

Exploring the Obstacles Faced by Iraqi EFL College Learners in the
Phonetic Transcription of English Vowels

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استكشاف العقبات التي يواجهها طلبة الكليات العراقية دارسي اللغة الانجليزية كلغة اجنبية في

ترميز حروف العلة

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Abstract

English phonetic transcription presents considerable difficulties for most EFL learners, because they initially expose to English through traditional English spelling rather than phonetic symbols. This study investigates the challenges faced by Iraqi EFL college learners in transcribing English diphthongs and triphthongs. The present study is conducted to answer the following questions: (1) What challenges do Iraqi EFL learners encounter in accurately transcribing diphthongs and triphthongs? (2) What are the common mistakes made by Iraqi EFL learners in transcribing English words containing diphthongs and triphthongs?. To address these questions, the following hypotheses were formulated: (1) Iraqi EFL learners face significant challenges in transcribing English diphthongs and triphthongs; (2) Iraq EFL Learners often struggle to differentiate between the phonetic symbols representing diphthongs and triphthongs. A descriptive quantitative approach was employed, using a test developed by the researcher and administered to a sample of 25 students from the Department of English at Al-Imam Kadhim College during the 2024–2023 academic year. The findings reveal that Iraqi EFL learners encounter substantial difficulties in transcribing these vowel sounds. While students performed better on recognition tasks, they struggled considerably with production tasks, particularly when required to provide full phonetic transcriptions. Furthermore, the results indicate that learners found diphthong transcription easier than triphthong transcription.

الملخص

يشكل الترميز الصوتي الانجليزي صعوبة لغالبية دارسي اللغة الانجليزية لأنهم تعرضوا في البداية للغة الانجليزية من خلال التهجئة الانجليزية التقليدية وليس الرموز الصوتية. حيث تهدف الدراسة الحالية الى استكشاف التحديات التي يواجهها الطلبة العراقيين دارسي اللغة الانجليزية

كلغة اجنبية في ترميز حروف العلة الثلاثية والمزدوجة في الكلمات. اجريت الدراسة الحالية للإجابة على الاسئلة التالية: ١. ما هي التحديات التي يواجهها الطلبة العراقيين دارسي اللغة الانجليزية كلغة اجنبية في ترميز حروف العلة المزدوجة والثلاثية. ٢. ما الاخطاء الشائعة لتي يرتكبها الطلبة العراقيين دارسي اللغة الاجنبية كلغة اجنبية عند ترميز الكلمات الانجليزية التي تحتوي على حروف العلة المزدوجة والثلاثية؟ لتحقيق اهداف الدراسة الحالية، صيغت الفرضيات التالية: ١. يواجه الطلبة العراقيين دارسي اللغة الانجليزية كلغة اجنبية تحديات كبيرة في مجال الترميز الصوتي بما في ذلك اصوات العلة المزدوجة والثلاثية. ٢. يواجه الطلبة العراقيون دراسو اللغة الانجليزية كلغة اجنبية صعوبة في التمييز بين الرموز الصوتية الخاصة بحروف العلة المزدوجة والثلاثية. ولتحقيق فرضيات الدراسة، اعد الباحث اختبارا وطبقة على عينة من الطلبة. وقد استخدم المنهج الوصفي الكمي. وبلغ عدد افراد العينة ٢٥ طالبا من قسم اللغة الانجليزية في كلية الامام الكاظم (عليه السلام) للعام الدراسي (٢٠٢٢-٢٠٢٣). وتشير نتائج الدراسة الى ان الطلبة العراقيين دارسي اللغة الانجليزية كلغة اجنبية يواجهون تحديات وصعوبات كبيرة في ترميز حروف العلة وخاصة الحروف الثلاثية. وكشفت الدراسة ايضا ان اداء الطلبة العراقيين كان أفضل في الاسئلة الموضوعية مقارنة بالأسئلة الانتاجية.

Introduction

Wells (2006) describes the term Phonetic transcription as “ the use of phonetic symbols to represent speech sounds” (p. 1). However, there are two main kinds of transcription: phonemic or broad transcription which is a system of applying basic symbols to represent the phonetic pronunciation of a word and differentiate between phonemes and usages the set of symbols, in contrast to phonetic or narrow transcription that includes a lot of details to capture the distinction between allophones that employ more precise symbols (Ladefoged & Johnson, 2011). Teaching phonetic transcription, According to Sonning (2013) is particularly helpful for students whose second language (L2) lacks a close grapheme-phoneme connection compared to their first language (L1). Since learners find it difficult to understand how spelling and pronunciation relate to one another in English, phonetic awareness is thought to help students with their pronunciation, Phonetic transcription, which visualizes pronunciation mistakes, according to Atkielski (2015), helps learners in understanding their errors.

