"I hereby declare that the substance of this dissertation is entirely the result of my investigation and that due reference or acknowledgement is made whenever necessary to the work of the other researchers"

Ms. Sohila MEKHOUKH

DEDICATION

I dedicate this modest work to whom I owe love and respect, to:

My dearest parents who surrounded me with affection, sacrifice and encouragement, may Allah protect them

My wonderful brothers: Abdelghani, Mohamed Amine, Hamza & the beloved Ayoub

My lovely sister: Naouel (Hadjar) & her husband

My affectionate uncles: Smail & Abbas Benhamada

My colleagues at the English Department in Algiers: Karima Oudahmane, Amina, Hind, Amel, Maha, Hizia, and all the literature colleagues (2005 entry)

My colleagues at the Foreign Languages Department in Setif

My room-mates at Dely Ibrahim University campus: Fatima, Sihem (cherchalia), Sara, Lamia …

My intimate friends and acquaintances: Nadjia Sahnine, Samira Moussaoui, Bariza and her mother auntie Houria, Hayet Merfoud, Fadila, Wafa, Amira, Nassira, …

And anybody who loves Souhila

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Abstract

This experimental study investigates the role of the teaching of English word stress through three modes of pronunciation/speech practice to see if this can improve the learners' performance. We noticed that the production element in the Foreign Languages Department (the English Section) at the University of Setif is not satisfactorily taken into account, and the practice activities done in the language lab are limited to imitation and do not allow for communicative oral practice of the targeted pronunciation feature. Thus, our research question concerns whether the use of controlled, guided and free pronunciation-oriented speaking practice help our students produce word stress more accurately.

Questionnaires and tests were the main research tools used in this study. The teacher's questionnaire, the subjects' questionnaire, and pre-test's results helped us identify and diagnose some of the students' problems with word stress and the potential causes. Students participated in either experimental or control group, study English as a foreign language. Material used for instruction is planned to be production-oriented and the lessons were of a practice type. A variety of tasks including listening and spelling awareness activities were also designed, added to that, an integration of three speaking practice modes (controlled, guided, and free) simultaneously, taking into account the learners' difficulties even with any features related to word stress, such as syllable division and vowel reduction.

The pre-test/post-test data indicated that our teaching strategy facilitated the improvement of word stress production among these students to some extent. The experimental group exceeded the abilities of the control group.

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Introduction

One of the major aims of foreign language (FL) instruction is developing the learners' communicative competence in the target language, in which pronunciation forms a crucial element. A good mastery of pronunciation is as important as any other language skill that is part of the grammatical competence in particular (Scarcella and Oxford, 1994). Celce-Murcia and Olshtain (2000), state that a sound knowledge of pronunciation is a key feature for successful communication, and an inefficient grasp of this language skill may lead to misunderstanding and problems of communication. A learner who fails to pronounce the correct production of certain phonemes (the smallest units of speech that distinguish one word from another) or suprasegmentals, such as stress[1] and intonation[2], may not communicate successfully with speakers from the target language community, even though s/he might have a good command over structures and lexis (Yates, 2002). This is why the teaching of pronunciation is essential in EFL pedagogy particularly, since many suprasegmental aspects of the foreign language pronunciation are not salient to learners, unless they are explicitly taught to them and practised.

Errors in word stress placement may inhibit mutual comprehension. Avery and Ehrlich (1992) suggest that the incorrect placement of English stress may be one of the most serious pronunciation problems which has a great effect on comprehensibility, especially since stress is part of a word's identity, and the shift in stress does affect the meaning and the function of the word.

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[1] Stress is described as "the relative strength of a syllable" (Roach, 1991: 4).
[2] Intonation is referred to as "the use of the pitch of the voice to convey meaning" (Ibid).
The *syllable* is the minimal unit of sequential speech sounds composed of a vowel or a vowel-consonant combination (Roach, 1991).

It should be stressed that EFL learners need to learn *how* to pronounce the sounds of the target language rather than merely acquiring knowledge *about* those sounds (Burgess and Spencer, 2000). Fraser (2000: 25) clarifies this point by emphasising that "pronunciation is not just a knowing-*that*, but a knowing-*how*". That is to say, pronunciation is not only part of language knowledge such as grammar and vocabulary, but also a skill that needs to be practised and developed.

In the Foreign Languages Department (English Section), University of Setif, EFL students study English phonological features -among which word-stress is included in the second year programme- in the phonetics module (*see appendix 6 for programme details*). However, in the first place, it seems that very little practice opportunities are provided in the classroom, i.e., the phonetics course is highly theoretical and does not provide enough practical tasks and practice opportunities, apart from few laboratory work through which students try to apply some phonetic theory. Further still, from my short teaching experience I noticed that many students still have problems with word-stress placement though this point has been thoroughly covered in the phonetics module. In this research we try to investigate the kind of errors which are made, how, when and why they occur. These preliminary observations will hopefully be corroborated by a questionnaire and a pre-test.

We try to follow a practice framework based on the communicative-cognitive approach to teaching pronunciation suggested and implemented by a number of researchers like Bowen (1972), Scarcella and Oxford (1994), Celce-Murcia et all (1996), and Morley (2000), which include the following:

- Contextualization of the targeted feature to be practised and devising activities.

- Explanations of the target feature.

- Pronunciation-oriented listening practice (develops the aural perception through discrimination and identification tasks).

- Pronunciation/speech practice: A mixture of three modes of speaking practice: controlled (dependent) practice; guided (structured) practice; communicative free (independent) practice respectively.

- Developing spelling awareness.

We have chosen this communicative teaching framework since it gives importance to the practice element which is neglected in our institution. On the basis of this framework –which will be explained thoroughly in the chapter 3-, and after identifying the students' problems of word stress through the questionnaires and the pre-test, we shall design first, teaching units aimed at strengthening and practising the points which our research tools would have identified as sources of potential problems. Then, we shall provide a variety of learning opportunities to all students. Therefore, we shall design a wide range of activity types such as matching, close tests, working out rules, predicting, sorting, developing awareness, etc. At the end, we shall provide the three modes of speaking practice: controlled, structured, and free practice, something which is not usually done in a traditional phonetic course.

Thus, the aim of the present study is to investigate the correlation between pronunciation teaching that provides practice based on a variety of communication activities with different speaking modes (controlled, structured, and free), *and* the performance of learners' correct production of word-stress. On the basis of these assumptions, our research question can be formulated as follows:

Can the assignment of three types of oral activities in the language class improve the learners' use of word stress more efficiently and enable them to overcome their difficulties?

Now, we shall define a number of terms used in our research. Definition of other key terms are duly provided in chapter one (the literature review).

1. Definition of Relevant Terms

i. Controlled Oral Practice

It is the type of exercise that gives learners repeated opportunities to use, recognize, and manipulate a particular language point. Repetition is a good example of controlled activities. Its aim is to develop accurate use of the form of language in question and establish it in the students' minds (Callum and Acklam, 2000).

ii. Structured/guided Oral Practice

It is a phase of instruction that occurs after the teacher explicitly models, demonstrates, or introduces a skill or strategy. In this phase students practise newly learnt skills under the teacher's supervision and receive feedback on performance. This crucial phase involves teachers and students' interaction[1]. Guided practice should be designed to identify students' errors so that correction is conducted immediately and steps by step.

Guided practice serves as a bridge between activities designed to present new material and independent practice. The effectiveness of guided practice can be evaluated by measures of student success in independent practice.

iii. Independent/freer Oral Practice

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[1] Unknown Author. <http://www.usu.edu/teachall/text/reading/READglos.htm>

It is used to activate the students' language. Through these activities, students have the opportunity to use the target language in a reasonably natural contextualized situation, which means that they may need to use a wide range of English as well as the target language. Role plays and discussions are part of the independent practice (Callum and Acklam, 2000).

iv. Word Stress

It is the relative degree of force used in pronouncing the different syllables of a word of more than one syllable (Kelly, 2000). Word stress is also called syllable stress by some Australian researchers.

We move now to sum up the content of each chapter in the sub-title below.

2. The Content of Chapters

This dissertation consists of five chapters; a theoretical part and an experimental one. Chapter one and two cover the theoretical part of the literature review which will serve as a basis for the theoretical framework which we will use in this paper. Chapters three, four and five cover the experimental part through which we clarify the details of our investigation.

- Chapter one explains some background information on word stress to clarify its characteristics and rules, with reference to particular issues like common errors, stress and intelligibility, and regional and social variation in stress placement.

- Chapter two reviews the various approaches to teaching pronunciation between past and present, in addition to outlining some teaching models based on the communicative approach, and a special focus is put on the practice component.

- Chapter three discusses the significance of the study, statement of the problem, the rationale of the work, the research question, and the research methodology.

- Chapter four deals with the presentation of the experiments' results, and discussion of data collected from the questionnaires and pre-post tests.

- Chapter five looks at some of the teaching implications and possible suggestions that can be drawn from this research, concerning the teaching of word stress.

1. BACKGROUND ON THE ENGLISH WORD STRESS

1.1. Introduction

When a particular pronunciation feature impedes comprehension, the listener, who tends to focus on the acoustic signal, will not understand the intended message unless s/he uses contextual cues to resolve the ambiguity (Benrabah, 1997). Word-stress is a suprasegmental feature that has the most effect on intelligibility (Yates, 2002). It can be taken as the building block and the basis for teaching pronunciation, since it is the most teachable and learnable feature of all suprasegmentals (Dalton and Seidlhofer, 1994), and "it can serve as a starting point for tackling the most difficult part, intonation" (Benrabah, 1997: 163).

