

The Role of Accurate Pronunciation in Determining Intelligibility of Speech

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Abstract

If we learn a language, we must learn to produce its sounds. The learner's ability to communicate effectively in the foreign language depends on his mastery of its sound system. This paper is an experimental investigation of accurate pronunciation by Iraqi advanced learners. It comprises four sections, one appendix and a bibliography.

Section one serves an introduction to the whole study. It introduces the reader to the problem of the study. It also includes the aims of the study, hypothesis, the procedures and the significance of the study.

Section two presents a survey of the concept of intelligibility, Factors affecting and methods used in measuring intelligibility.

Section three outlines English sound system, English vowels and it ends up with non-linguistic factors.

Section four is the experimental part of this paper. It deals with a description of the test and outlines the student's errors have been analyzed.

The possible causes of their errors have been identified and accordingly conclusions have been drawn.

Section One

Introduction

1.1 The Problem

English sound system is very important to be mastered by learners of foreign languages. Since language is basically oral, learners should be well trained to produce near- native sounds in order to communicate with others effectively. Writing is also necessary tool for effective communication. Since language is a means of communication and communication is carried through pronunciation the intelligibility of spoken communication depends on accurate pronunciation.

According to his experience as a teacher, the researcher has come to the fact that inaccurate pronunciation represents a problematic area not only to students but also to teachers themselves. Few have specialized in teaching phonetics and phonology. Iraqi students learning English as a foreign language encounter pronunciation problems arising from the fact that English students in Iraqi universities may find difficulty in understanding spoken language said by native speakers of English.

1.2 The Aims of the Study

The present paper aims at:

- 1- Identifying areas of difficulty in the intelligibility of English pronunciation of Iraqi EFL learners by the semi-native speaker (the researcher himself).
- 2- Illustrating the main types of errors and specifying the sources behind them.

1.3 Hypothesis

It is hypothesized that Iraqi students learning English as a foreign language encounter problems in listening to the speech of native speaker of English.

1.4 The Procedures

The present paper consists of two parts. The first part is theoretical which starts with the concept of intelligibility and it ends up with non-linguistic factors. The second part, however, is practical which includes a test to examine the performance of students in producing the test items. The last step is to analyze the results of the test and to make a statistical evaluation of the find results.

1.5 The significance of the Study

The value of the present paper lies in the fact that the paper will be useful to teachers by enabling them to cope better and more effectively with the intelligibility of their students in the classroom.

Section Two

2.1 The Concept of Intelligibility

The concept of intelligibility is still one of those concepts in need of investigation in order to understand the nature of the process.

It has been found out that there is an agreement among linguists on defining the concept of intelligibility as "understanding".

The purpose behind this section is to introduce a number of definitions of "Intelligibility" in order to establish the foundation for the present paper.

Intelligibility is defined by different specialists differently. Some are given below:

Richards (1985: 144) defines intelligibility as the degree to which a message can be understood.

Catford (1967: 143) defines intelligibility as the ability to hear and recognize words and larger utterances.

This paper, intelligibility is defined as the hearer's and speaker's ability to understand an oral message and to produce on the basis of intelligibility a proper written message.

2.2 Factors affecting Intelligibility

factors, such as age, sex, occupation, educational background and voice quality which represent one of the most clues to a speaker's identity might affect intelligibility. These factors are of crucial importance and must be taken into consideration in teaching. A factor such as age is an important one since the distinctions in age might possibly affect the results of the study. The researcher takes into consideration such factor so the similarity in age among students could be more practical. The present paper practices the topic under investigation on both sexes. According to occupation, there is no difference concerning the subjects' professions. Instead they all have the same properties of expertise.

2.3 Methods Used in Measuring Intelligibility

Lane (1963: 52) measures intelligibility by counting the total number of words listeners transcribed correctly.

Barefoot (1993) however, counts percentages of key words

recognized.

