

**Stress Placement In English Compound  
Words As Made By Iraqi EFL Learners At  
The University Level : A Descriptive Study**

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**Abstract**

Iraqi learners of English face a lot of difficulties in learning English language especially in English phonetics and phonology . These problems appear in stress placement in English compound words . The aim of the current research is to identify and analyze the errors made by third year students , Department of English , College of Education in placing stress mark in compound words . One of the most important problems is the different stress system between English and Arabic . We can say that first language affects the second language . This influence is so difficult to avoid

## المستخلص

يواجه العراقيون متعلمين اللغة الانكليزية مشاكل كثيرة في تعليم اللغة الانكليزية خاصة في مجال علم الصوت . تظهر هذه المشاكل في وضع علامه التشديد الصوتية في الكلمات المركبة او المزدوجة . هدف البحث هو تمييز وتحليل اخطاء طلبة المرحلة الثالثة - قسم اللغة الانكليزية في وضع علامه التشديد في الكلمات المركبة . احدى هذه المشاكل هي اختلاف نظام التشديد في الكلمات بين اللغة العربية واللغة الانجليزية . ولهذا يمكننا القول بأن اللغة الاولى او لغة الام لها تأثير كبير في تعلم اللغة الثانية . هذا التأثير من الصعب جدا الابتعاد عنه .

## 1.Introduction

Fraser (2001:78) explains that stress is related with syllables and with the prominence of syllables . Stress is one of the suprasegmental features . It is very important part that needs to be taught in teaching pronunciation in English because the right pronunciation with the right placement of word stress is so important in speaking . Stress placement conveys the meaning of words . The wrong placement for word stress will give different meaning . This leads to misunderstanding by the listener .

Foreign learners of English need to know the right placement of stress in order to improve their pronunciation . If they do not know stress placement ,

they will find difficulties . One of these problems is that they will not understand native speakers . Secondly , native speakers will never understand non-native speakers because of the non-pronunciation of words (Jesry ,2005:43) .

The problem of the current study is that Iraqi EFL learners at the university level do not know how to put stress mark in compound words . The hypothesis of the current research is that Iraqi EFL learners will find difficulty in locating stress mark in English compound words .

## 2. The syllable

Phonologically speaking , Katamba(1989:153) illustrates that the syllable is the unit in terms of which phonological systems are organized . O'Connor and Trim (1973:259) point that the syllable is the minimal pattern of phoneme combination with a vowel as a peak that is preceded and followed by consonant cluster. Phonetically speaking , the syllable is a unit that consists of a center which has little or no closure to airstream .This center is preceded and followed by great closure to airstream .So , we can say that the onset is a consonant or consonant clusters that come at the

beginning of the syllable and the coda is the consonant or consonant clusters that come at the end of the syllable . The onset and the coda are occupied by consonant sounds while the peak is occupied by vowel sound (Roach , 2009:56) .

There are several cases for the syllable :

1-The syllable may consist of just one vowel to be one syllable as in are / a: / , or /ɔ:/ , and err / ɜ: / .

2-Some syllables have an onset but they do not have coda as in key /ki: / and bar /ba:/ .