1.2. English Stress

Stress can be best described in relation to the syllable. As explained by Pennington (1996), in English, words are composed of a number of syllables, which consist of only one vowel (the most important component) followed or preceded by consonant(s). All the sounds of a syllable are pronounced together as an unbroken unit, and the length of a syllable remains constant whatever the number of consonant clusters. However, the vowel (V) is longer when it is not surrounded by other consonant (C) phonemes, and shortens to compensate for the added phonemes. Here is a possible range of syllable types in English with detailed labels for their description:

E.g.: prompts /prɒmpts/: CCVCCCC   splints /splɪnts/: CCCVCCC

Syllable (henceforth Sy)

Rhyme (henceforth Rh)

Onset (henceforth On)   Peak (henceforth Pe)   Coda (henceforth Co)

/p r   ɒ   m   p   t   s/

/s p l   ɪ   n   t   s/

(Roach, 1991: 73)
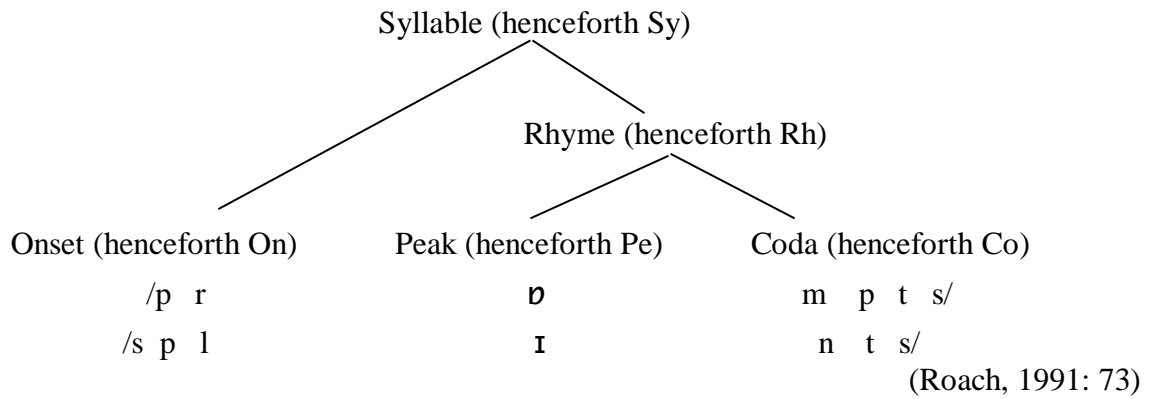
The syllable is formed by different phonological units. The rhyme of a syllable can be divided into the nucleus or peak, which is the vocalic part or the syllabic segment, and the coda, which consists of any final consonants. Any consonant before the rhyme form the onset of the syllable. Syllables are grouped into feet, and the first syllable of each foot is stressed. A foot is a timing unit that begins at the onset of a stressed syllable and ends at the onset of the next stressed syllable (Giegerich, 1992). X-position is also a timing unit. There is one-to-one correspondence between x-positions and consonant phonemes. However, the association between x-positions and vowel phonemes depends on the vowel length (tense/lax)[1] distinction. For example, here is the syllable analysis of the word 'fill' (with lax vowels) and the word 'feel' (with tense vowel):

Sy   Sy

Rh   Rh

On   Pe   Co   On   Pe   Co

X   X   X   X   X X   X

/f   ɪ   l/   /f   i: l/
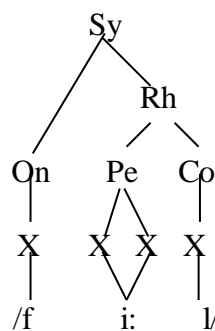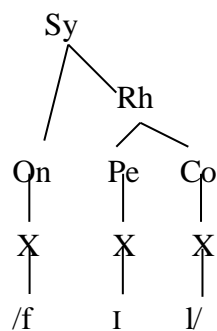
(Giegerich, 1992: 142)

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[1] *tense* refers to long, and *lax* refers to short, that is, not articulated with much energy (Giegerich 1992; Roach, 1991).

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Thus, the length of a tense vowel is associated with two x-positions. Here is the rule:

- Associate a [- tense] vowel with one x-position.
- Associate each element of a diphthong with one x-position.
- Associate a [+ tense] vowel with two x-position.

(Giegerich, 1992: 142)

E.g.: kangaroo /kæŋgə'ru:/
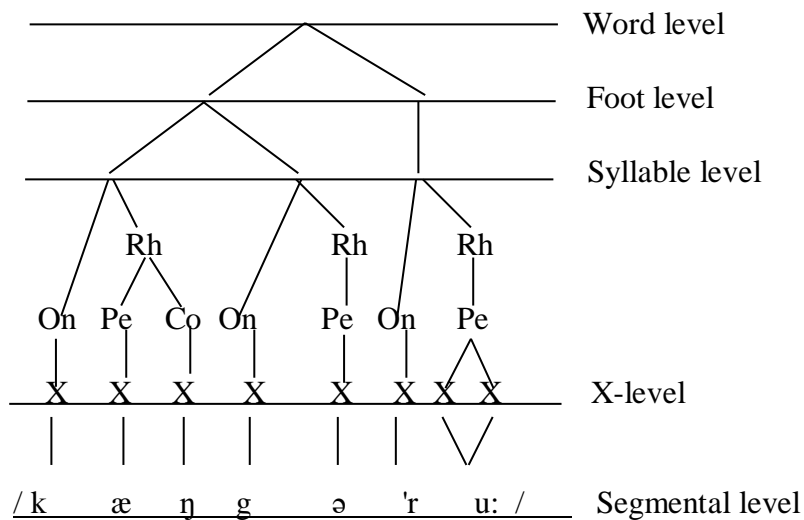
(Giegerich, 1992: 194)

Stress (also called 'accent' by some authors: Gimson, 1975; Cruttenden, 1986) is a suprasegmental feature which applies on whole syllables, not individual vowels and consonants (Ladefoged, 1993). It can be defined from two different perspectives. At the perception level, it is: "a complex auditory impression which the listner perceives as making one syllable more prominent than its neighbours" (Rogers, 2000: 94). At the production level, Ladefoged (1993) explains that:

"stressed sounds are those on which the speaker expends more muscular energy. This involves pushing out more air from the lungs by extra contraction of the muscles of the rib cage, and by extra activity of the laryngeal muscles, so that there is an additional increase in pitch"

(Ladefoged, 1993: 249).

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So, from the speaker's point of view, stress is the amount of respiratory effort expended, whereas from the listener's viewpoint, it is the greater perceptual prominence or strength (Pennington, 1996).

Following Katamba (1989), the realization of stress requires three prosodic features. These are: duration or length, intensity or loudness, and pitch or frequency. Thus, a stressed syllable in English tends to be frequently longer, louder (a less important parameter), and often higher in pitch than the neighbouring unstressed syllables. The most reliable feature is length.

These three factors that characterize the stressed syllable are briefly defined by Scarcella and Oxford (1994: 222) as follows:

- **Loudness**: When there is an increase in the amount of air being pushed out of the lungs. There is also an increase in the loudness of the sound produced. Most languages use loudness to indicate stress.

- **Pitch**: Generally speaking, pitch is the property of a sound which allows a listner to place it on a scale from high to low. It is an important indicator of stress. It rises when the air flows out of the lungs at a greater rate than normal. Changing the tension of the vocal chords also affects pitch, since the pitch rises when the vocal chords are stretched. Variation in pitch conveys many different types of information.

- **Vowel length**: Vowel length is another indicator of stress. The English system of stress requires reduction of some vowels and lengthening of others, because it is so important to show which syllables are stressed.

The **notation** of stress mark (') is placed at the beginning of the stressed syllable of the lexical word in standard dictionaries (the procedure which we will adopt in our paper), rather than over the vowel, as it is sometimes done in some other contexts (Pennington, 1996).

In polysyllabic English words, one syllable carries the main stress, and this varies from word to word (Gimson, 1975). For example:

- On the last syllable: *be'hind, re'sult, ciga'rette*

- On the penultimate syllable: *to'gether, im'portant*

- On the ante-penultimate syllable: *' yesterday, ' afterwards, ' critical*, etc.

1.2.1. Different Types of Stress

In English there are two types of stress: word-stress (or lexical) stress, sentence (or syntactical) stress. Kingdon (1958) defined word stress and sentence stress and illustrated the difference between the two as follows:

- **Word Stress** is the relative degree of force used in pronouncing the different syllables of a word of more than one syllable. Monosyllables cannot be said to have word stress.

- **Sentence Stress** is the relative degree of force given to different words in a sentence. In English, content words (nouns, main verbs, adverbs and adjectives) carry stress, whereas structure words (pronouns, prepositions, articles, auxiliary verbs and conjunctions) do not.

Sentence stress may differ from word stress in two ways: a) monosyllables may take sentence stress if they play an important enough part in the utterance, and b) words of

more than one syllable may be unstressed if their function in the sentence is sufficiently unimportant.

Grammar words (also known as function words) such as auxiliary verbs, prepositions, pronouns, etc, are usually unstressed. However, any word can be stressed where the meaning requires it, i.e. contrasting or correcting something a person has said or is likely to think. e.g. *I got a taxi from the airport*. Not *to the airport*. *He did it*. Not *she* (Rogers, 2000). So, **emphatic stress** is often used to draw attention to a word or utterance. For example, the utterance *'Mary has two cars'*, by placing extra stress on '*two*', a speaker can express surprise or definiteness. **Contrastive stress** is used to avoid a misinterpretation. Extra stress on '*two*' will then be used to avoid any confusion as to the number of cars Mary has. Furthermore, intonation changes take place on the most prominent stressed part of a phrase or sentence, usually at the end. This is what we call **tonic stress** (Kingdon, 1958).