Intelligibility in this paper means the transmission of a message from a speaker to a listener. The speaker is the researcher himself whose message is recorded on a cassette. The listeners are Iraqi college students to be tested on the production level in which, the learners are asked to read the test items in normal speed and to be judged by the researcher to indicate whether their production is intelligible or not.

Section Three

3.1 English sound system

O'Connor (1980: 138) reports that when we start to listen to a foreign language, we hear some of the sounds as the same as those in our native language and some as different. We are generally wrong. They are much more likely to be all different but the ones we think are the same are near enough for us to make a phonemic identification. It is extremely difficult to hear unfamiliar phonemes.

Speech sounds in English can be classified into two segmental groups, vowels and consonants. The consonantal group includes (24) phonemes, whereas the vowel group includes (20) speech sounds. It is often helpful to show the students how the sounds are produced.

In some cases, the teacher can demonstrate by pointing to the parts of the mouth that are used, certain related basic elements of the English sound system will be shown below:

3.1.1 English Vowels

English vowels are classified into two groups, the pure vowels (short and long) and the glides (diphthongs and triphthongs). The English pure vowels are twelve: /i, i:, e, ^, o, o:, u, u:, a, a:, @, @:/, where as the diphthongs are eight: /i@, e@, u@, ei, ai, oi, ou, au/. For producing triphthongs, diphthong glides into a third vowel quality, which is always /@/ and thus producing five glides: /ei@, ai@, oi@, ou@/ and ou@.

For any description of the English vowels, the phonetician relates the described vowels to three primary factors.

- 1- Part of the tongue (i.e.. front, central or back).
- 2- Height of the tongue (i.e., the distance between the part of

the tongue and mouth roof).

- 3- The shape of the lips (i.e, whether rounded, spread or neutral). Roach (1991: 14-24):

3.1.2 English Consonants

English has 24 consonantal phonemes: sixteen of them are voiced: /b, d, g, v, z, ɖ, ʒ, m, n, ŋ, h, l, r, w, j/. and the other eight are voiceless: /p, t, k, f, θ, s, ʃ, tʃ/. Each consonantal phonemes can be defined according to its place and manner of articulation. This can be indicated as follows:

Place of Articulation

Manner of Articulation		Bilabial	Labio-Dental	Dental	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
	Plosives	pb			t, d			k, g	
	Fricatives		Fv	θ ð	s z	ʃ ʒ			h
	Affricates					tʃ, dʒ			
	Nasals	m			n			ŋ	
	Liquids				l	r			
	semi vowels	w					j		

3.2 English Stress Pattern

Stress placement has an essential and extra- ordinary role in the pronunciation of English words. According to Roach (1999: 103) and Jones (1967: 136), just like many other languages, English syllables, are either stressed or unstressed, when syllable is said to be stressed this means that the syllable has been uttered with more muscular effort, increased air pressure and greater amplitude of vibration.

Roach (1991: 86) distinguishes four different kinds of phonetic prominence: (1) prominence of pitch, (2) prominence: of duration, (3) prominence of vowel quality, (4) prominence of loudness, English stress, however, is of two types; primary and secondary. The former is marked with the stress mark (1) before the syllable, and the latter is marked (1) before the syllable. In mono syllabic words, there can be only one stressed syllable which is a primary stress. The location of primary stress in disyllabic, trisyllabic or polysyllabic syllables varies from one word to another.

Gormbaum (1996: 493) believes that it is not easy task to establish rules that determine where to place the primary and the secondary stress, such vules are extremely complex and admit numerous exceptions, e.g.,

	Examples	Gloss
Disyllabic words	/ ¹ pɪktsə/	Picture
	/bɪ ¹ haɪnd/	Behind
Trisyllabic words	/ ¹ pɜː fɪktli/	Perfectly
	/kəmp ¹ liːtli/	Completely
Polysyllabic words	/fə ¹ tɒgrəfi/	Photography