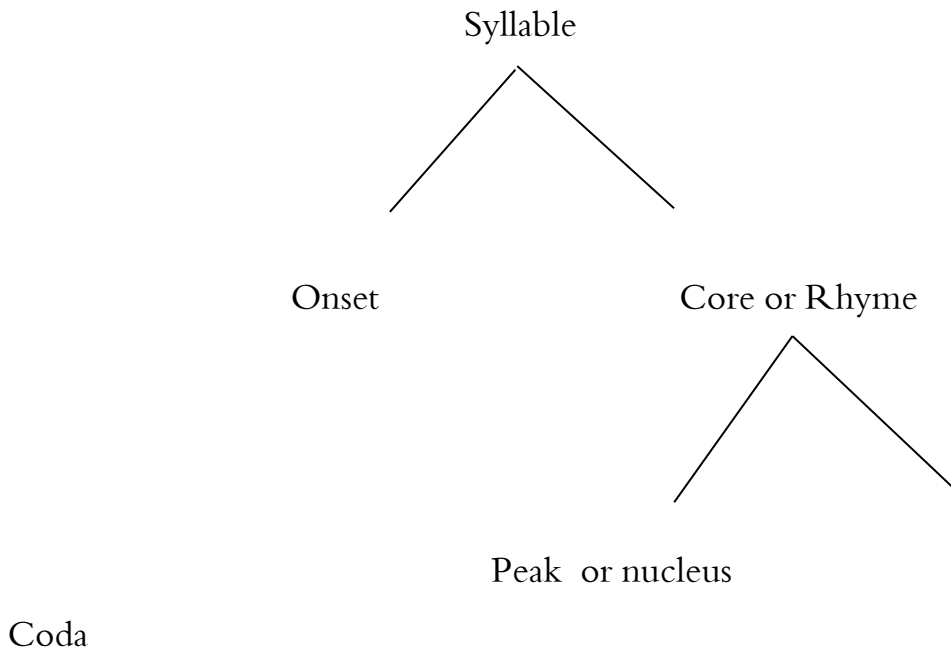
3-Some syllables do not have an onset but they have coda as in ought / ɔ:t / and am /æm / .

4-Some syllables have onset and coda as in sat /sæt / and ran / ræn / .

The general formula for English syllable is CVC . The letter(C) refers to consonant ; whereas the letter ( V ) refers to vowel .This means that the onset can have zero , one , two , three consonants . Coda can have zero , one , two , three , and four consonants (Crystal , 2008 :467) .

## 2.1. The structure of the syllable

An English word consists of at least one syllable . The syllable consists of two parts onset and rhyme . The term onset refers to a consonant or consonant clusters that come at the beginning of the word. Rhyme is composed of two kinds. These kinds are peak and coda . Peak is the vowel sound while the coda is a consonant or consonant clusters that come at the end of the word(Hyman , 1975:188) .



**Figure (1) : The Structure of the Syllable**

Shows that the consonant clusters of the onset are )  
 Kreidler (1997 :87

Pre-final , final , and post final consonants . Initial two consonant clusters are of two kinds . The first kind is composed of /s/ as a pre-initial consonant followed by an initial consonant which can be one of the following consonants / p , t , k , m , n , l , w , j , f , r /. The following table shows this type of consonant clusters .

**Table (1) : Initial Two-Consonant Clusters with Pre-initial /s/**

Pre-initial consonant /s-/	Initial consonants
	/p/ ' spin ' /spɪn/
	/t/ ' stick ' /stɪk/
	/k/ ' skin ' /skɪn/
	/f/ ' sphere ' /sfɪə/
	/m/ ' smell ' /smel/

	/smel/
	/n/ 'snow'
	/snəʊ/
	/l/ 'slip'
	/slɪp/
	/w/ 'swing'
	/swɪŋ/
/j/ 'sewer' /	
sju:ə/	
/r/ 'syringe'	
/srɪndʒ/	

The second kind consists of one of the following consonants / p , t , k , b , d , g , f , θ , s , ʃ , h , v , m , n / as initial consonants followed by one of the following consonants / l , r , w , j / as post-initial consonants.

**Table (2) : Two-Consonant Clusters with /l , r , w , j / as post-initial**

	/l/	/r/	/w/	/j/
/p/	Play /pleɪ/	Pray /preɪ/	----	Pure /pjʊə/
/t/	---	try /traɪ/	twin /twɪn/	tune /tju:n/
/k/	clay	cry /kraɪ/	quick	cue /kju:/