1.2.2. Levels (degrees) of Stress

There is disagreement among linguists about the exact number of stress degrees that are needed to be described. In English, word stress is usually seen at three different levels: 1) primary, strong, main or principal; 2) secondary, or medium; 3) weak or unstressed (Kingdon, 1958). However, according to Rogers (2000), a tertiary stress will occasionally be marked when it is relevant. In rapid speech, syllables with tertiary, and sometimes even secondary, stress are often reduced to unstressed. In extremely slow or careful speech, syllables normally unstressed may acquire tertiary or

even secondary stress. Generally, every phonetic phrase contains only one primary stress.

Kelly (2000) claimed that in practice, a two-level stress can be adopted (stressed/unstressed) for teaching purposes, especially if learners may have difficulty in perceiving more than two levels of stress with confidence. So, two levels of stress are enough to train learners' ears and attract their attention to how stress works within words and utterances. However, this is not meant, of course, to discourage teachers from further investigation and deeper studies into the nature of stress, in fact, "the deeper one's understanding of the subject matter, the better one's teaching of it is likely to be" (Kelly, 2000: 70).

1.3. The Placement of Stress in Words

In this section we shall discuss the properties of English word stress. These general properties show that stress placement is predictable in some cases and unpredictable and irregular in other cases, and that there are phonological factors affecting the prediction of stress (such as syllable weight) as well as non-phonological factors (such as syntactical and morphological structures).

1.3.1. Stress and Syllable Structure

According to Giegerich (1992), for a given word, there is a correlation between the syllable structure and the placement of stress. In order to carry stress, a syllable must satisfy certain structural requirements: a complex rhyme (a rhyme containing at least two x-positions), and ambisyllabicity (the association of a consonant with two

syllables at the same time). A syllable is said to be heavy when it has a two x-rhyme, whereas a light syllable is the one having a single x-rhyme.

E.g.:

```
        'bee' /bi:/                                    'to' /tʊ/
      Heavy syllable                                 Light syllable
            Sy                                             Sy
         /      \                                       /      \
      (On)      Rh                                   (On)       Rh
       |       /  \                                   |          |
       |      X    X                                  |          X
       |       \  /                                   |          |
       /b      i:/                                   /t          ʊ/
```
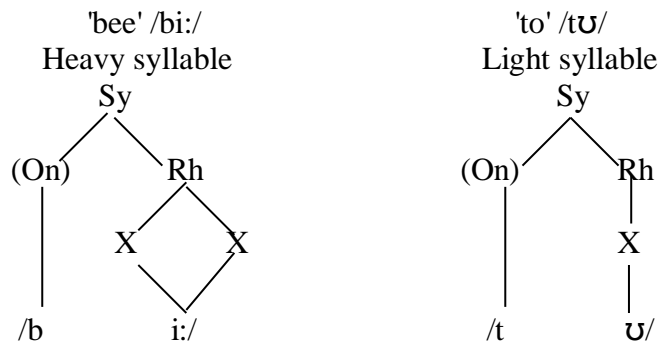
(Giegerich, 1992: 146)

