtn/

determine /dɪ'tɜ:.ɪmn/

dirty /'dɜ:.ɪti/

early /'ɜ:.ɪli/

earn /ɜ:.ɪn/

earth /ɜ:.ɪθ/

firm /fɜ:.ɪm/

first /fɜ:.ɪst/

fur /fɜ:.ɪ/

girl /gɜ:.ɪl/

heard /hɜːɪd/

hurt /hɜːɪt/

learn /lɜːɪn/

pearl /pɜːɪl/

prefer /prɪ'fɜːɪ/

purse /pɜːɪs/

search /sɜːɪtʃ/

skirt /skɜːɪt/

surface /'sɜːɪfɪs/

thirty /'θɜːɪti/

turn /tɜːɪn/

were /wɜːɪ/

work /wɜːɪk/

her /hɜːɪ/

journal /'dʒɜːɪnl/

nurse /nɜːɪs/

person /'pɜːɪsən/

purpose /'pɜːɪpəs/

return /rɪ'ɜːɪn/

shirt /tʃɜːɪtʃ/

stir /stɜːɪ/

thirsty /'θɜːɪsti/

thursday /'θɜːɪzdi/

urge /ɜːɪdʒ/

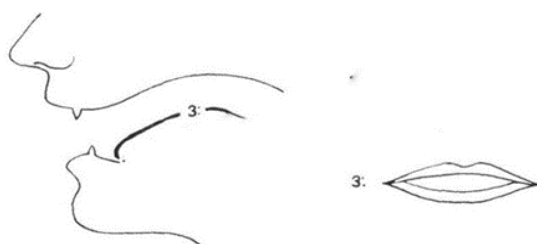
word /wɜːɪd/

worm /wɜːɪm/

MINIMAL PAIRS-1

One approach to demonstrate the differences between short and long vowels is to highlight the difference presented in minimal pairs which pairs of words that have only one sound difference, in this case the vowel length, such as the examples given below: the learners can use the minimal pairs differences to model the different sounds for to copy the vowel length.

/ɜː/ vowel sound



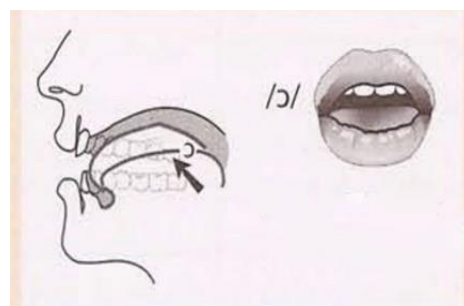
burn /bɜːɪn/

fur /fɜːɪ/

shirt /tʃɜːɪtʃ/

stir /stɜːɪ/

/ɔː/ vowel sound



born /bɔːɪn/

four /fɔːɪ/

short /ʃɔːɪt/

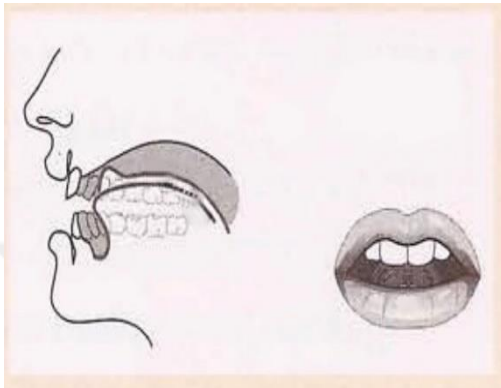
store /stɔːɪ/

turn /tɜːn/
word /wɜːd/

torn /tɔːn/
award /ə'wɔːd/

MINIMAL PAIRS-2

/ɜː/ vowel sound



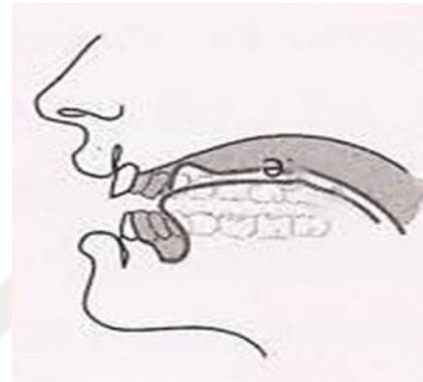
fur /fɜː/

her /hɜː/

work /wɜːk/

worm /wɜːm/

/ə/ vowel sound



further /'fɜːðər/

herald /'heɪəld/

worker /'wɜːkər/

warmer /'wɜːmər/

EXERCISES

A. In which of the following options is there an [ɜː] sound?

- | | | | | |
|---------------------|----------------|----------------|-----------------|-----------------|
| 1. a) bell | b) sad | c) normal | d) earth | e) mad |
| 2. a) search | b) such | c) well | d) wall | e) call |
| 3. a) cure | b) cut | c) hut | d) hurt | e) port |
| 4. a) want | b) word | c) wrote | d) wrap | e) wake |
| 5. a) tall | b) tap | c) turn | d) ton | e) toy |
| 6. a) pop | b) port | c) shine | d) shore | e) shirt |
| 7. a) four | b) fur | c) found | d) fault | e) foam |
| 8. a) land | b) laid | c) lead | d) learn | e) lend |