	/kleɪ/		/kwɪk/	
/b/	<b>black</b> /blæk/	<b>bring</b> /brɪŋ/	--- --	<b>beauty</b> /bju:tɪ /
/d/	--- --	<b>drip</b> /drɪp/	<b>dwel</b> /dwel/	<b>due</b> /dju: /
/g/	<b>glue</b> /glu:/	<b>grin</b> /grɪn/	--- --	-----
/f/	<b>fly</b> /flaɪ/	<b>fry</b> /fraɪ/	--- --	<b>few</b> /fju: /
/θ/	--- -	<b>through</b> /θru:/	<b>thwart</b> /θwɔ:t/	-----
/s/	<b>slip</b> /slɪp/	-----	<b>swim</b> /swɪm/	<b>sew</b> /sju: /
/ʃ/	-----	<b>shrew</b> /ʃru:/	--- --	-----
/h/	-----	-----	-----	<b>huge</b> /hju:dʒ/
/v/	-----	-----	-----	<b>view</b> /vju: /
/m/	-----	----- -	-----	<b>muse</b> /mju:z/
/n/	-----	-----	-----	<b>news</b> /nju:z/
/l/	-----	-----	----- -	<b>lewed</b> /lju:d/



Three initial consonant clusters consist of a pre-initial /s/ followed by the initial consonants / p , t ,k / and the post-initial consonants / l , r , w, j /

Table (3) : Three consonant clusters

Pre-initial /s/	initial	Post-initial			
		/l/	/r/	/w/	
	/p/	splay/spl eɪ/	spray/spe ɪ/	----- --	spew/spju: /
	/t/	----- -	String/str ɪŋ/	----- --	stew/stju: /
	/k/	sclerosis /sklærɒsɪ z/	----- -	squea k /skwi: k/	skewer/skj ʊə/

The onset is followed by the peak of the syllable .

This peak is occupied by the vowel which is either a pure vowel or a diphthong . Final two consonant clusters are of two types . The first type is composed of a pre-final consonant / m , n, ŋ , l ,s / followed by final consonants . Any consonant may be a final consonant except / h , w , j/.

**Table (4 ) : Final Two–Consonant Clusters**

<b>Pre–final consonant</b>	<b>Final consonant</b>	<b>Examples</b>
/m/	/p/	<b>lamp</b> /læmp/
/l /	/t/	<b>belt</b> /belt/
/n /	/t/	<b>bent</b> /bent/
/ŋ/	/k/	<b>bank</b> /bæŋk/
/s /	/k/	<b>disk</b> /dɪsk/

The second type of final two consonant clusters consists of a final consonant followed by post–final consonants which are / s , z , t , d , θ /.

**Table (5) : Two–consonant clusters**

<b>Final</b>	<b>Post–final</b>	<b>Examples</b>
/p/	/t/	<b>kept</b> /kept/
/k/	/t/	<b>backed</b> /bækt/
/t/	/s/	<b>bets</b> /bets/
/f/	/θ/	<b>twelfth</b> /twelfθ/
/d/	/z/	<b>beds</b> /bedz/
/g/	/d/	<b>bagged</b> /bægd/

Final three consonant clusters are of two types . The first type consists of pre–final , final , and post–final consonants .

**Table (6) : Three Consonant Clusters with pre-final , final , and post-final**

Pre-final	Final	Post-final	Examples
/l/	/p/	/t/	helped /helpt/
/ŋ/	/k/	/s/	banks /bæŋks/
/n/	/d/	/z/	bands /bændz/
/l/	/f/	/θ/	twelfth /twelfθ/

The second type consists of a final consonant , post-final 1 and post-final 2.

**Table (7) : Three Consonant Clusters with final , post-final 1, and post-final 2**

Final	Post-final 1	Post-final 2	Examples
/f/	/θ/	/s/	fifths /fifθs/

Final four consonant clusters consist of pre-final , final , post-final 1 , and post-final 2 .

**Table (8) : Clusters with pre-final, final , post-final1 ,and post-final 2**

Pre-final	final	Post-final1	Post-final2	Examples
/l/	/f/	/θ/	/s/	twelfths / twelfθs /
/k/	/s/	/t/	/s/	Prompts /prɒmpts/

### 3. Stress

Gimson (1973:94) defines the term stress as " great laxity of definition ". Jones (1976:245) shows that stress is the degree of force in producing a syllable . The term stress is defined by Carr (1993:167) as the synonymous with one of the senses of accent Stress is the greater loudness or prominence that a syllable exhibits within a word (Teschner and Whitley ,2004:1 ) . Roach (2009: 73) points that through the production of stressed syllables , the speakers use more muscular energy than is used in unstressed syllables .