Abbott et al (1981: 45) agree that it turns necessary for the teacher to exploit certain rules of English stress pattern. In certain occasions an English word is distinguisihed solely by stress as in (be¹low- ¹billow). More commonly, stress can change the grammatical word class as in the case where some disyllabic verbs are distinguished from corresponding nouns or adjectives in that the verbs receives the mary stress on the second syllable, where as the nouns or adjectives place it on the first syllable. Such distinctions are usually accompanied by changes in vowel qualities, e.g.,

Noun /Adjective	Verb	Gloss
/ ¹ kɒndʌkt/	/kən ¹ dʌkt/	Conduct
/ ¹ ɒbdʒɪkt/	/əb ¹ dʒekt/	Object
/ ¹ prɒdʒuːs/	/prə ¹ dʒuːs/	Produce
/ ¹ sʌbdʒɪkt/	/səb ¹ dʒekt/	Subject

3.3 English Spelling system

There is a traditional complaint among foreign learners of English causes a real problem in learning since it is full with irregularities.

3.3.1 Historical Background and Attitudes

It is clear that English has changed throughout historical events that determined and paved the way for the creation of the spelling system. English was the area where different tribes and communities immigrated and refuged. Consequently, different languages influenced the English spelling system.

The English spelling system remains under the debates of different views, some are negative calling for reforms, others are positive. Taylor (1981: 316) and Thornton (1980: 47) agree that English spelling system is a help rather than a hindrance and the impression of its being difficult is an exaggeration. The second view regards this system as inefficient shows that English spelling system is difficult to be learned by the foreigners and the native speakers as well. The reason behind such an attitude is the absence of constant relationship between phonemes and graphemes.

3.3.2 Spelling Pronunciation

Lado (1957: 20) shows two reasons behind committing spelling pronunciation. The first one is related to cases where the native and the foreign languages manipulate similar alphabets; a symbol that represents a particular sound in the native is indifferently pronounced in the foreign language as well. The second reason on spelling pronunciation is attributed to the confusing nature of the English spelling system.

Any foreign learner of English as well as native one may be puzzled out since there is no constant relation between English phonemes and graphemes.

Therefore, it is importees to discriminate between the spoken and written form of English since the writing system is confusing in

nature. The irregularities of this system can be summed up as follows:

- 1- A Single phoneme may be represented by different letters, e.g., the phoneme /i/ is spelt as: **i** (sit, with, rich), **e** (pretty, needed, wicked), **a** (village, private).
- 2- A Single letter may represent different phoneme, e.g., the grapheme **e** is pronounced as: /i/ (houses, wicked), /e/ (set, bed, went), and /i:/ (complete, be, these).
- 3- A Sing phoneme may be reprsented by different combinations of letters, e.g., the phoneme /i:/ can be spelt: **ea** (leaf, reason), **ie** (piece, fieled), **ei** (seize, receive) and **ey** (key).
- 4- Some letters represent no phonemes i.e., they are silent letters, e.g., **k** (knight), **S** (island), **l** (calm), **g** (sign), **gh** (light).
- 5- There are phonemes without equivalent graphemes, e.g., the phoneme /tʃ/ in (chat, natural, Christian).
- 6- A germination of the same letter may represent one phoneme, e.g., (bigger, letter, ladder, cheese).
- 7- Sometimes the learner of English is puzzled whether to follow the Oxford manner in writing words like (abridgement, acknowledgement, judgment), or to use the Cambridge manner of writing as (abridgment, acknowledgment, judgment). Therefore, it seems quite evident that, as far as the foreign learners are concerned, mispronunciation is often expected in learning English since spelling is misleading in nature.

3.4 Interference

Interference, very often, constitutes a major difficulty confronting any foreign language learner. This notion was firstly introduced and described by lado (1957), where emphasized the transfere of some aspects that hurdle any aspects, rather they can be classified into two primary subsections; linguistic and non- linguistic.