Moreover, the common representation of speech sound in English is phonetic transcription. There is a symbol for each English sound. In most cases, phonetic transliteration is placed in brackets. Small members of consonants and phonemes may be recognized in many languages; however, due to the complexity of English spelling, specific letters or letter clusters may differ in various words. As a result, learning how to pronounce English words by using phonemes (symbols) rather than alphabetic letters is essential (Ladefoged & Johnson, 2011). EFL students need to know that if they desire to obtain native or near-native level English pronunciation, they must either get the words from native speakers directly or utilize English phonetic transcription. Every student who correctly translates words can correctly pronounce them (Gilakjani, 2016).

Furthermore, Vowels are the most difficult phonemes to master in phonetic transcription because there are different types of them such as long vowels, short vowels, diphthongs, and triphthongs, and the pronunciation nature of the vowels according to the place of manner and articulation is confusing.

2. Literature Review

2.1 Pronunciation.

According to Gilakjani (2016), pronunciation is the specific sounds that humans produce and utilize to express meaning. Pronunciation refers to the articulation of words; how a word is expressed, an acceptable method, and a graphical depiction of how a word is articulated through phonetic symbols.

According to Cakir et al. (2014), learners of foreign languages typically find it challenging to pronounce the target language since the new sounds do not always match those in their native tongue. Effective pronunciation encourages study and poor pronunciation makes teaching the language very difficult.

A small collection of distinct and recognizable symbols forms the foundation of written language. Spoken language emerges as a continuous entity characterized by an infinite array of elements.

2-2 Phonetic Transcriptions

Phonetic transcription is the process of encoding speech sounds using a phonetic symbol. Every sound in a verbal utterance should be written by a phonetic symbol (Wells, 2003: 1). According to Ochs (1979), the process of translating spoken words into symbols is not as simple as it may appear at first. Written language is a collection of a small number of clearly

identifiable and distinct symbols. On the other hand, spoken language is a ceaseless phenomenon with an almost limitless number of components.

According to Roach (2009), the words "transcription" and "writing" are interchangeable. Writing words or sentences phonetically, or utilizing phoneme and accent marks are referred to as phonetic transcription. Slant marks should always be used on both sides when writing anything phonetically, whether it's a phoneme, a word, or a sentence.

So it can be said that phonetic transcription is the employment of symbols to symbolize speech sounds (or phones). A phonetic alphabet is the most frequent method of phonetic transcription.

2-3 Phonetic Symbols:

The International Phonetic Alphabet (IPA) is an alphabet system in which every symbol corresponds to a definite English sound. Learners can master exactly the pronunciation of a word in English by utilizing IPA. Whether you learn English on your own or with a qualified teacher in an individual English Accent Training session, this may help you improve your English pronunciation and feel more confident in speaking English (Jones, 1949).

According to Jones (1949), the IPA isn't the only phonetic alphabet in use, Some academic traditions differ in minor details (for example, the usage of $\hat{S}$ in the place of $\int$ or y IPA j), while others differ in the number of symbols employed. The International Phonetic Alphabet (IPA) did not Emerge as the international standard for phonetic transcription. That its inventors planned, and it is used less often in America than in Europe. Despite its flaws, it is extensively used by linguists and dictionaries, but with various changes. (Abercrombie, 1953). However, there is no single 'IPA transcription' for each language, instead, there may be various methods, all using the IPA alphabet and all equally scientific (Wells, 2003).

2.4 English Vowels

As stated by Roach (2009), "vowels are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips". There are twenty vowels in English. Moreover, Vowels are sounds in which the vocal cords vibrate continuously and the air stream is permitted to pass from the mouth freely. Such as the English "ah" / α :/ or "oh" / ou /. Ladefoged & et al. (2004: 201) states that :

A vowel is a "sound at the center of a syllable in which there is no obstruction of the vocal tract. There are the basic parameters of most vowels which are the

three scales whose endpoints are traditionally called high and low, front and back. Many of the features required for linguistic descriptions of vowels have been established for some time"

Vowels are represented based on the following criteria:(i) The tongue height (ii) The tongue position whether it is raised or lowered(iii) The lips position (Roach, 2009). Furthermore, Vowels are the center or "peak" of a syllable. A syllable can be as simple as one vowel (V). Alternatively, A consonant can also be used to surround the vowel in the syllable on one or both sides (Ibid).