Shandera and Burleigh (2005: 65) explain that stress has four major characteristics . These characteristics are loudness , pitch , duration , and sound quality . If these features are existed in producing the syllable , this syllable is stressed . Stressed syllables are more prominent than unstressed syllables . They are marked in transcription with a raised vertical line [ ' ] .

Phonologically speaking , the main function of stress is to provide emphasis or contrast in sentences as in " The big man looks angry " (Jones , 1976:455).

We can distinguish between stressed and unstressed syllables . Malmberg (1963: 80) notes that stressed syllables are produced with more force than unstressed syllables . Stressed syllables are produced by pushing more air out of the lungs in one syllable than the other syllables .Roach (2009:73) states that from the perceptual point of view , all stressed syllables have one characteristic . This characteristic is prominence . There are four features that make a syllable prominent . These features are the following .

1-loudness , where stressed syllables are louder than unstressed syllables .

2-Length , where stressed syllables are longer than unstressed syllables .

3-Pitch

It is related to the frequency of vibration of the vocal folds and to the high or low pitch notes . If the pitch is

high , the syllable is stressed . If it is low , the syllable is unstressed .

#### 4–Quality

Stressed syllables contain a vowel that is different in quality from neighboring vowels .Stressed syllables are strong syllables .Unstressed syllables are weak syllables .

A strong syllable has a center with either 1–a syllable center which is long vowel or diphthong , with or without coda ( consonants that come after the peak ) , e.g. die / daɪ / or 2–a syllable center is a short vowel , one of / ɪ , e , æ , ʌ , ɒ , ʊ / followed by at least one consonant , e.g. run / rʌn / . A weak vowel has a syllable peak which consists of the vowels / ɪ , ʊ , ə /

with no coda as in sofa / səʊfə / ( Malmberg , 1963: 55) .

Stress has many functions in English . It can be used in sentences to give special emphasis to a word . For example , ( 'John or 'Marry should 'go ) . It is used to indicate the syntactic categories of the words. The syntactic categories are nouns , verbs , adjectives , and adverbs .Thus , stress can show whether the word is noun or verb . Nouns and adjectives are usually stressed

on the first syllable whereas verb has stress on the final syllable (Ladefoged , 2010 :112 ) .

### 3.1. Stress levels

Skandera and Burleigh (2005:73–74) mention several types of stress. The first type is primary stress . The second type is secondary stress . Primary stress can be defined as the strongest stress and can be indicated by a high small , raised vertical line [ ' ] just before the stressed syllable in the word . The second strongest stress is the secondary stress and can be indicated by a small , lowered vertical line [ , ] just before the stressed syllable . For example , ( photographic ) / , fəʊtə'græfɪk / . The first syllable/ fəʊ/ has secondary stress while the third syllable /græ/ has primary stress. The third type is tertiary stress . Tertiary stress is the third strongest type and it can be indicated by ( ◌ ) . The last level of stress is unstressed (there is no stress ) . The word ( indivisibility ) has different types of stress / , ɪndɪ vɪzə'bɪlɪtɪ/ . The first syllable has secondary stress / ɪ / . The third syllable / vɪz / has tertiary stress. The fifth syllable / bɪ/ has primary stress . The other syllables are unstressed Roach (2009 :75).

### 3.2. Stress placement in simple words

Jones(1957 :248) states that stress placement in simple words depends on four features . The first feature is whether the word is simple or complex .The second feature is the grammatical category of the word ( N , V , Adj. , Adv. ) . The third is the number of the syllables the word has . The fourth feature is the phonological structure of those syllables .