3.4.1 Linguistic Factors

One of the major terms offered by the proponents of contrastive linguistics is that of 'transfere'. lado (1964: 72) defines it as the

extension of a native language habits into the target language with or without the awareness of the learner. The learner filters the foreign words in the mould of his native system. When such a transference is acceptable, it is termed as facilitation, otherwise, it is called interference.

Interference is more obvious in the level of phonology. Al-Hamash (1976: 15) believes that each language distributes and arranges its phonemes, either singly or in cluster. When the two languages, native and foreign share similar phonemes, no difficulties are encountered, hence, the learner will not substitute the phoneme by another, i.e., no interference exists (Othman, 1977: 27).

The child who learns his native language differs from the one who learns a foreign language; there are differences in time, motive and other related environments; this native language is a well established language. Therefore, when a child learns his mother tongue, he learns to hold on to anything he finds to assist in the process of communication in the first language (Mac carthy, 1978: 14).

Rivers (1983: 92) shows that a second language, similar to that of a native, may start from as early as age two. For this reason a foreign language may have a powerful influence on the general pronunciation of the bilingual speakers. The second language is usually used by the bilinguals in order to interact out of class with native speakers, they may have found a variant of the language. The acquisition of the foreign language may start as late as twenty and even more (Ibid).

Learning a native language differs from learning a foreign language in the area of error- reform. When a child commits mistakes in his native tongue, he is welcomed and encouraged by his parents. Where as a child is usually blamed or laughed at as he mispronounces words in the foreign languages (Rivers, 1983: 83).

3.4.2 Non- Linguistic Factors

In fact, there are certain errors committed by foreign language

learners which are attributed to factors other than the language itself. According to Lado (1957: 11), such factors can be divided into: age, qualified teachers, time, teaching programme, advocacy and the number of the students in the classes. It is true that the preferred age to start teaching a foreign language is still under debate. Nevertheless, it is generally agreed that teaching children a foreign language should start with oral forms since pronunciation becomes more difficult after early adolescence.

There are some factors that block up any learning process in general, and pronunciation in particular. Al-Hamash (1976: 35) shows problematic factors attributed to the individual learners themselves. The intellectual capacities and psychological reactions including shyness, timidity and lack of motivation vary from one learner to another. He adds that, sometimes, learning deficiencies are caused by physical defects (such as perception, sight, and articulation).

Section Four

4. The Test's Results presentation

This section is devoted to show the general subjects' performance in the intelligibility of segmental and suprasegmental aspects (stress) of Iraqi college students at production level only. Then, the discussion moves to tackle the students' responses after discussing error analysis in general.

The researcher has tested (50) students. They belong to the Iraqia University, college of Arts during the academic year 2012. They are selected randomly from the third year. It is also worth mentioning that the test consisting of one question comprising (100) items.

The student's pronunciation is recorded while reading the test items which are selected to measure a particular area in their pronunciation. The performance of each student is recorded separately on a tape recorder.

The student's production of the test items are compared with that of semi-native speakers of Received Pronunciation the researcher

himself and scored on right- wrong basis. Each correct item is given one mark and incorrect one is given a zero. The entire test has been scored out of (100) one hundred.

The researcher, in this test, tries to find out the students general performance and scores mean in producing segmental and some supra segmental aspects (stress only).

After surveying the students' responses, it has been shown that they face difficulties in mastering English pronunciation. The results of the students performance of the whole test are presented in the following table:

The Intelligibility of Segmental and Suprasegmental Sounds on Production Level

Table One

Item	Correct	Errors	Item	Correct	Errors	Item	Correct	Errors
1	30	70	34	50	50	67	40	60
2	23	77	35	30	70	68	40	60
3	40	60	36	20	80	69	30	70
4	60	40	37	70	30	70	20	80
5	50	50	38	40	60	71	30	70
6	40	60	39	20	80	72	50	50
7	30	70	40	30	70	73	45	55
8	30	54	41	32	68	74	40	60
9	20	80	42	10	90	75	35	65
10	18	82	43	30	70	76	30	70
11	40	60	44	65	35	77	50	50
12	45	55	45	40	60	78	30	70
13	40	60	46	10	90	79	30	70
14	30	70	47	12	88	80	45	55
15	30	70	48	20	80	81	40	60
16	10	90	49	30	70	82	50	50
17	15	85	50	15	85	83	40	55
18	20	80	51	20	80	84	40	60