B. Read the following transcriptions of the names loudly:

Pearl /pɜːrl/ Harbor World /wɜːrld/ Bank Church /tʃɜːrtʃ/ of England
Early /'ɜːrli/ bird /bɜːrd/ Earth /ɜːrθ/ summit

C. Repeat the following tongue twisters

A bird	Early
A dirty bird	Early girl
A dirty bird is the word	Early girl earns
A dirty bird is the third word	Early girl earns in the work

The skirt	The person
The fur skirt	The thirsty person
The fur skirt of the girl	The thirsty person is a nurse
The fur skirt of the girl in the church	The thirsty person is a nurse at the work

The curtain	The Earth
The pearl curtain	The surface of the Earth
The pearl curtain is a word	The surface of the Earth is burnt
The pearl curtain is the worst word	The surface of the Earth is certainly burnt

D. REPEAT the following sentences loudly

1. The little girl cried a lot yesterday.
2. How did you get so dirty?
3. I think Betty will earn much money at the bank.
4. I had the worst luck today!
5. Were you hurt in the accident?

E. REPEAT the following minimal sentences

1. There is a **WORD/AWARD** for students.
2. Many **SHORTS/SHIRTS** were sold in the shop.
3. The paper is **TURN/TORN** very quickly.
4. The **FIRM/FARM** was well managed last year.
5. We can see you're **HURT/HUT**.

F. REPEAT the following sentences with contextual clues

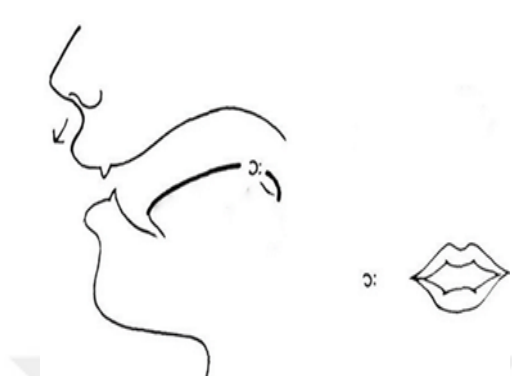
1. What's the **PURPOSE** of this **PERSON**?
2. The **FIRST FUR** has a smooth **SURFACE**.
3. The **GIRL** has a **PEARL PURSE**.
4. **CIRCLE** the **THIRD** option **CERTAINLY**.
5. The men **WERE JOURNALS** and **WORK** to **EARN** a lot.

G. IDENTIFY /3:/ the long vowel in the sentences of the short story

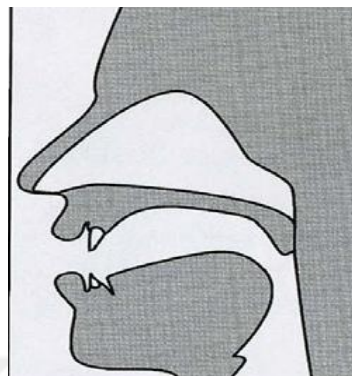
Ross wants to work by herself and earn money. She starts to search for some jobs. Ross becomes a nurse and works early in the morning. Ross later learns that she is third person coming after the head nurse.

THE TEACHING OF THE /ɔ:/ SOUND

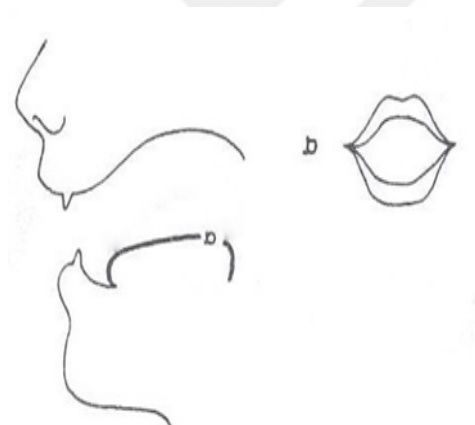
The /ɔ:/ is a central, back and lip-rounding long vowel between with the /ɒ/ and // phonemes which are short rounded vowels seen in the following English vowel charts.