Strong syllables are stressed while weak syllables are unstressed . We put stress mark on the first syllable in some words and on the second syllable in others if the word consists of two syllables . For example , in the nouns (increase ) and (insult ) /'ɪnkri:s / , /'ɪnsʌlt / . The first syllable is stressed, and the second syllable is unstressed , but in the verbs (increase ) and (insult ) /ɪn'kri:s/ , /ɪn'sʌlt/ the first syllable is unstressed while the second syllable is stressed . In the adjectives (lovely ) and (sunny ) /'lʌvli/ , /'sʌni / the first syllable is stressed while the second syllable is unstressed . This means that adjectives have the same rule of nouns .

If the word consists of three or more syllables , there is always one stressed syllable and the others are unstressed syllables . Examples ,the verbs (entertain) /



entə'teɪn/ and (resurrect) /rezə'rekt/. If the last syllable of the word is strong, it will be stressed. If the last syllable is weak, we put stress mark on the preceding syllable if it is strong. For example, determine /dɪ'tɜ:mɪn/. If the second and the third syllables are weak, we put stress on the first syllable if it is strong, for example, monitor /'mɒnɪtə/.

If the word is noun, stress mark falls on the first syllable if it is strong. Example, enmity /'enməti/. If the first syllable is weak, stress falls on the second syllable, potato /pə'teɪtəʊ/. If the first and the second syllables are weak, and the last syllable is strong, the final syllable will not receive the primary stress. For example, intellect /'ɪntələkt/. Adjectives have the same rule of nouns, for example insolent /'ɪnsələnt/ (Roach, 2009 : 78).

### 3.3. Complex words and the placement of stress

Complex words can be defined as the words that made up of the stem and one or more affixes. Example (teacher), the stem is (teach) and the affix is (-er). It consists of two main kinds :

1-words that consist of a root plus an affix

2- compound words which are made of two single words , example , ice-cream .

Affix is a bound morpheme that only occurs when attached to some other morphemes such as a root or a stem . Affixes are classified into three types depending on their positions .

1-Prefix which are added to the beginning of a root as in remark, untidy and so on .

2-Suffix which are added to the end of a root , as in quickly , books

3-Infixes are affixes that are occur within the stem , as in man-men , foot -feet (Robins, 1964:43).

The suffix takes the primary stress if the stem consists of more than one syllable , it has two types of stress ( primary and secondary ) , e.g. (Japan ), the primary stress is put on the last syllable / dʒə'pæn/ , but when the suffix (-ese) is added to the word , the primary stress will be put on the suffix itself and the secondary stress is placed on the first syllable / ,dʒæpən'i:z/ . There are some affixes do not affect stress placement as in the word (

comfort ) /'kʌmfət/ – (comfortable ) /'kʌmfətəbl/ . The word (punish) / 'pʌnɪʃ/ –(punishment ) / 'pʌnɪʃmənt / . There are some affixes affect stress placement . This means that it changes the place of stress from place to place in the same word . For example , the word (perfect ) /'pɜːfɪkt / – (perfection ) / pə'fekʃn/(Robins,1964:64).

### 3.3.1. Compound words

Compound words can be defined as a word that is made up of two words written in conventional spelling as one , with or without a hyphen (Jones , 1967:256–257) . If the compound words consist of two nouns N + N compounds . The first element has primary stress . Examples ,

Typewriter / 'taɪpraɪtə /

Car ferry / 'kɑːferi /

Sunrise / 'sʌnraɪz/

Suitcase /'suːtkeɪs /

Teacup / 'tiːkʌp /

If the first element of the compound words is an adjective and the second element has ( -ed morpheme) at the end , the first element will take secondary stress and the second element will take primary stress .

bad-tempered / ,bæd'tempəd /

half-timbered / ,ha:f'tɪmbəd/

heavy-handed / ,hevi'hændəd/

If the first element of compound words is a number and the second is noun , primary stress falls on the second element and secondary stress falls on the first element

Five-finger / ,faɪv'fɪŋgə /

Second-class / ,sekənd'kla:s/

Three-wheeler / ,θri:'wi:lə/

If the compound words function as adverbs , secondary stress on the first element and primary stress on the second element