Stressed syllables must be heavy while unstressed syllables may be light: any stressed syllable, be it a monosyllable or part of a polysyllabic word must have a complex rhyme. As a consequence of this condition on stressed syllables, there are no lexical words of the form /bɪ/ in English. Thus, for a syllable to be stressed, it must have more than a single x-position in their rhymes. Here are some examples:

```
     'be' /bɪ/            'bit' /bɪt/              'bee' /bi:/
        Sy                    Sy                       Sy
       /  \                  /  \                      /  \
      /    \               /     Rh                  /     Rh
     On     Rh            On   Pe   Co              On      Pe
      |      |             |    |    |               |      /\
      |      Pe            |    |    |               |     /  \
      |      |             |    |    |               |    /    \
      X      X             X    X    X               X   X      X
      |      |             |    |    |               |    \    /
     / b    ɪ /          / b   ɪ   t /             / b    i: /
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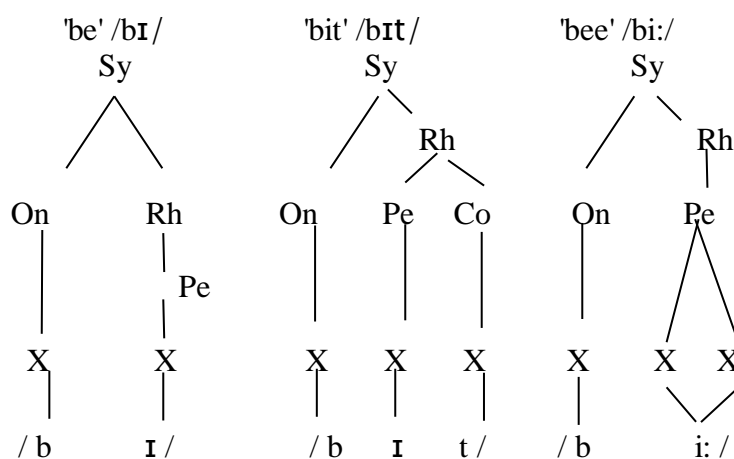
(Giegerich, 1992: 182)

The maximum number of x-positions in the rhyme is one for unstressed syllables, and two for stressed syllables: the maximum number is three (Giegerich, 1992).

Ambisyllabicity is also connected with stress. For example, in the word 'pity', the medial consonant /t/ is ambisyllabic because the syllable boundary rule places a syllable boundary before it, and thus making the /t/ part of the second syllable, and the complex rhyme ensures that this consonant is also part of the first syllable. Here is an example for the word 'pity' /pɪtɪ/:
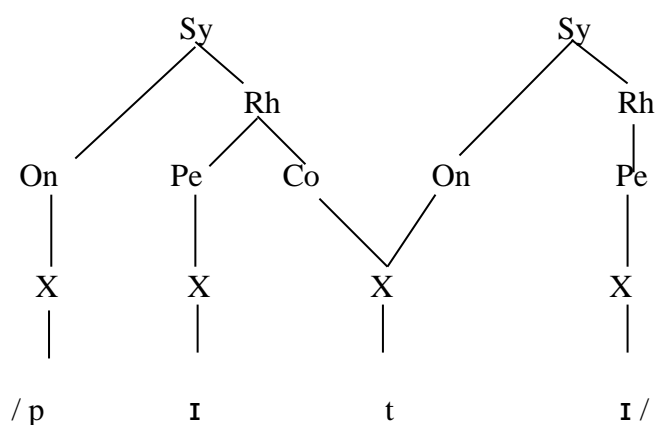
(Giegerich, 1992: 183)

Ambicyllabicity makes stressed syllables heavy even though they might be otherwise light. It means that any syllable can become heavy provided that there is a consonant available for ambisyllabicity. But this does not mean that in any polysyllabic word, the heavy syllable always can carry stress. Although the weight condition on stressed syllables could be met in the word 'aroma', for instance, by making /r/ ambisyllabic, every word in the English language has only one correct stress pattern. Thus, stressed syllables are heavy but not all heavy syllables are stressed.

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1.3.2. Stress and Phonological Structure (Metrical Phonology)

Following Katamba (1989), we assume that stress is a relational concept, that is, a stressed syllable is more salient and prominent than an unstressed one. This fact is important in Metrical Phonology, which is an approach developed within the generative phonology framework in recent years to deal with stress phenomena. Prominence is denoted by binary branching trees termed weak (W) and strong (S).

E.g.:   sender

                                    S   W

                                    sen   der

The strong syllables carries the stress, but the weak syllables are unstressed. Gimson (1975) and Roach (1991) noted that vowels in unstressed syllables tend to be shorter, of lower intensity and different in quality, while stressed ones have clear or full vowel quality. Weak syllables can only have four types of peak: the schwa vowel /ə/, syllabic consonants /l, m, n, r/, close front unrounded vowels /ɪ/, /iː/, and close back rounded vowels /ʊ/, /uː/. Thus, schwa and syllabic consonants occur only in weak syllables, /ɪ/, /iː/, /ʊ/, /uː/ occur frequently in both stressed and unstressed syllables. All the other vowels and diphtongs (strong vowels) may occur in syllables other than those carrying the primary stress, but will often have a secondary degree of stress associated with them.

So far, we have discussed the phonological factors that affect the placement of stress. Now, we shall elucidate another influencing factor, which is not phonological in nature.

1.3.3. Stress and the Non-phonological Structure

Syntax and morphology are parts of grammar that affect the regularities governing English word stress placement.

First, syntax information plays a significant role in this respect. Stress is not assigned randomly to a sequence of syllables in speech, but rather to syllables of syntactic units called words. On the one hand, every lexical word (that is, words that are members of the syntactic categories noun, verb, adj, adverb) has a relatively stable stress pattern which is rarely influenced by context, where the word occurs. However, function words such as articles, prepositions and so forth, do not bear stress, unless they occur in contexts that make them otherwise (e.g. emphatic stress, etc). On the other hand, there are differences in the stress placement of nouns, verbs or adjectives. Verbs frequently have their main stress on the final syllable, while in nouns, it is rare, and when it happens it is often unstable. E.g. di'gest (V) / 'digest (N).

Morphologically speaking, the structure of words (that is, the way in which words may be made up of morphemes: prefixes roots and suffixes) plays a major part in the regularities that govern stress placement in English. We shall not deal with prefixes here because usually they do not affect stress of the root word. We focus then on complex words containing roots and suffixes.

There are two types of suffixes: inflexional and derivational. Inflexional suffixes are those suffixes that produce different forms of the same word, e.g. the plural form (cameras) of *camera*, the present participle form (developing) of *develop*, the past tense (commented) of *comment*, etc. Conversely, derivational suffixes produce totally new words, along with compounding (as in fireplace, blackbird), in fact,

derivational morphology forms part of word-formation devices in grammar. Examples can be suffixes like '-less' as in penniless, childless; '-ly' attaches to adjectives and forms adverbs (nicely, hopefully); '-ee' attaches to verbs to form nouns (employee, payee), etc.

On the phonological side, such suffixes can be divided into two classes: stress-neutral and stress-shifting as will be illustrated in table 1:

Inflexional	Derivational	
Examples: a. tall*ies*	b. 'penni*less*	c. a'tom*ic* ('atom)
de'velop*ing*	'nation*hood*	so'lemn*ity* ('solemn)
'comment*ed*	'solemn*ly*	employ'*ee* (em'ploy)
'furnish*es*	in'terpret*able*	New'ton*ian* ('Newton)
'camera*s*	'open*ness*	
	Stress-neutral	Stress-shifting

(Giegerich, 1992: 190)

Table 1: Stress shift in inflexional and derivational suffixes

Stress-neutral suffixes have two properties: first, they never make any diffrence to the stress pattern of their base, i.e. of the word to which they are attached; second, such suffixes are always unstressed, even where they may have heavy syllables, and even if such suffixes are attached together (e.g. 'childlessness). Thus, "stress-neutral suffixes…are simply appended as unstressed material to an entirely unmodified base" (Giegerich, 1992: 191).

Stress-shifting suffixes affect stress placement in two ways: firstly, the stress pattern of their base may differ radically from that of the base word when it occurs without a suffix, for example, 'atom and a'tom(ic), 'Newton and New'ton(ian). Secondly, stress-shifting suffixes differ from stress-neutral ones in that they can bear

the main stress of the word, for example: "-ese" (Japa'nese), "-ette" (ushe'rette), "-ee" (emplo'yee), etc.

Having explained the properties of English word stress, we move now to consider some of the rules governing its use and prediction.

1.3.4. Tendencies and Rules of Word Stress

The tendencies of the English stress within the word is fixed and unpredictable, that is every word has its own stress pattern, which is an important part of its identity, unlike other languages where the stress phenomenon is free and regular and can be predicted (Dalton and Seidlhofer, 1994). Many languages have word-stress regularly placed in a certain position on almost all words: for instance, Czech and Finnish typically have the stress on the first syllables; Spanish and Welsh typically on the penultimate syllable; and French and Turkish typically on the final syllable.

Yowell (1980), for example, provided a clear comparison between Arabic and English stress. He claimed that languages show marked differences in the placement and function of stress, and that marking stress in Arabic can be predicted and determined by certain rules, and the meaning of words or utterances do not change accordingly. Whereas in English it is not the case, it is unpredictable and the shift in stress affects meaning. This is why dictionaries provide indications of the stress for each word.

The cause behind this irregularity of English word stress is mainly an etymological one, arising from the fact that English vocabulary has been drawn from two sources: 1) the teutonic (Germanic language), that is, the tendency is towards early

word stress; 2) the Romanic (Romanic language), where late word stress prevails (Kingdon, 1958).

Kelly (2000) claimed that guides to English word stress are better to be considered as descriptions of tendencies rather than rules, because they are not accurately and thoroughly true all the time, there are always some exceptions. However, Cruttenden (1986) argued that any description of English word stress rules will inevitably involve exceptions, and that "…a large number of exceptions does not defeat the object of the exercise; a general rule with exceptions is more economical than listing every word with its own unique pattern" (Cruttenden, 1986: 15). That is to say, it is safer for FL learners to rely on rules, instead of listing every word as an exception, though many recommend teaching the stress with the introduction of each new vocabulary item in the lesson as the best method (Kenworthy, 1987).

Here are some potential rules of word-stress listed below, although they might be rules of thumb.

Rule 1	*'Front weight' in nouns and adjectives*. There seems to be a very strong tendency in English for what is called core vocabulary to have stress on the first syllable. This means that many common nouns and adjectives will have stress on the first syllable. *Examples*: 'water · · · · · · · · · 'people · · · · · · · · · 'brother · · · · · · · · · 'table 'finger · · · · · · · · · 'woman · · · · · · · · · 'sister · · · · · · · · · 'ugly 'father · · · · · · · · · 'butter · · · · · · · · · 'pretty · · · · · · · · · 'apple
Rule 2	*Two- and three-syllable words which have a prefix*. In words with prefixes such as 'be-', 'in-', 'dis-', 'ex-', 'un-', etc., the stress is almost always on the second or third syllable, i.e. prefixes are not stressed in English words. Note that the majority of these words are verbs. *Examples*: re'peat · · · · · · · · · be'gin · · · · · · · · · be'cause · · · · · · · · · dis'trust in'crease · · · · · · · · · ex'haust · · · · · · · · · in'fer · · · · · · · · · ins'pect con'clude · · · · · · · · · con'fer · · · · · · · · · in'vite · · · · · · · · · under'stand

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Rule 3	*Words with suffixes*. If we examine English words with suffixes, a similar tendency is revealed: suffixes are never stressed. *Examples*: -ly 'quietly -al o'riginal -ive admi'nistrative -ent/ant e'quivalent -ic auto'matic Another general tendency is for the stressed syllable to be somewhere in the middle of the word, rather than on the first or last syllable in words of four, five, or six syllables.
Rule 3.1	Certain suffixes determine on which of the other syllables the stress will fall. There are very many suffixes which cause the syllable *before the suffix to be stressed*. These are: -ive (im'pressive) -iate ('deviate) -ient (in'cipient) -iary (pe'cuniary) -iant ('deviant) -iable (ne'gotiable) -ial (subs'tantial) -ish (di'minish) -ion (in'vention) -ify (identify) -ic (geo'graphic) -ium ('premium) -ian ('median) -ior (su'perior) -ious (in'fectious) -io ('radio) -ical (eco'nomical) -iar (fa'miliar) -ity (oppor'tunity) -ible (im'possible) It doesn't matter if the stress was on a different syllable in the form of the word without the suffix (sometimes called the 'base' word); the stress will move from wherever it was to the syllable before the suffix when any of these suffixes are added.
Rule 3.2	The suffix '-able' usually does not change the stress pattern of a word to which it is added. So in 'commend' the stress is on the second syllable, in 'commendable' it remains on the second syllable. *Examples*: a'dapt a'daptable re'ly re'liable 'knowledge 'knowledgeable de'test de'testable *Exceptions*: ad'mire 'admirable pre'fer 'preferable
Rule 3.3	following suffixes cause the stress to be placed on the fourth syllable from the end of the word (this applies, of course, only to words of four or more syllables): -ary (vo'cabulary) -ator (in'vestigator) -mony (a'limony) -acy ('intimacy) -ory (ca'tegory)