2.5 Types of Vowels

Vowels are made when the air passes freely through various month-shape. Differences in the placement of the tongue and lips cause differences in the shape of the month. The primary Vowel letters are a, e, i, o, and u. But, there are several kinds of vowels relying on how they sound when we spell them (O'Connor, 1980)

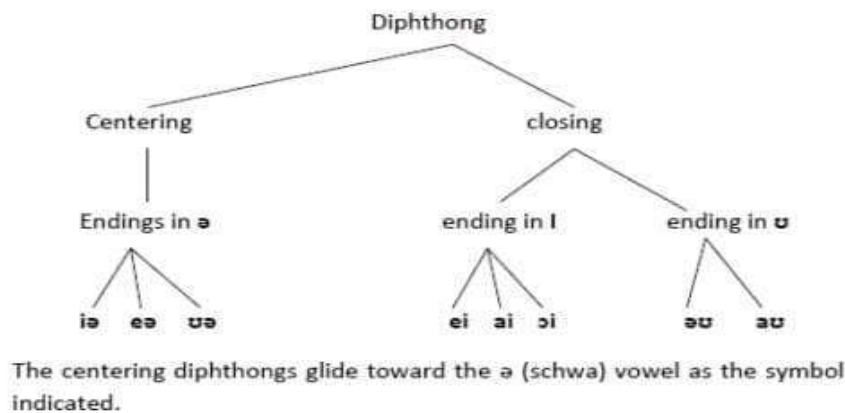
Stevens (1998: 50) states that the English phonemic system has twelve pure or (simple) vowels, eight diphthongs, and five triphthongs. The corresponding phonetic symbols for these are as follows ;

1. (Pure Vowels) (“/i:/, /ɪ/, /ʊ/, /u:/, /e/, /ə/, /ɜ:/, /ɔ:/, /æ/, /ʌ/, /ɑ:/”)
2. (Diphthongs) (“ aɪ / , /eɪ/ , /əʊ/ , /aʊ/ , /eə/ , /ɪə/ , /ɔɪ/ , /ʊə/”)
3. (Triphthongs)(“/aʊə/ , /eɪə/ , /əʊə/ , /ɔɪə/ , /aɪə/”)

2.5.1 English Diphthong:

According to Roach (2009), a sound is created by movement between two vowel elements. In contrast to the pure vowel, the vowel stays the same and does not move to another sound. One of the most popular oral communication mistakes that comes from a second language learner is a product of monophthong instead of diphthong sounds. Chomsky and Halle (1968: 24) mention that “diphthongs have been described as a sequence of two vowels pronounced together, the two vocalic elements being members of the same syllable. It is difficult to distinguish between a genuine diphthong from sequences of a vowel and a semivowel”

Diphthongs are like long vowels in terms of length. The initial components of every diphthong are tenseness and fortis than the second part. There are eight diphthongs in all (O'Conner, 1980). The simplest method to remember them is to divide them into three categories, as shown in this diagram:



One of the characteristics of The closing diphthongs is that they have a movement toward a vowel at the end. The weakness of the second sound in diphthongs prohibits the sounds from gaining a completely closed articulation position. Yule (2006) defines diphthong sounds as compound vowel sounds. In every instance, they initiate with a vowel sound and finish with the glides. In the articulation of some individual vowel sounds, our vocal organs take on a fixed position, whereas, in the articulation of diphthongs, our organs move from one sound to another during sound production.

2.5.2 English Triphthongs:

According to Roach, (2009), Triphthongs are the most complicated vowel sounds in English. They're not easy to articulate and difficult to identify. A triphthong is an uninterrupted transition from one vowel occurrence to another and subsequently to a third vowel.

For instance, a slow articulation of the word 'hour' initiates with a vowel aspect that is similar to the sound α , and moves towards the vowel (schwa, ə). The phonetic symbol aʊə used to symbolize how we articulate the word 'hour' (Roach, 2009). The triphthong is a combination of the five closing diphthongs listed on the previous page, plus a final shwa.