19	20	80	52	10	90	85	50	50
20	20	80	53	30	70	86	60	40
21	18	82	54	10	90	87	30	70
22	10	90	55	20	80	88	10	90
23	20	80	56	60	40	89	40	60
24	30	70	57	55	45	90	30	70
25	10	90	58	30	70	91	35	65
26	40	60	59	50	50	92	10	90
27	30	70	60	40	60	93	12	88
28	50	50	61	50	50	94	20	80
29	40	60	62	60	40	95	14	86
30	60	40	63	40	60	96	10	90
31	5	95	64	60	40	97	12	88
32	20	80	65	40	60	98	24	76
33	5	95	66	70	40	99	12	88
						100	30	70
							2000	3000
							40%	60%

4.1 Interpretation of the Results

The results reveal that there are problematic areas in producing segmental and suprasegmental aspects (stress). To put it differently, the pronunciation of English consonants and vowels is a real problem for the present subjects.

4.1.1 Consonants

The major problem detected in this respect is found in the pronunciation of the English phonemes /p/, /v/, /ŋ/ and /ʒ/. These sounds cause a real difficulty for the learners of English since they have no equivalent counterpart in Arabic. It seems that students tend to use the rules of their native language in the production of some English sounds; or, particularly the sounds that have no counterparts in Arabic.

For instance, many of the students confuse the sounds /ŋ/, /p/, /v/

with /ŋg/, /b/, /f/ asin (spring, pin, five) they pronounce them as /sbrɪŋg/, /bɪn/, /faɪf/ respectively. Such mispronunciation can be attributed to two major causes, one of which is absence of the sound in the language with which the students are familiar. The other cause may be attributed to the model himself. In other words, such errors attributed to negative interference. Items of this type of errors are (3, 4, 5, 6, 7, 10, 11, 16, 30, 34, 41, 54, 58, 68, 71, 82, 83, 97, 98, 99) (see appendix)

According to table (1), the students tend to break cluster of more than two- elements. They tend to insert vowels between the final and the second element or between the second and the third element in different word position, e.g., they pronounce (street, English, films) as /sitriit/, /lŋgilɪf /, /filimz/ respectively. These errors are partly due to inadequate knowledge of the nature of English consonantal clusters but primarily to mother- tongue interference. Items of this type of errors are (4, 12, 14, 15, 16, 17, 18, 24, 36, 45, 53, 55) (see appendix).

It has been viewed throughout the present test that, there are numbers of pronunciation errors committed by students of English due to spelling pronunciation. For example Most the students have faultly pronounced /ð/ in breathe as /θ/. Such an error can be attributed to a confusion between the verb forms as opposed to their noun forms.

Checking the results of this test, it is clear that the students fail to produce /p/ in (pin) with aspiration and /p/ in (spin) without aspiration. This may be due to the fact that the students do not know that phonemes /p/, /t/, /k/ are pronounced in different ways. They are aspirated at the beginning of the word. They are unaspirated in the middle of the word and if they are preceded by /s/. Items of this type of errors are (7, 11, 12, 17, 18, 32, 43, 51, 62, 90) (see appendix).

In the production of syllabic consonants, students fail to produce syllabic /n/, /l/. The reason for that is attributed to the Arabic phonological system. They insert a vowel before these sounds. Items of this type of errors are (59, 63, 87, 91) (see appendix).

Some errors may be attributed to the orthographic system of English. For example, the letter (ch) is pronounced /tʃ/ in (chauffeur).