Head-first / ,hed'fɜ:st /

North-east / ,nɔ: 'θ i:st /

Down-stream / ,daʊn 'stri:m /

If the compound words function as verbs , secondary stress falls on the first element while primary stress falls on the second element ,

Down-grade / ,daʊn 'greɪd/

Back-pedal / ,bæk 'pedəl /

ill-treat / ,ɪl 'tri:t / ( Roach , 2009 :66 )

The stress will shift from the second element to the first element if the compound is used in a noun phrase , e.g. light- house keeper / ,laɪt 'haʊs 'ki:pə / (Vogel , 2007:24) .

## 4. The Practical Part

### 4.1. Selection of Stimuli

The experiment was made in the form of a test consisting of ten items (compound words) . All the items were taken from Roach (2009 : 84-85 ) . These compound words were written on paper and were given to the students in order to put stress mark .The students

were instructed to be very careful in putting stress mark because it is important for the analysis technique .

#### **4.2. The Answer Sheet**

All the students were provided by an answer sheet in order to answer . In the answer sheet , there are ten compound words . The researcher asked the students to put stress mark on the compound words .

#### **4.3. The Subjects**

The sample of the current research is the third year students – Department of English – College of Education –University of Missan of the academic year 2018 .The total number of the students is 50 students . They were all native Iraqi Arabic speakers , and they had passed a full two years courses in English Phonetics and Phonology during the first and the second years of their university Education .

#### **4.4. Statistical Test Used**

The researcher used the T-test in order to investigate whether the results are significant or not and to analyze the data . She used SPSS Program . By using SPSS program , the researcher put the scores of the students , then she chose analyze , compare means , T-test for one group in order to get the analysis of the data .

### 4.5. Data Analysis

The researcher is used to find out the mistakes or errors of the students in putting stress mark in compound words . The sample of the study is 50 students . The test is consisted of 10 items . All the test items are compound words . The students have to put the stress mark in the correct place . They have to be careful in putting stress mark . To get the scores of the students in the test , the researcher is divided the total mark of the test . One mark is given for each correct answer . The total mark of the test is out of 10 marks .

### 4.6. Findings

The following tables are the results of the analysis .

Table (1)  
One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Scores	50	3.44	2.287	.323

Table (2)  
One-Sample Test

Test Value = 5					
t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper

scores	-4.823-	49	.000	-1.560-	-2.21-	-.91-
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N refers to the number of the students . The mean of the student achievement in the test is 3.44 and the calculated t-value is 4.823 which is higher than the tabulated t-value for the test which is 0.02 . Thus , the difference is statistically significant . The results showed that the performance of the students in the test was poor . This means that the students made a lot of errors in locating stress in compound words .The results of the analysis show agreement with the hypothesis .

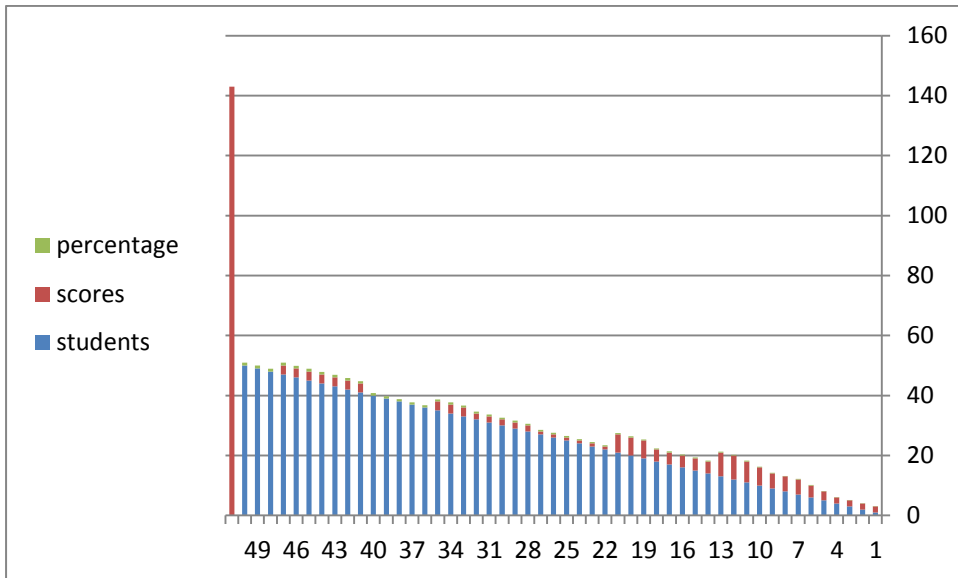
**Table (3): The performance and the percentage of the students in the test**