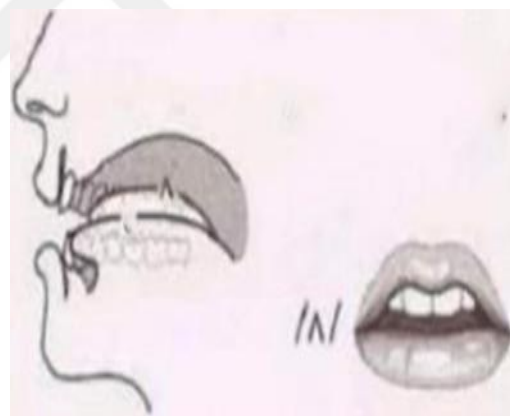
Adapted from Baker (2008: 25)



Adapted from Hamann & Schmitz (2005: 28)



Adapted from Baker (2008:35)



Adapted from Baker (2008: 38)

SINGLE OCCURRENCE OF /ɔ:/ SOUND

all /ɔ:l/	also /'ɔ:lsəʊ/
awful /'ɔ:fəl/	ball /bɔ:l/
board /bɔ:ɪd/	bored /bɔ:ɪd/
born /bɔ:ɪn/	bought /bɔ:t/
call /kɔ:l/	caught /kɔ:t /
cord /kɔ:ɪd/	court /kɔ:ɪt/
dawn /dɔ:n/	door /dɔ:ɪ/

four /fɔːɹ/	for /fɔːɹ/
former /'fɔːmər/	forward /'fɔːwərd/
horse /hɔːs/	jaw /dʒɔː/
law /lɔː/	lawn /lɔːn/
lord /lɔːd/	more /mɔː/
pause /pɔːz/	paw /pɔː/
pork /pɔːk/	port /pɔːt/
pour /pɔː/	raw /rɔː/
raw /rɔː/	short /ʃɔːt/
story /'stɔːi/	tall /tɔːl/
thought /θɔːt/	torn /tɔːn/
war /wɔː/	warm /wɔːm/

MINIMAL PAIRS-1

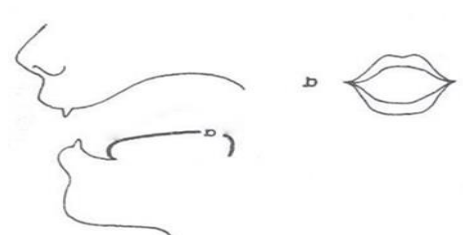
One approach to demonstrate the differences between short and long vowels is to highlight the difference presented in minimal pairs which pairs of words that have only one sound difference, in this case the vowel length, such as the examples given below: the learners can use the minimal pairs differences to model the different sounds for to copy the vowel length.

/ɔː/ vowel sound



four /fɔːɹ/
store /stɔːɹ/
cord /kɔːd/
court /kɔːt/
port /pɔːt/

/ɒ/ vowel sound



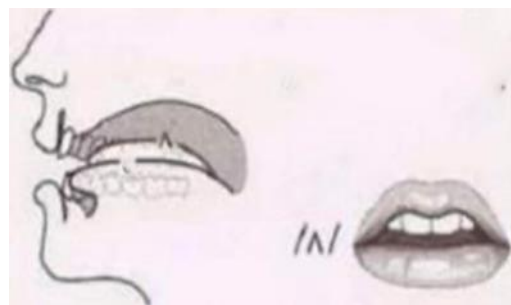
far /fɒɹ/
star /stɒɹ/
card /kɒd/
cart /kɒt/
part /pɑːt/

MINIMAL PAIRS-2

/ɔ:/ vowel sound



/ʌ/ vowel sound



bought /bɔ:t/

caller /'kɔ:lər/

caught / /kɔ:t/

dawn /dɔ:n/

but /bʌt/

color /'kʌl-ər/

cut / /kʌt/

done /dʌn/

EXERCISES

A. In which of the following options is there an [ɔ:] sound?

- | | | | | |
|-------------------|-----------------|----------------|------------------|------------------|
| 1. a) bell | b) sad | c) normal | d) bought | e) mad |
| 2. a) call | b) could | c) wood | d) tell | e) course |
| 3. a) more | b) moon | c) pond | d) pole | e) rope |
| 4. a) banana | b) bored | c) bake | d) make | e) cake |
| 5. a) awake | b) wake | c) warm | d) wet | e) wed |
| 6. a) toil | b)tail | c)tale | d) tall | e) tell |
| 7. a) lock | b) lord | c) lost | d) look | e) long |
| 8. a) joy | b) jail | c) jaw | d) junk | e) jung |

B. Read the following transcriptions of the names loudly

Lord /lɔ:rd/ Byron

Law /lɔ:/ and order

Chalkboard /'tʃɔ:kbɔ:rd/

C. Repeat the following tongue twisters

A story

Door

A story of horses

Four doors

A story of horses in a war

Four doors on the floor

A story of horses in a stormy war

Four doors on the floor in the store

The board

The pork

The chalkboard

The raw pork

The chalkboard is for all

The raw pork is not thought

The chalkboard is for all of four

The raw pork is not thought for the lord

The court

Call

The court for a law

Call Saul

The court for a law and more

Call the tall Saul

The court for a law and four more

Call the tall Saul in the dawn

D. REPEAT the following sentences loudly

1. The film made me bored yesterday.
2. Could you tell me more about yourself?
3. Why don't you pour Bob another drink?
4. This is the fourth great story that I have ever heard.
5. The pork that you cooked was awful!