The letter g is pronounced /dʒ/ in (reign). The letter d is pronounced /d/ in (asked). The letter b is not pronounced in (comb). The letter l is pronounced in (calf). The letter n is pronounced in (hymn). Items of this type of errors are (10, 14, 19, 20, 21, 22, 23, 24, 29, 31, 32, 33, 35, 39, 40, 41, 42, 43, 46, 47, 48, 49, 51, 52, 88) (see appendix).

4.1.2 Vowels

The major type of error detected in the analysis of the test is that of mispronunciation. As For as vowels are concerned, the results reveal that the chief type of error confronting learners of English are mispronunciation and deficient reading of words (see Table one).

Some of the mispronunciations committed by learners of English can be related the difference between the learner's stored sound system and that of the English language. It is quite evident that some English sounds are unfamiliar to learners because they do not get proper ear- training on the sounds. According to table (1), Diphthongs like /ei/ and /eə/, are replaced by pure vowel (e). Items of this type of errors are (6, 26, 27, 33, 62, 63, 67, 75, 77, 88). Diphthong /ou/ is often realized as /o:/ in words like (photograph) /fo:təgra:f/. The long vowels /ɜ:/, a: , o:/ are often pronounced as short vowels when they occur in words with letter combination: (ur), (ar), or (our). For instance, words like (church) is often mispronounced as /ts ə ts/. Items of this type of errors are (8, 38, 56, 69, 70) (see appendix).

Many of the errors are chiefly related to the influence of the English or the graphic system. It has been found from the analysis of the students performance that they are highly misled by the spelling form because the students expect a similar simplicity in English. Words like (church), (colour), (airport), (earring) are often mispronounced as /tʃɜrtʃ/, /kolə/, /erport/, /erɪŋ/ respectively. Such errors may be attributed to the context of learning Many students fail to give sufficient length to some vowels and produced by students as short vowel. Items of such errors are (8, 15, 21, 31, 39, 43, 48 53, 58, 69, 70, 78) (see appendix). Such errors may be attributed to inadequate knowledge of the nature of English vowels.

4.1.3 Stress

A number of incorrect pronunciations can be attributed to errors in the placement of stress. Further investigation in this area reveals that learners of English often attempt to stress the final syllable of the foreign words in conformity with their native stress pattern. The learners adhere to this procedure even when the word suggests a stress on the first syllable.

The results indicate that most students produce stress pattern in their English speech that are remote from those of native speakers of English. Therefore misplacement of stress by students constitute the most frequent cause of intelligibility failure.

The analysis of the results can be summarized into the following four primary cases. Some short vowels are changed into long one as they receive primary stress:

Word	Correct Pronunciation	incorrect
/i/ → /i:/ economics /ikono ¹ mi:k/	/i: kə ¹ nomik/	
/e/ → /i:/ countless /kaunt ¹ li:s/	/ ¹ kauntlɪs/	
/i/ → /i:/ practice	/ ¹ praktis/	/prak ¹ t i:s/
/ə/ → /ɛ:/ easterm	/ ¹ i:stɜn/	/ ¹ istɜ:n/

- Some long vowels are changed into short ones as they lose their primary stress.

Word	Correct Pronunciation	incorrect
/i:/ → /i/ eastern	/ ¹ i: stɜn/	/is ¹ tɜ:n/
/ə/ → /e/ earrings	/ ¹ ɛ:riŋz/	/er ¹ ni:ŋgz/
/a:/ → /a/ armour	/ ¹ a:mɜ/	/ar ¹ mo:r/
/o:/ → /o/ organize	/ ¹ O:gɜnaiz/	/orgɜ ¹ naiz/

* Some diphthongs are changed into pure long vowels due to stress shifting.

Word	Correct	incorrect
/ou/ → /o:/ formost	/ ¹ fo:moust/	/for ¹ mo:st/
also	/ ¹ O:lsou/	/ə ¹ so:/
rightmost	/ ¹ raitmoust/	/rait ¹ mo:st/

threefold /¹Ori:fould/ /θre¹fo:;d/

* Some diphthongs are changed into pure short vowels due to stress shifting.