Students	Scores	Percentage
1	2	4%
2	2	6%
3	2	8%
4	2	10%
5	3	12%
6	4	15%
7	5	15%
8	5	17%
9	5	19%
10	6	21%



11	7	23%
12	8	25%
13	8	27%
14	4	29%
15	4	31%
16	4	33%
17	4	35%
18	4	37%
19	6	37%
20	6	40%
21	6	42%
22	1	44%
23	1	46%
24	1	48%
25	1	50%
26	1	52%
27	1	54%
28	2	56%
29	2	58%
30	2	60%
31	2	62%
32	2	63%
33	3	65%
34	3	67%
35	3	69%

36	0	71%
37	0	73%
38	0	75%
39	0	77%
40	0	79%
41	3	81%
42	3	83%
43	3	85%
44	3	87%
45	3	88%
46	3	90%
47	3	92%
48	0	94%
49	0	96%
50	0	98%



**Figure (1) : Histogram of The students' Achievement**

## 4.7. Discussion

Stress placement in words is so important in English language . The wrong placement for stress on the wrong syllable will cause misinterpretation and misunderstanding . Intelligibility can be considered as the most important feature that shows the importance of stress placement in words . It involves the message of the speaker that should be understood by the listener. Intelligibility in speech is so important for good communication . This means that the right placement for stress in words is very useful in English because it

leads to the message that the listener will understand what the speaker is talking about (Jesry, 2005: 87) .

The most difficult thing for second language learners is how to put stress in words . This is because most of the learners do not have adequate theoretical background about how to put stress mark on the syllables. Iraqi learners of English are not accurate in putting stress in compound words . They put stress mark on the first part of the compound words , or on the second part whenever they like or without any stress . They are influenced by Arabic system of stress . Word stress system between English and Arabic is so different that is why the learners find difficulty . English stress system is more complex than of Arabic . We can conclude that first language affects the second language (foreign language ) . This influence is so difficult to avoid

Another reason for this difficulty is that most Iraqi learners of English learn English in order to pass their written exams only. The students must regard English as a basic language in order to improve their skills to speak not just for passing the exams .

Stress placement in English differs according to the grammatical category of the word . So , if the students do not able to differentiate between word class N , V , Adj , Adv . , they will never know how to put stress correctly and they will cause errors .

#### **4.8. Conclusion**

The major conclusions that can be drawn from the present investigation are the following :

1-It is quite clear that Iraqi EFL learners made a lot of mistakes in putting stress mark in compound words .

2- One of the most important reasons for the difficulty of locating stress in compound words is the influence of the first language ( the mother tongue ) on the second language .

3- The data presented here provide a strong confirmation for the hypotheses because the statistical means and differences are significant .

## **4.9.Recommendations**

1. Because we are English teachers , our job is to teach students stress patterns of compound words in order to solve their problems in locating stress mark .
2. English labs , CDs , DVDs and TVs are so important to improve English.
3. The students must do their best in reading and understanding the placement of stress in compound words .

## **Appendix**

- Put primary stress mark on each of the following compound words .

1-daybreak

2-door-handle

3-absent-minded

4-bad-tempered

5-second-hand

6-angle bracket

7-big-hearted

8–long–awiated

9–old–established

10–figurehead

11–greenfly

12–barefaced

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