The main source of difficulties for a foreign student is that the lengthening of vowel symbols in modern English is extremely modest, particularly in very tiny sounds. The center of /o/ the triphthong's three vowel characteristics (that is, i or ʊ) is difficult to hear because the come-out sound is hard to distinguish from many compound sounds and vowels. To further complicate the matters, there is an issue of whether the diphthong sound appears to include one or two syllables. The articulation

of these words ('fire' / faɪə / or 'hour' / aʊə / with BBC accent, are most likely understood by almost English speakers to have only one syllable, while other words such as 'player' /pleɪə/ or 'slower' / sleʊə / have two syllables (Ibid)

3. Methodology:

3.1 Research Method:

This research used a descriptive quantitative method. According to Khotari (2007), quantitative research employs methods and measures to generate quantifiable/discrete values. The reason for choosing this approach is to provide the findings of the data analysis as numerical results so that the readers might comprehend the research's findings more easily

3.2 Study Population and Sample

The participants of this study comprise Iraqi EFL 2nd year university students at the Department of English/ College of Education/ Al-Imam Kadhim College during the academic year 2023-2024. The total population was 25 students. The sample was chosen randomly. The reason for selecting this stage is that they have already practiced pronunciation.

3.3 Instruments:

In this research, the researcher used a test that contains two questions; each one consists of six words shown for clarification. The words used in this study were (12). They were collected from the book entitled "English Phonetics and Phonology" by Peter Roach (2009). The sample of the study was given 30 minutes to read the text and to ensure proper transcription, the pupils were not permitted to use dictionaries. In the test, each student must write the exact transcription of the words in the first question, as well as pick the right diphthongs or triphthongs to fulfill the transcription of the remaining words in the second question.

3.4 Validity and Reliability

The researcher uses "Reliability and validity" to evaluate his work because these terms are very closely related. There are two validity forms, including apparent validity and relevance validity, etc. Both face validity and content validity are the appropriate ways to determine whether or not the test is valid for the aim of this study. So to confirm the content and the face validity of the test, it has been presented to two instructors to verify that the the test is valid.

The concept of reliability is closely linked to objectivity. It refers to the stability of the scores obtained from a test "The rule is then the more objective a test, the more reliable it is" (Bachman, 1990). The

Alpha-Cronbach equation is applied and the reliability of the test is 0.80, it is considered an acceptable one. According to Bachman (1990:259), the test reliability is acceptable if it is not less than 0.50.

4. Data Analysis

To begin, the researcher statistically examines the data using frequencies and percentages, as well as a graphical representation for each table.

4.1 Frequency and Percentage of the first question:

Table (1)

Statement	True=1	False=2
transcription of bought	8	17
	32.0%	67.0%
transcription of hour	4	21
	16.0%	84.0%
transcription of noise	0	25
	0%	100.0%
transcription of player	2	23
	8.0%	92.0%
transcription of broad	6	19
	24.0%	76.0%
transcription of loyal	4	21

Table (1) displays the repetition and proportion of the first question. As observed, in writing down the phonetic symbol for the word 'bought', students achieve (8) exact answers with a proportion (of 32.0%) while they obtain (17) wrong answers with a proportion of (67%). In writing the phonetic symbol for the word 'hour', just (4) students got the accurate answer while (21) got an inaccurate answer with proportion (16%) and (84%).

In transcribing the word 'noise', (0) students obtain the exact answer while (25) obtain an inexact answer with proportion (0%) and (100%) severally.

The table also shows that just (2) students succeeded in transcribing the word 'player' while (23) failed to obtain the exact answer. The reason for this result is that the transcription of "player" is difficult for the students. Similarly, in the word 'loyal', students must obtain (4) exact answers and (21) wrong answers with proportion (16%) and (84%) accordingly. While the word 'broad' students make more substantial progress than they make

in the early words. Since (6) of them obtain the right answer while (19) obtain the wrong answer with proportion (16%) and (83%).

4-2 Descriptive Statistics of the First Question

Table (2)

Statement	Mean	mode	Std. Deviation
Phonetic representation of bought	1.6800	2.00	.47589
Phonetic representation of the hour	1.8400	2.00	.37417
Phonetic representation of noise	2.0000	2.00	.00000
Phonetic representation of the player	1.9200	2.00	.27689
Phonetic representation of broad	2.7600	2.00	.43589
Phonetic representation of loyal	1.8400	2.00	.37417

Table 2 points out the descriptive results of question one. This table contains three columns, The second one stands for the average measure for the transcription of each word. The third one stands for the most repeated response by students whereas, the last one stands for the standard deviation.

As observed in Table 2, the third column value (2) demonstrates that students frequently write the incorrect answers rather than the correct ones. The first column (2) indicates that as well.