Rule 4	*Compound words*. There are also some rules for determining stress in compound words. These are words which are formed by combining two nouns, a noun and an adjective, a verb and a preposition, etc. it is very common for compound words which are nouns to have stress on the first element. So, the tendency in Rule 1 also applies to compound nouns. *Examples*: a 'teapot a 'chairman a 'put-on a 'crossword a 'windscreen a 'postman a 'pushover a 'hotdog a 'newspaper a 'walkout a 'grandfather a 'blackbird
Rule 4.1	Some compound words are formed from an adjective plus a noun. When the same two words are used separately in a sentence, each word will have equal or independent stress. For example, compare: What a beautiful 'black̲bird! Look at that big 'black̲ 'bird̲!
Rule 5	There is a set of *words which can be used as either a verb or a noun* in English (there are a few cases of noun or adjective): increase export import content overflow insult decrease In all these words, the noun has the stress on the first syllable, and the verb has the stress on the last syllable. This seems to fit with rules 1 and 2: the nouns will have front weighting and the verbs, with a prefix as the first syllable, will have stress on the second syllable.

Table 2: A summary of English word stress rules   Kenworthy (1987: 63-65)

1.4. Common Errors in Word Stress and their Causes

Avery and Ehrlich (1992) consider the incorrect placement of English word-stress as one of the most serious pronunciation problems encountered by FL learners. This has a great effect on comprehensibility, especially since stress is part of a word's identity, and the shift in stress does affect the meaning and the function of the word. Some researchers suggest that these errors are often the result of transfer from the learner's first language although many of these may be attributed to the unpredictable nature of stress in English.

Haycraft (1971) mentions two such types of stress errors made by students and explains their causes according to the learner's origin and his/her mother tongue:

1. Misplaced stress: e.g.: *ve'getable* instead of *'vegetable*.

2. Overstress: e.g.: *'pos-si-'bil-i-'ty* instead of *possi'bility*.

Haycraft (1971) lists some of the possible reasons for misplaced stress:

1. Mother tongue preference for end stress rather than front stress, in words of Latin origin, e.g., *gene'ral*, *insti'tute* (Latins and Germanic groups).

2. Mother tongue preference for end stress rather than front stress in most words, e.g., *satis'fy*, *govern'ment* (French).

3. Hesitance over which syllable to stress in any new word, e.g., *achromycine*, *development*, *envelope* (all nationalities).

Potential reasons for overstressing listed by Haycraft (1971):

1. Hesitance over which syllable or word to stress (all nationalities).

2. Mother tongue tendency to give full pronunciation value to all syllables (Italians and Spaniards).

3. Fear of leaving out a word (all nationalities).

4. Fear of speaking carelessly (all nationalities and in particular well-educated students).

5. Fear of sound clusters (all except Germanic groups).

Most of the above-mentioned errors of wrong stress use can be avoided with explicit instruction.

FL learners usually transfer the stress pattern of their language into the target language. We shall give examples on some of the problems confronting Arab and French learners mentioned by Kenworthy (1987), and Yowell (1980).

In Arabic the placement of stress in words is determined by the number and order of consonants and by the quality of the vowel. Learners tend to transfer three habits from their mother tongue to English:

- Learners put stress on the final syllable of English words ending in a vowel followed by two consonants, as in 'difficult', 'comfort' and 'expert'.
- A tendency in learners to place stress on endings such as '-est', '-ism', '-less' and '-ness' (because of the above –VCC rule).
- Learners put stress on the last syllable of a word ending in a diphthong or a long vowel plus a single consonant, as in 'irritate', 'gratitude', and 'institute'.

(Kenworthy, 1987: 125)

Moreover, the schwa vowel which occurs in unstressed syllables, causes difficulties for learners because in English it is represented by different vowel letters, unlike Arabic which implement the one sound-one letter orthographic convention.

In addition, single stressed English compound words are taken as two separate words by the Arab learners, thus each element is given a separate stress, because such word combination in Arabic does not exist.

In the native language of the learner, the vowels of all syllables are given full value, for example, 'colony' is mispronounced as /ˈkɒlɒnɪ/; syllable boundaries are clearly marked, for example, some words may receive extra syllables because of the effect of spelling (several is mispronounced as /ˈseverel/); and finally, clusters of more than two consonants are not permitted, for example, the learner tends to insert an additional vowel to break up the groups of consonants, for example, 'asked' is mispronounced as a two-syllable word.

In French dictionaries, the division between syllables is marked but there is no indication of stress. French words have a tendency for end-weighting, whereas English words tend to have a front-weighting stress. Consequently, French learners expect the stressed syllable too late. Further, a large number of cognate words in French and English make pronunciation difficult for learners in this area. Besides, the mobility of wordstress in English is also problematic. The following table demonstrates a spelling and pronunciation error made by French speakers:

Error	Native language	Possible cause
'impressive' Stress on the last syllable pronounced to rhyme with 'five'	French	Learners over-generalizing silent –e rule (only applies in stressed syllables)

Table 3: A sample spelling/pronunciation error   (Kenworthy, 1987:100)

Being a suprasegmental feature of pronunciation, stress is said to have an effect on intelligibility and comprehensibility, and errors in stress cause communication problems. Thus, we shall explain the connection between stress and intelligibility.

1.5. Stress and Intelligibility

Following Kenworthy (1987) FL learners do not necessarily need to acquire perfect native-like pronunciation. Instead, the target is rather a comfortably intelligible pronunciation, meaning that a pronunciation which can be understood with little or no conscious effort on the part of the listener. This is because after puberty the difficulty of learning a new language increases as the learner loses the capacity of easy imitation. According to Roach, the goal of instruction should be "…normally to develop the

learner's pronunciation sufficiently to permit effective communication with native speakers" (Roach, 1991: 6). For this goal to be achieved, priority should be given to teaching pronunciation features that may have a greater influence on intelligibility (usually suprasegmentals) depending on the phonetic structure of the learners' L1, and the things which cause a local problem for them. Thus, if easy intelligibility is to be achieved, it is important to give words their correct stress pattern (Gimson, 1975; Benrabah, 1997; Morley, 2000), simply because incorrect word stress decreases intelligibility and may even lead to embarassing misunderstanding.

Dalton and Seidlhofer (1994), consider two terms for the same concept, that is *intelligibility* meaning that the speaker produces sound patterns that are recognisable as English; and *comprehensibility* which means that the listener is able to understand the meaning of what is said. For instance, if a FL learner expects a word to have a particular stress placement, s/he cannot recognize it when a native-speaker produces it. On the other hand, if a non-native speaker pronounces a word with wrong stress placement, even if the sounds of the word are properly uttered, a native hearer may not understand that word. This is because native-speakers of English pay attention to the rhythm more than to the individual sounds. Some examples are provided in the following table:

Intended word	FL learner mispronunciation	Native speaker misperception
Written	Wri'tten	Retain
Comfortable	'comfor'table	Come for a table
Productivity	Pro'ductivi'ty	Productive tea

Kenworthy (1987: 18)

Table 4: The effect of incorrect word stress use on intelligibility

Benrabah (1997) investigated the intelligibility of Algerian speakers of English and he found out that there is an unusual lengthening of unstressed syllables which results in miscomprehension.

For Avery and Ehrlich (1992), English stress can fall on any syllable of a word in English. It is not the case with all languages, where word-stress may fall on the same syllable on a regular basis. In fact, in English, every word has its own stress pattern which is an important part of its identity, together with its characteristic sounds and its meaning (Dalton and Seidlhofer, 1994). And this identity-creating effect is not found in all languages, a matter which causes FL learners difficulties in determining stress of each different word. Thus, there is a need for developing the learners' awareness about their pronunciation in general and the aspect of word-stress in particular as far as it affects intelligibility (Benrabah, 1997).

In the sub-title below we shall explain how word stress placement may differ from one English variety to another, although in this research we try to be consistent following the RP[1] pronunciation.

1.6. Regional and Social Variation in Word Stress Placement

Speakers of English have different stress patterns in their speech when they say certain words or sets of words with two or more syllables. That is to say, there is a number of variations among speakers and varieties in the placement of stress. According to Pennington (1996), different varieties fix stress on a different syllable.

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[1] RP (Received Pronunciation) is the accent of British English usually chosen for the purposes of description and teaching. It is also called Oxford English, public school accent, and BBC pronunciation (Roach, 1992).

For example, the stress shift in the following lexical set does not occur in all varieties

of English: *De'mocracy*   *De'mocratise*   *Demo'cratic*

In some non-stress-shifting varieties, *democratic* follows the pattern of *democracy* by maintaining the stress on the same second syllable. In such case, English stress is much more regular and predictable. However, although these changes have made the stress system of English more simplified, this may cause a deviation from the norms and may make things more complex.

Here are some examples of British and American English differences given by Darragh (2000). For instance, initial stress occurs in the British English pronunciation of originally French words such as *'chauffeur*, *'gourmet*, *'chalet*, *'garage*, *'parquet*, and *'paté*; in American English, these borrowed words are pronounced with the main stress on the final syllable as in its original French pronunciation, whereas in *magazine* and *cigarette*, the main stress varies between initial and final position.

Word	British English	American English
ballet	/'bæleɪ/	/bæ'leɪ/
debris	/'debri:/	/də'bri:/

Furthermore, words ending in '–ary', '-iry', and '-ory' tend to be longer in American English than in British. American speakers emphasise the ending more than the British speakers, so that the word seems to have an extra syllable. However, in this case the stress position is not affected and does not change, but the additional syllable may create some kind of confusion for the FL learner. In fact, the Americans tend to show greater clarity in pronouncing unaccented syllables by giving due emphasis to each syllable of a word. As Darragh (2000: 14) stated: "…the tendency of Americans

to keep a secondary stress on one of the unaccented syllables of a longer word is a consequence of their effort to pronounce all the syllables."

Word	British English	American English
secretary	/ˈsekrətrɪ/	/ˈsekrəterɪ/
territory	/ˈterətrɪ/	/ˈterətɔːrɪ/

In addition, in words like *missile*, *docile*, *fragile*, *mobile*, and *tactile*, British speakers give more emphasis to the last syllable:

Word	British English	American English
hostile	/ˈhɒstaɪl/	/ˈhɑːstl/
missile	/ˈmɪsaɪl/	/ˈmɪsl/

Across many other varieties of English, the main stress can also be found either on the first or second syllable of the following words: *address*, *adult*, *affluence*, *inquiry*, *laboratory*, *orchestra*, *detail*, and *perfume*. According to Pennington (1996: 134), varieties of English may differ in their stress patterns according to any of the following three characteristics:

1. The placement of stress on one or another specific syllable;
2. The stability or variability of stress placement within a particular word or set of words;
3. The parameter or combination of parameters by which stress is manifested.

<div align="right">(Pennington, 1996: 134)</div>

1.7. Conclusion