Word		Correct	incorrect
/ou/ → /o/	photograph	/ ¹ foutəgr:f/	/foto ¹ gra:f/
/ai/ → /e/	eyebrow	/ ¹ aibrau/	/eb ¹ rau/
/ei/ → /ə/	danger	/ ¹ deindʒə/	/dən ¹ dʒə:/
/uə/ → /u/	fury	/ ¹ fjuəri/	/fju ¹ ri:/

It has been found out that intelligibility of speech is reduced when stressed vowels are made unstressed. The results indicate that the students fail to show where the stress may occur when they produce it. Most of the responses centered on the point “somehow intelligible” which reflects the students uncertainty of what they produce.

Conclusions

The following conclusions are what the researcher has arrived at while and after conducting the present study:

1. Students are not conscious of all the complexities of the sound system which reach their ears. Consequently in their production, they tend to perceive, interpret and produce only those features which are relevant to the intelligibility of the first language. The test had disclosed that the Iraqi learner of English at the university level produce a high percentage of errors in producing English suprasegmental features, namely, stress as effect of negative transference from their mother tongue in which there is no relation between stress placement and Meaning. Therefore, Misplacement of stress by students constitute the most frequent cause of intelligibility failure. The only solution for this intelligibility failure is for students to work hard on listening and imitating the native speech until they sound as close to it as they can. This can be done by producing long utterances smoothly and without hesitation.

2. it has been found out that the segmental sounds also constitute difficulty for Iraqi students in universities. Items of three and four-element clusters in initial, medial and final positions, however, constitute a source of difficulty for students. This may be attributed to the non- existence of three and four segment clusters in Arabic. The

only solution for this intelligibility failure is that the teachers can make use of the “building up” technique for teaching English consonant clusters. The students are asked to build up the cluster by adding one segment each time in order to produce an accurate pronunciation for example, the word (*street*) /stri:t/ is practiced at first by producing /ri:t/, then /tri:t/ and finally /stri:t/.

3. percentage of errors indicate that most students fail to produce the correct responses, i.e., they are incompetent in producing the English vocalic system. In other words, they are unaware of the distinctions made between short and long vowels and between vowels and diphthongs in the test item. The researcher believes that mispronunciations were due to insufficient or improper models used in teaching pronunciation. The researcher also relates this problem with the fact that phonetics is taught through Arabic. This may lead to all sorts of improper and foreign sounding pronunciation the only solution for this intelligibility failure is that English vowel system is better taught through the use of audio- visual aids or at least some recordings of native speakers.

4. English spelling system is difficult to be learned by the foreigners and native speakers as well. The reason behind such an attitude is the absence of constant relationship between phonemes and graphemes. The researcher believes that such a system will be inconvenient to many users and hence, mispronunciation may result. Thus, teachers should use different techniques to teach spelling pronunciation, not stick to one. Audials and visuals are very important for the teaching of language activities, in particular pronunciation and spelling. Teachers can use pictures, films, games, songs, radio and television in addition to recorder.

5. The researcher believes that the role of the language laboratory is not taken into consideration in the process of teaching in Iraqi universities. He shows that the language laboratory can help the student in:-

1. The student will accustom himself to the normal speed of the native speaker without limiting himself to hearing his teacher only.
2. He always hears authentic language with correct pronunciation and stress.
3. The teacher can listen to his students carefully while he practices

sound production so that he can give immediate help for students who need it.