4-3 Frequency and Percentage of Second Question:

Table (3)

Statement	True=1	False=2
Phonetic representation of lower	16	9
	64.0%	36.0%
Phonetic representation of fire	15	10
	60.0%	40.0%
Phonetic representation of a lawyer	15	10
	60.0%	40.0%
Phonetic representation of care	20	5
	80.0%	20.0%
Phonetic representation of brown	16	9
	64.0%	36.0%
Phonetic representation of near	20	5
	80.0%	20.0%

The table above displays the repetition and proportion of the second question in which the students are asked to choose the right phonetic symbol of the word. As observed, in choosing the right triphthongs to fulfill the transcription of the word ' lower ', students obtained (16) right answers

with a proportion (64%) whereas, they obtained (9) wrong responses with a proportion of (36%).

About (15) students succeeded in getting a suitable Triphthong to fulfill the transcription of the word ' fire ' while (10) of them did not succeed in obtaining the exact answer, with proportions (60%) and (40%). As seen in the previous case, almost all of the students succeeded in choosing the exact diphthong to fulfill the phonetic transcription of the word ' lawyer where (15) of the students chose the exact answer with a proportion (60%) whereas (10) of them chose the wrong answer with proportion about (40%).

It is understood that students are significantly improved in writing the completing transcription of words. In determining the exact diphthong to finish the transcription of the word ' care ', (20) students obtained the exact response while (5) of them obtained the wrong response with proportion (80%) and (20%) respectively. As indicated by the data, students provide more correct answers than incorrect ones. About (16) students succeeded in getting suitable diphthongs to fulfill the phonetic transcription of the word ' brown ' on the other hand, the other (9) were unable to provide the correct answer, with percentages (64%) and (36%). As observed in this table, most of the students do well in selecting the exact diphthong symbol to finish the transcription of ' near ' where (20) individuals obtain the exact answer with a proportion (80%) while (5) obtain the incorrect answer with proportion (20%). The reason for this result is that this word is simply similar to the earlier one in this question.

4-4 Descriptive Statistics of the Second Question:

Table (4)

Statement	Mean	mode	Std. Deviation
Phonetic representation of lower	1.3600	1.00	.48990
Phonetic representation of fire	1.4000	1.00	.50000
Phonetic representation of a lawyer	1.4000	1.00	.50000
Phonetic representation of care	1.2000	1.00	.40825
Phonetic representation of brown	1.3600	1.00	.48990
Phonetic representation of near	1.2000	1.00	.40825

As observed in this table, the mode value (1) shows that students chose the right response many times. This result is approved by the average.

4.5 The results

To examine the findings according to the hypotheses of the study, it inferred that Iraqi EFL college learners encounter challenges concerning the English phonetic transcription including triphthongs and diphthongs. It

is found that the finding approved the first hypothesis. It is clear from the findings of question number one that the whole students do not succeed in transcribing the common word 'noise'. The proportion of responses to the six words in this question is 0%, 16%, 24%, 32%, 8% and 16% respectively. This points out that the proportions are extremely low and the reason behind this result is that the EFL learners do not do transcription exercises inside or outside the classroom, and due to this, the learners will have many mistakes in producing the pronunciation of many words.

Based on the findings of the study, it was found that many EFL learners are not capable of identifying the phonetic symbols representing diphthongs and triphthongs. As shown in Question Two, the percentages of correct transcription for the six target words were 64%, 60%, 64%, 60%, 80%, and 80%, respectively. These relatively high percentages suggest a strong ability among learners to accurately identify the correct transcription of diphthongs. However, the results also reveal a notable weakness in identifying the correct transcription of triphthongs, indicating a disparity in learners' phonological competence across these vowel types. Consequently, the outcomes of question two provide empirical support for hypothesis 2, which posited that Iraqi EFL learners may struggle to differentiate between the phonetic symbols of diphthongs and triphthongs. Moreover, the researcher observed that EFL learners performed significantly better when the task involved selecting the appropriate phonetic symbols to complete the transcription of words or identifying the correct transcription by circling it, as required in question two.

5.1 Conclusion

The study reveals that Iraqi EFL college learners face significant difficulties in accurately transcribing English diphthongs and triphthongs. The results show a high rate of errors, with most students unable to correctly transcribe words containing these triphthong vowel sounds. It was also observed that Iraqi EFL students exhibit a clear ability to identify and distinguish phonetic symbols, particularly in the case of diphthongs. The findings confirm that learners struggle both with recognizing and differentiating the phonetic symbols for diphthongs and triphthongs. Additionally, the study concluded that Iraqi EFL college learners perform significantly better on recognition-based tasks, such as selecting appropriate phonetic symbols to complete word transcriptions or identifying the correct transcription from multiple options. However, they demonstrate considerable difficulty—and in many cases, complete failure—when required to independently transcribe given words. The

results highlight the need for more targeted instruction and practice in this challenging area of English phonetics for Iraqi EFL learners.

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