So far, we have tried to provide some characteristics and description of word-stress, its phonological structure and use, its relation with intelligibility, its potential problems and other related issues, in order to clarify the feature under investigation in this paper. In the following chapter, we shall continue with our literature review. Some details will be provided on the communicative framework that we shall adopt in this study, with a special focus on the value of practice.

2. PRONUNCIATION TEACHING AND THE VALUE OF PRACTICE

2.1. Introduction

It is necessary to deal with pronunciation in the foreign language classroom, since it is important for the communication of meaning. Without adequate pronunciation skills, the FL learner's ability to communicate his/her intentions can be restricted (Celce-Murcia and Olshtain, 2000).

Teaching pronunciation of the target language is then essential and requires careful planning. It goes without saying that the teacher's speech performance or mere exposure to audio clips of native speakers' speech will not help FL learners efficiently. It is explicit teaching and consciousness-raising that make them notice things, instead of being left to pick up what seems significant for them (Dalton and Seidlhofer, 1994). As Peter McCarthy (1972) noted:

> "If pronunciation is to be taught, time must be found for it. And to neglect the manner of speaking a language_its pronunciation, that is_can only produce a lop-sided course of language study_as lop-sided as if one were to neglect its spelling, or its grammar!" (sic)
>
> (McCarthy, 1972: 33).

In this chapter, we will see a brief historical background on the different approaches to pronunciation teaching with a special focus on the communicative approach that emphasises the practice dimention in learning. This is the main area upon which we designed our teaching framework followed in this study.

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2.2. Approaches to the Teaching of Pronunciation

Pronunciation teaching tends to be linked to the approaches and methods being used in the FL teaching. After having no place in the grammar-translation method, other teaching approaches emerged, most of which advocate the teaching of pronunciation from different perspectives.

Morley (2000) pointed out that from the 1940s to the early 1960s pronunciation was viewed as an important component of English language teaching curricula in audio-lingual methodology developed in the US and the situational language teaching in Britain. Along with correct grammar, accuracy of pronunciation was a high-priority goal in language teaching. That was the golden time for the teaching of pronunciation. But beginning in the late 1960s and continuing through the 1980s and in quite sharp contrast to the previous period, a lot of questions were raised about the teaching of pronunciation in the ESL curriculum. There were questions about whether pronunciation could be taught directly at all, and whether pronunciation could be learnt through formal instruction.

Throughout the 1970s, there were some indications of changes. Many researchers began to raise issues and suggested expansions and changes of emphasis in classroom practices. That set a foundation for the slight changes beginning in the mid 1980s and continuing into the 1990s.

Celce-Murcia, Goodwin and Brinton (1996) highlighted the methodology and beliefs of the main second language (L2) approaches, which will be briefly summarized.

The Direct Method and the Naturalistic Approaches regard the process of learning a FL as being the same as that of acquiring a mother tongue (L1). Thus, by listening to an appropriate model, FL learners pick up the pronunciation. Consequently, the methodology for pronunciation teaching consists of imitating a model through repetition, and the imitation can start after an initial 'silent period', during which the learner listens to L2 samples, but is not required to speak.

The Reform Movement establishes important changes to pronunciation instruction. As speech is a primary goal, it is emphasized from the initial stages of language learning. There is integration between phonetics and L2 teaching, and phonetic training is provided for both teachers and learners. The implication for methodology is that pronunciation is explicitly taught with the aid of the phonetic alphabet.

Audiolingualism and the Oral Approach equally emphasize pronunciation teaching from the start. The main contribution to classroom methodology is the concept of phonemic contrasts, which are believed to contribute to improve learners' perception and production. The methodology exploits the use of minimal pair drills and the imitation of appropriate models. Besides, learners receive some form of phonetic information to help them with the acquisition of the pronunciation component.

After a period of time when pronunciation occupied a relevant place in the language curriculum, it practically disappeared with the development of the Cognitive Approach. This was justified by the belief that language is governed by rules, thus

habit formation cannot contribute to L2 acquisition. The conclusion is that teaching pronunciation is a waste of time, since it cannot be learnt.

The pronunciation component reappears in the language curriculum with the Silent Way. Again, pronunciation is supposed to be taught from the first levels, with the help of tools such as pointers, charts and colourful rods. It is believed that explicit instruction improves pronunciation accuracy, and the instruction is implemented with the help of the tools previously mentioned. The teacher speaks little, just indicating what learners are expected to do.

Pronunciation is still important for the Community Language Learning approach. Central beliefs here are that private classes are the ideal condition for learning, and that learning is optimised when learners take decisions about the course content and 'listen' to themselves. The methodology follows many steps. First, learners decide on an utterance they want to learn and the instructor gives an idiomatic version of it in the target language. The learners practice the utterance which is divided into chunks until they can produce it fluently, and then record it on tape. The utterance is played back and the learners have to give the target version for the chunked-translation presented by the instructor. The learners decide on the pronunciation aspects in which they want further practice and use the instructor as a 'human computer' that can be turned on and off to provide data for repetition drills as many times as the learners think necessary.

Finally, the Communicative Approach acknowledges the importance of the pronunciation component too, but differently from previous approaches. It aims at intelligible pronunciation, rather than total accuracy. It states that traditional methods

of pronunciation teaching are incompatible with the notion that language teaching should be communication-oriented. Despite recognizing the importance of pronunciation teaching, the Communicative Approach proponents tended to ignore it, or focus on the suprasegmentals for some time. At present, they recognize the importance of segments and suprasegmentals in the teaching of intelligible pronunciation. Thus, pronunciation tasks should appeal to all kinds of learners and aim at an interaction between fluency and accuracy. This can be accomplished with the use of tools of other disciplines, technology developments, the consideration of sociopsychological factors, and the learners' active participation in the curriculum selection and in the learning process as a whole. Morley (1999) sums up the characteristics of a Communicative-Cognitive-Affective approach in the following points:

- Guiding learners toward the development of a level of intellegibility that supports effective communication.
- Implementing a learner-centered approach that targets learners' cognitive involvement in developing speech awareness and self-monitoring and self-correcting skills.
- Helping learners develop self-confidence and a positive self-image.

(Morley, 1999: 20)

The methodology is still under constant development, and although the Communicative Approach has recognized the necessity of teaching pronunciation, teachers and material developers who follow this approach have found it difficult to incorporate the communicative feature in the teaching of pronunciation.

It is this last approach that we are most concerned with. In this study, we try to design a teaching strategy which follows the communicative approach by adopting a framework of the models below.

2.3. Pronunciation Teaching Models Based on the Communicative Approach

Many attempts have been made to design pronunciation materials according to the Communicative Approach principles. Some of these guidelines are suggested here.

Bowen (1972) proposes three realistic goals for the teaching of pronunciation:

a) ability to communicate orally with ease and efficiency;

b) ability to produce the basic contrasts of the target language sound system; and

c) ability to understand fluent speech as produced by native speakers.

The accomplishment of such goals might benefit from the use of an eclectic approach to the teaching of pronunciation, especially for post-puberty language learners. For Bowen, the success of pronunciation instruction depends essentially on motivating the learner by integrating pronunciation with the other elements of instruction, which might be accomplished by contextualizing the pronunciation lesson.

Bowen observes that even a pronunciation lesson that includes a combination of techniques (e.g., modeling and imitation, phonetic description, practice, and minimal pair drills) seems ineffective in the acquisition of pronunciation. This could be related to the lack of contextualization of the tasks that make up the lesson, which do not motivate learners. For Bowen, motivation is a powerful factor influencing the improvement of learners' pronunciation. The author believes that successful

pronunciation teaching is directly related to having motivated learners and meaningfully contextualized pronunciation instruction. The author exemplifies contextualized pronunciation teaching by designing activities with minimal-pair sentences, such as the following example:

This pen leaks. (Then don't write with it.)

This pan leaks. (Then don't cook with it.)

These sentences must be part of a situation, which can be easily illustrated and which can show learners the meaning load of phonemes, such as /e/ and /æ/ (pen vs. pan) in English. In addition, it would be helpful if the situation where the target elements are practised is relevant for the learners. Finally, the two elements being elicited by the minimal-pair sentences should have approximately the same probability of being used in the carrier sentence.

Bowen's demonstrations of how to capture learners' attention and make them feel motivated to study pronunciation are relevant. The technique suggested by him seems quite appropriate to make learners aware of pronunciation difficulties and hopefully motivate them. Nevertheless, the minimal pair sentences are hard to create, and it should be very difficult to maintain a real communicative environment in class by simply using this type of technique.

Scarcella and Oxford (1994) made a thorough contrast between the traditional approach and the research-based approach in pronunciation teaching. Their suggested research-based approach differs from the traditional audiolingual approach in that the goal is no longer perfect pronunciation but an intelligible one. The focus is put on longer chunks of language instead of discrete sounds. Due emphasis is also given to

the presentation of pronunciation features communicatively through a variety of contexts rather than isolated drills. Phonetic explanations are provided only when necessary. Additionally, students' motivation is seen as vital and the affect element is taken into account. This comparison is clearly summed up in the following table:

Research-based approach	Traditional approach
•The goal is to gain sufficient pronunciation skills so that the quality of pronunciation will not inhibit communication.	•The goal of instruction is to acquire native-like pronunciation.
•Instead of putting the emphasis on sounds, teachers concentrate on stress and intonation.	•The primary emphasis is teaching sounds.
•The emphasis of instruction is on teaching pronunciation communicatively.	•Sound segments are taught non-communicatively through drills of isolated words.
•The teacher provides students with phonetic descriptions only when they are helpful to students in tutorials.	•Phonetic descriptions are a primary component of traditional pronunciation classes.
•The students' motivation is seen as central to successful language instruction. The student plays a primary role in improving pronunciation. Self-monitoring skills and awareness strategies are taught.	•Students do not take responsibility for improving their own pronunciation.
•Affect is critical in pronunciation instruction. Students learn specific relaxation activities to lower anxieties and resistance to improving pronunciation.	•Affect is not viewed as important in instructional activities.