E. REPEAT the following minimal sentences

1. It was **DONE/DAWN** when I was awake.
2. We can see the **CALLER/COLOR** through the door.
3. I see the **STAR/STORE** every night.
4. All people were in the **COURT/CART**.
5. That **PART/PORT** was not very good.

F. REPEAT the following sentences with contextual clues

1. Tell the **STORY** of the **SHORT LORD**.
2. The **DOOR** of the **COURT** is for **ALL** people.
3. **POUR FOUR MORE** glasses!
4. The **HORSE** was **BORN** in the **DAWN**.
5. The **TORN BALL** was **AWFUL**.

G. IDENTIFY /ɔ:/ the long vowel in the sentences of the short story

Joe told a horrible story but it was so boring. At first, I ignored it but it was pouring down outside, so I leaned forward to listen it. Suddenly, the door was knocked and everybody felt more and more worried but the door was opened, there were just four wet dogs.

APPENDIX 5: THESIS ORIGINALITY REPORT TARANIP EKLENECEK

Turnitin
Dijital Makbuz

Bu makbuz ödevinizin Turnitin'e ulaştığını bildirmektedir. Gönderiminize dair bilgiler şöyledir:

Gönderinizin ilk sayfası aşağıda gönderilmektedir.

Gönderen:	Melek Çakırcalı
Ödev başlığı:	The written perception of North Ame...
Gönderi Başlığı:	The written perception of North Ame...
Dosya adı:	Melek.pdf
Dosya boyutu:	2.89M
Sayfa sayısı:	92
Kelime sayısı:	31,543
Karakter sayısı:	160,529
Gönderim Tarihi:	14-Oca-2021 11:39AM (UTC+0300)
Gönderim Numarası:	1487349938

ABSTRACT

ÇAKIRCALI, Melek. The written perception of North American English Long Vowels (NAE) by non-native English Foreign Language instructors in Turkey. Master's Thesis, Ankara, 2019.

The aim of this research is to analyze the underlying phonetic process that non-native Turkish Foreign Language teachers go through in producing long vowels in North American English (NAE). Therefore, the target of the study is to concentrate on the perception and the production of long vowels by Turkish Foreign Language teachers who work at preparatory departments of universities and teach adults the NAE. Based on the concepts of recognition and production, the purpose of this paper is to measure the degree of knowledge of EFL non-native teachers about the long vowels in North American English (NAE) along with their awareness through written and production tests. 30 non-native teachers who work at universities will take place in the study. The participants are EFL teachers who work at preparatory schools of different universities. In order to collect data, a range of tests will be conducted in terms of the written test as instrument. Pre and post-test designs will be implemented and the numerical data will be obtained through SPSS package program (ANCOVA). The findings are expected to reveal in which tests (written) EFL non-native teachers at universities will be successful. According to the results of the written test, the most problematic long vowel sound will be tried to be found after the comparison between pre and post test scores that will enable non-native English teachers to improve the abilities of long vowels in NAE.

Keywords: Long Vowels, perception, pronunciation, aliphthong, North American English.

The written perception of North American English Long Vowels (NAE) by non-native English Foreign Language instructors in Turkey

ORIJINALLIK RAPORU

%3

BENZERLİK ENDEKSİ

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INTERNET
KAYNAKLARI

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YAYINLAR

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ÖĞRENCİ ÖDEVLERİ

APPENDIXES 7: YAYIMLAMA VE FİKRÎ MÜLKİYET HAKLARI BEYANI

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Kişisel Bilgiler

Adı Soyadı: Melek ÇAKIRCALI

Eğitim Durumu

Lisans Öğrenimi: Atılım Üniversitesi

Öğrenimi: İngiliz Dili ve Edebiyatı

Bildiği Yabancı Diller: İngilizce

İş Deneyimi

Çalıştığı Kurumlar: Amerikan Kültür Dil Okulları Kızılay Şubesi (Instructor -Kızılay Branch-)

Başkent Üniversitesi YDYO Temel İngilizce Birimi (Instructor)

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Tarih: 03.02.2021