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APPEDIX

TEST ITEMS

Please read the Following Items Carefully

1	Breathe	/bri:ð/
2	Breath	/brθθ/
3	Going	/ ¹ gðuɪŋ/
4	Thankful	/θaŋkful/
5	Five	/faiv/
6	Engage	/ingeid3/
7	Perhaps	/pðhaps/
8	Church	/tʃð:tʃ/
9	Photograph	/foutð ¹ graf/
10	Garage	/ ¹ gara: 3/
11	Pin	/pin/
12	Street	/stri:t/
13	Bread	/bred/
14	Mixture	/ ¹ mikstʃð/
15	Excuse	/ik ¹ skju:z/
16	Spring	/sprɪŋ/
17	Twelfths	/ ¹ twɪf θs/
18	Texts	/teksts/
19	Chronic	/kronik/
20	chauffeur	/ʃ ðufð/
21	Chew	/tʃ u:/
22	Ocean	/ðuʃ n/
23	Physician	/fi:ziʃ n/
24	Asked	/a:skt/
25	Recent	/ ¹ ri:snt/
26	Care	/ ¹ keð/
27	Share	/ ¹ ʃ ed/
28	Sharp	/ʃ a:p/
29	Region	/ri:dʒðn/
30	Begin	/bi ¹ gin/
31	Regime	/rei ¹ i:m/

32	Paradiagm	/ ¹ par ⁰ dim/
33	Reign	/rein/
34	Girl	/g ⁰ :l/
35	Gin	/d ³ in/
36	Children	/tsildr ⁰ n/
37	Steal	/sti:l/
38	Magazine	/mag ⁰ ¹ zi:n/
39	Prestige	/pre ¹ sti: 3/
40	Condemn	/k ⁰ n ¹ dem/
41	Damn	/dam/
42	Hymn	/him/
43	Calf	/ka:f/
44	Could	/kud/
45	Explain	/iksplein/
46	Comb	/ ¹ k ⁰ um/
47	subtle	/ ¹ s [^] tl/
48	Womb	/ ¹ wu:m/
49	Bomb	/ ¹ bom/
50	Films	/filmz/
51	Plough	/ ¹ plau/
52	Lsland	/ ¹ ail ⁰ nd/
53	Student	/ ¹ stju:dnt/
54	Color	/ ¹ k [^] l ⁰ /
55	English	/ɪŋɡɪʃ /
56	March	/ma:ts/
57	Salt	/so:lt/
58	Bald	/bo:ld/
59	Cuddle	/k [^] dl/
60	Museum	/mju:z ⁰ m/
61	Lawyer	/ ¹ lo:j ⁰ /
62	Picture	/ ¹ pikts ⁰ /
63	Even	/ ¹ i:vn/
64	Conduct	/ ¹ kond [^] kt/
65	Produce	/ ¹ prodju:s/
66	Subject	/ ¹ s [^] bd ³ ikt/
67	Danger	/ ¹ deind ³ 0/

68	Eye brow	/ ¹ aibrau/
69	Fury	/fɔ̃:ri/
70	Armour	/ ¹ a:mɔ̃/
71	Organize	/ ¹ O:gɔ̃naiz/
72	Rightmost	/raitmɔ̃ust/
73	noise	/noiz/
74	View	/vju:/
75	Container	/kɔ̃n ¹ teinɔ̃/
76	Earing	/jɔ̃riŋ/
77	Airport	/ ¹ eɔ̃po:t/
78	Least	/li:st/
79	Lest	/lest/
80	Antifreeze	/antifri:z/
81	Myself	/ ¹ maiseif/
82	Subway	/s [^] b ¹ wei/
83	Half finished	/halfinif t/
84	Greenhouse	/gri:n ¹ hɔ̃us/
85	Deep-freeze	/di:p- ¹ fri:z/
86	Blackbird	/blakbɔ̃:d/
87	Happen	/hapn/
88	Beige	/bei3/
89	Pick	/pik/
90	Spin	/spin/
91	Cattle	/katl/
92	Economics	/i:kɔ̃ ¹ nomik/
93	Countless	/ ¹ kauntlɔ̃s/
94	Practice	/ ¹ praktis/
95	Eastern	/ ¹ i:stɔ̃n/
96	Formost	/ ¹ fo:moust/
97	Also	/ ¹ o:lsou/
98	Threefold	/ ¹ θri:fould/
99	arrange	/ɔ̃ ¹ reind3/
100	Behind	/bi ¹ haind/