(Scarcella and Oxford, 1994: 225)

Table 5: Research-based approach VS traditional approach

The following techniques are used in the research-based approach for pronunciation instruction proposed by Scarcella and Oxford (1994):

- *Self-monitoring*: Students can learn to self-monitor their pronunciation to improve their intelligibility.

- *Tutorial Sessions and Self-Study*: These begin with a diagnostic analysis of each student's spoken English and an individualized programme is designed for each student.

- *Modeling and Individual Correction*: Report the results of analysis of students speech sample individually.

- *Communication Activities*: Design activities for the students to practise specific sounds.

- *Written Versions of Oral Presentations*: In the more advanced levels, students can be given strategies for analyzing the written versions of their oral presentations.

- *Computer-Assisted Language Learning*: Teachers can use visual displays of speech patterns to teach intonation, stress, and sounds to individuals and small groups of students.

- *Explanations*: Explanations of how to produce sounds or use pronunciation patterns appropriately should be kept to a minimum though directions about what to do with the vocal organs can help some students in some circumstances.

- *Utilization of Known Sounds*: Comparisons with the students' first language may help some students to produce a second language pattern.

- *Incorporation of Novel Elements*: Using novel elements with the use of directions.

- *Communication Strategies*: Students can be taught some useful communication strategies which will help them give the impression that their pronunciation is better than it really is.

- *Affective Strategies*: A number of excellent affective strategies can be taught to help learners lower their anxieties and gain confidence.

Celce-Murcia, Brinton, and Goodwin (1996) suggested a framework that supports a communicative cognitive approach to teaching pronunciation. Preceded by a planning stage to identify learners' needs, pedagogical priorities, and teachers'

readiness to teach pronunciation, the framework offers a structure for creating effective pronunciation lessons and activities on the sound system and other features of North American English pronunciation. According to Celce-Murcia et al (1996), a pronunciation lesson should consist of five steps:

a) *Description and analysis* (raises learner awareness of the pronunciation feature being targeted).

b) *Listening discrimination* (learners listen for and practice recognizing the targeted feature).

c) *Controlled practice and feedback* (support learner production of the specific feature in a controlled context).

d) *Guided practice and feedback* (offers structured communication exercises in which learners can produce and monitor for the targeted feature).

e) *Communicative practice and feedback* (provides opportunities for the learner to focus on content but also get feedback on where specific pronunciation instruction is needed).

For Morley (2000, 1999), pronunciation should be integrated within the mainstream instruction as long as it is part of communication. She proposed a teaching framework based on the communicative cognitive affective approach. She designed the multidimensional curriculum: a dual-focus programme which combines micro-level speech production (i.e., a focus on discrete elements of pronunciation in a bottom-up[1] sense) and macro-level speech performance (i.e., a focus on general elements of communicability in a top-down[2] sense).

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[1] It is the process of starting teaching the smaller elements such as phonemes first (Yates, 2002).
[2] It is the process where the focus is put on larger chunks of language, that is, suprasegmentals (Yates, 2002).

At the microlevel, the emphasis is put on discrete features of voice and articulation such as vowel and consonant, stress, rhythm and intonation and their clear and precise production. However, at the macrolevel, the focus is put on global patterns of spoken English like non-verbal behaviour, voice quality, segmentals and suprasegmentals, mastery of grammar and vocabulary, fluency and intelligibility.

She considered that developing learners' native-like pronunciation will frustrate both learners and teachers, especially after the learners exceeded the age of puberty. Instead she proposes four realistic goals for pronunciation teaching:

- Functional intelligibility (ability to make oneself relatively easily understood)

- Functional communicability (ability to meet the communication needs one faces)

- Increased self-confidence (ability to develop positive self-image)

- Speech monitoring abilities and speech modification strategies for use beyond the classroom (ability to listen for and recognise errors, and the ability to correct oneself when a pronunciation error has been pointed out).

The role of learners and teacher has also undergone a change. On the basis of learner-centeredness, learners should be guided towards developing self-help strategies, that is, speech awareness, self-correcting and self-monitoring skills. So the teacher acts as a speech coach and facilitator of learning, giving suggestions and offering help and affective support when necessary, while learners are led towards autonomy.

Attention is also given to the instructional planning that involves a cognitive dimension (with attention to selected information about both language and study

procedures), an affective dimension (with encouragement of learner self-involvement and self-monitoring, and a classroom atmosphere which is supportive and comfortable), and a practice dimension (with speaking tasks and activities through which learners work toward modifying pronunciation/speech patterns in spoken English).

It has been noted that, according to the cognitive communicative approach, due emphasis is given to the importance of practice in pronunciation teaching, yet less reference is made towards the significance of teaching phonetics in class. Further details on this point will be given in the next sub-titles.

2.4. The Relevance of Phonetics in Pronunciation Instruction

Phonetics and phonology are not that esoteric and highly academic disciplines having no relevance to the real world. Actually, a good understanding of these two levels of speech representations is quite necessary for both the foreign language teacher and learner. And any attention to pronunciation in class is phonetics.

For the teacher, knowledge about phonetics facilitates the diagnoses of learners' errors and provides the concepts and notation needed to represent accurately both the learners' speech and the target pronunciation (Katamba, 1989). This does not require from the teacher to be a professional phonetician.

Moreover, the theory and descriptions provided by phonetics is essential for the language teacher to enable him/her to know how language works. Practically speaking, it can train the teacher's ear, strengthen his/her ability to relate what s/he hears to how it is produced, so that s/he can give well-based instructions to learners, diagnose

mistakes, and use phonetic clues to correct their mispronunciation (O'Connor, 1973). Theoretically speaking, Bertil Malmberg (1963) emphasized earlier that a thorough knowledge of phonetics of both the learners' mother tongue and that of the target language, the teacher could successfully accomplish his/her task of perfecting the students' pronunciation skills.

For the learner, a phonetics course will help him/her how to produce troublesome sounds, how to manipulate his/her speech organs, and what characteristics the sounds have when produced (Bowen, 1972). The language learner should study phonetic theory and do exercises based on that theory in order to learn how to produce the foreign sounds (Jones, 1972). Furthermore, learning foreign pronunciation requires knowledge of the functional structure and articulatory habits of both the L1 of the learner and that of the target language, because what constitutes difficulties for the foreigner is the use of a different phonemic system. Hence, "the greater is the difficulty and the more a knowledge of phonetics is necessary" (Malmberg, 1963: 110) (sic).

In addition, Malmberg (1963) asserted that one of the contributions of phonetics in the teaching of foreign language pronunciation is the foundation of phonetic transcription and the creation of the International Phonetic Alphabet. This system helps learners to get rid of spelling effect and direct their attention to the phonetic reality of phonemes. However, one main disadvantage of this system is that it concentrates only on phoneme scripts (vowels and consonants), and very few prosodemes (such as the indication of stress in words) which appear in a phonetically transcribed text. Little –if no- reference is made to details of sounds in juncture, such

as intonation and rhythm. This might explain in a way the reason why earlier approaches to pronunciation teaching favoured the teaching of segments over prosodic aspects.

Some researchers (Yates, 2002; Burgess and Spencer, 2000) claim that the FL learner –especially the one studying English for general purposes- does not necessarily have to know all about this theoretical background. It is practice that ought to be done in depth. On the other hand, it is asserted by some others (O'Connor, 1973; Roach, 1991) that the learner needs to learn a certain amount of phonetic theory –at least having the ability to understand the marking of stress and phonemic scripts-, but a lot of continuous practice will be more helpful.

However, Peter Roach indicated that the aim of phonetics and phonology is not only to explain how language is pronounced, but also "to present the information in the context of a general theory about speech sounds and how they are used in language" (Roach, 1991: 3). This theoretical background is necessary for those who study language at an advanced level or for the prospective teacher and researcher (Roach, 1991; Burgess and Spencer, 2000). In other words, such population is not merely concerned with how to pronounce properly, but also need a deep knowledge of the underlying principles that govern the use of sounds of the language in question.

Nobody can neglect the usefulness of phonetics and phonology in the foreign language pedagogy, but further still, practice is also crucial and a well-planned practical pronunciation teaching is necessary. One of the biggest mistakes a teacher might make is the assumption that students should need instruction only in phonetic theory, and hence pay no attention as to whether these students do progress or not.

That is, students are taught the phonetics rules but in practice they cannot easily apply those rules. As Peter McCarthy claimed:

> "The error here consists in failing to appreciate that the theory to be found in the textbooks needs to be pre-digested and turned to practical account, if pupils are to be taught to pronounce a foreign language acceptably, and if they are to understand in their turn how phonetic theory can be profitably applied"
>
> (McCarthy, 1972: 33).

It should be stressed then, that EFL learners need to learn *how* to pronounce sounds of the target language, not merely learning *about* those sounds (Burgess and Spencer, 2000). In pronunciation learning, one should be more concerned with practicing listening and speaking and to interpret and produce phonological features appropriately, instead of just labeling and defining them.

It is also worth-mentioning that pronunciation is not just a cognitive *knowing-that*, it is also a physical *knowing-how* (Fraser, 1999). It is a cognitive skill that needs pertinent practice from the part of the FL learner. This skill component cannot be solely learnt by listening to the teacher, but by practicing speaking as well. As Peter McCarthy (1972) observed: "pronouncing a foreign language *is* a skill, one that needs careful training of a special kind, and one that can't be acquired by just leaving it to take care of itself" (McCarthy, 1972: 14).

In the title that follows, we shall shed more light on the practice dimension comprehensively.

2.5. A Focus on the Practice Component

One of the necessary conditions for learning a language is the opportunity to practise the new skills and maintain old ones, in order to develop fluency and automaticity (Anderson, 1980). According to Anderson's Cognitive Learning Model, the learning task involves three stages: a) a cognitive stage, in which the learner develops and remembers the declarative knowledge; b) an associative stage where the declarative knowledge is transformed into procedural knowledge through which the learner starts to use this knowledge; and finally, c) an autonomous stage where the procedure becomes automated. It is the last two phases that are included in the opportunity for practice condition.

Pronunciation is an active and productive behaviour, which is supposed to improve through practice, which is mainly based on communicative and learner-centered approaches (Pennington, 1996). Appropriate and varied practice opportunities along with constructive feedback are then recommended to establish the newly studied points. According to Avery and Ehrlich (1992), communicative pronunciation teaching should place emphasis on the following areas, among which practice forms a crucial part:

- Meaningful practice beyond the word level

- Task orientation of classroom activities

- Development of strategies for learning beyond the classroom

- Peer correction and group work

- Student-centered classroom

2.5.1. Pronunciation-oriented Speaking Practice

Assigning a mixture of speaking practice activities is needed to get effective results. Three kinds of speaking practice can be used, starting from imitative (dependent practice) to rehearsed practice (guided self-practice), and arriving at extemporaneous practice (independent self-practice).

According to Pennington (1996), and Morley (2000), a pronunciation syllabus can be planned by providing a variety of speaking and listening tasks and activities with the integration of three practice modes: imitative (controlled), rehearsed (structured), and extemporaneous (free).

2.5.1.1. Imitative Practice

This type of practice activity offers little freedom or possibility of creativity on the part of students but it involves some limited level of language use. This kind of practice should be used only as necessary and may be introduced as a short-term component within a structured or free practice context, especially with more advanced students. The purpose of this particular practice type is to focus on controlled production of selected pronunciation features. Examples might be dialogue or minimal pair practice. It can include self access audio or video-taped material for use beyond the classroom setting, in addition to computer programmes for self-study.

2.5.1.2. Rehearsed Practice

This type of practice is a smooth transition from the first type of practice and paves the way to the next kind of practice mode. It involves activities which are

structured to some degree but which allow for student creativity and freedom of choice in deciding how to complete the activity. The purpose here is to work towards stabilization of modified pronunciation and speech patterns (that is, discrete and golbal features) so that the learner can use them easily later. This practice may include a variety of oral reading scripts, either teacher-selected, teacher-made or student-selected. Examples are simulated radio or TV broadcast scripts, excerpts from famous speeches, plays, poems, nevels, role play skits, etc; preplanned short presentations of a variety of topics; in-class or out of class rehearsal sessions through audio or video-taping of students' performance; feedback and rehearsal self-study of pair or group work sessions organized out of class, and so on and so forth.

Practice can then move gradually to the next mode by adding audience participation in the form of discussion interactions and question-and-answer format.

2.5.1.3. Extemporaneous Practice

This type of activity requires students to be relaxed by simply giving them topics to discuss without providing strict directions. The purpose here is that of "working toward integration of modified speech patterns into naturally occuring creative speech in both partially planned and unplanned talks (monologues)" (Morley, 2000: 118). This sort of practice may include small-group discussion presentations, either planned outside the classroom or planned spontaneously in-class and presented immediately; audience interaction that follow-up dialogue sessions in question and answer form, in-class presentations with audio or videotaping; out of class self-study

rehearsals either individually, in pairs or in small group preparation sessions; one-on-one individual speech work with teacher and students feedback sessions, and so on.

We can sum up by saying that the practice modes mentioned above clearly move from totally dependent practice with a model provided, to a more or less loosely guided practice with rehearsed speech, and end with independent practice with student's self-generated content.

2.5.2. Pronunciation-oriented Listening Practice

Pronunciation-based listening tasks are helpful for developing learners' auditory skills and their overall aural comprehension. Special attention should be given to fast authentic speech. Activities that involve recognition and discrimination of specific sounds, stress patterns, sound modifications and intonation contours will complement the students' production activities, as Avery and Ehrlich (1994) claims:

> "…exposure to listening exercises…will help students realize what has to be accomplished in the production of English sound…by concentrating on how native speakers actually pronounce the sounds that we expect them to produce"
>
> (Avery and Ehrlich, 1994: 198)

Furthermore, the combination of pronunciation study with listening activities makes students notice things about the target language and its use. Indeed, noticing is necessary at an initial stage of presentating an item and its recycling as well (Kelly, 2000). Improving the student's receptive (listening) skills will provide the basis for pronunciation improvement in their own speech (Hewings, 2004).

2.5.3. Spelling-oriented Pronunciation Practice

English spelling is not phonetic (Kelly, 2000; McCarthy, 1972). There is no one to one correspondance between sound and spelling, that is, a single sound might be represented by a number of different letters or letter combination in different words, and written letters may have a number of different pronunciation in different words.

So, English spelling is not a reliable indicator of pronunciation in many cases because of idiosyncractic factors having to do with a) the history of individual words, and b) the placement of stress (Pennington, 1996). For instance, we can notice that the first vowel of 'demon' is a fully stressed /i:/, while the second is reduced to schwa under the influence of reduced stress, but in 'demonic' the first vowel is schwa while the second vowel is a fully stressed /ɒ/.

It is important to help students develop their awareness of the relationship between spelling and pronunciation, so that when they come across a new written word they can attempt to pronounce it correctly, and vice versa (Hewings, 2004). Here are some regularities of sound/spelling correspondances pointed out by Hewings (2004: 10): certain suffixes control where stress is placed in a word, for example, the suffixes '–ic' and '–ity' cause the stress to be placed in the syllable before the suffix (compare *athelete/able* /ˈæθliːt/ˈeɪbl/ with stress on the first syllable, and *atheletic/ability* /æθˈletɪk/əˈbɪlɪti/ with stress on the second). However, although there are some regular patterns and clues to pronunciation, the language learner should not base his/her pronunciation on spelling solely for the majority of words, because the written language does not always portray its correct pronunciation.

Thus, it is important for EFL students to learn about how to relate spoken English and written English. For example, learners' awareness of spelling patterns as cues to stress or rhythm patterning is useful. The task of the teacher here is that of "presenting more information on important sound-spelling relationships and giving students special guidance in the use of English orthography as a key tool for predicting pronunciation patterns" (Morley, 1999: 20). Pennington (1996) pointed out that the teacher should draw the students' attention not to rely on unreliable correspondences between a) the written and spoken forms of English and b) the spelling patterns of the native language and the spoken forms of the target language, English.

2.6. Conclusion

So far, we have tried to review some of the available literature and pedagogic practices related to the teaching of pronunciation as a whole, with special attention to the value of communicative practice. We have seen that one of the principles of a communicative cognitive approach is giving practice an invaluable place in the pronunciation instruction more than mere phonetic explanations. On the whole, the ultimate aim is to set a clarified theoretical background of the framework adopted in the present study.

3. Rationale and Experimental Design

3.1. Introduction

The main purpose of the present research is to assess the extent to which a pronunciation programme in the teaching of word stress can improve the learner's production of correct word stress. There are two aspects to this research. First, we shall try to identify the problems students have with word stress. Second, we shall design a short course aimed at training students for a better acquisition and use of word stress. Thus, in this chapter, we shall discuss in-depth the rationale and the research design, the sample of study, instrumentation, and data collection.

3.2. Rationale

This research is an experimental study in which we investigate and identify the problems of students in the use of word stress, and their possible causes. The experiment is conducted at the Foreign Languages Department (English Section) – University of Setif. At this stage of education, students study English as a foreign language for four years to receive a BA. Phonetics is taught for three years, and word stress is taught during the 2nd year programme *(see appendix 6 for programme content and objectives)*.

Our aim is to find out whether pronunciation/speech practice using different modes of teaching, will bring about any changes and improvements to the learners' correct production of word stress, apart from what has been acquired from the traditional course of phonetics.

In this research study, we deal only with stress in words in isolation, which are not linked to particular combinations (in the case of rapid connected speech), because in some cases, certain word combinations may shift the main stress especially for those containing a secondary stress. For instance: *Chi'nese* becomes *a 'Chinese product*. Further, we deal only with RP English. No other variety is used because of some slight differences that can be found in the placement of stress. We exclude mono-syllabic words, because they are normally not stressed. Following Kelly (2000), we consider only two levels of stress (stressed and unstressed patterns), giving emphasis to the main stress to avoid confusion between the different levels of stress.

The teaching materials designed for this study are constructed according to the students' areas of weaknesses and deficiencies diagnosed and reported from the questionnaires and the pre-test in particular. Also, we try to design practice lessons which follow the communicative approach by adopting the framework discussed in the preceding chapter of literature review.

3.3. Statement of the Research Question

In the Foreign Languages Department (English Section) at the University of Setif, there is little practice in the phonetic course especially at the level of production. Practice in the language lab is limited to imitative practice (listen and repeat drills), and many teachers stick to one coursebook, and there's no variety of tasks. As a matter of fact, the phonetics course seems to be highly theoretical to students. Attention is given to theory at the expense of practice. The phonetic lecture is presented with very few practice sessions. For these reasons, our research question investigates whether

the assignment of three types of oral activities in the language class, may improve the learners' use of word stress more efficiently and enable them to overcome their difficulties. These three practice types are done respectively: controlled, guided and free.

3.4. Method

3.4.1. Subjects

The population consists of two groups of third-year EFL students at the English Section –Foreign Languages Department, University of Setif. There were 46 subjects in both groups (22 students in the experimental group, and 24 ones in the control group) of mixed sexes, aging 19 and over. My choice of this particular educational level is based on the fact that 3rd year students will be finishing the programme of phonetics course by the third year, and they are thus expected to master the overall pronunciation skills and stress in particular, that is, they have already studied word stress in the previous year programme of phonetics. Normally stress is taught in the 2nd year programme during the 2nd term, but since our experiment was intended to be held at the beginning of the academic year, it was impossible to conduct it with 2nd year students. The participants of the experimental group that followed our course on word-stress consisted of 4 males and 18 females. Meanwhile, the control group consisted of 7 males and 17 females. They were selected randomly.

3.4.2. Materials and Procedure

We used two questionnaires (one for teachers and one for students), and two tests (pre-test and post-test) as our main research tools for data collection. The aim of

the questionnaires was to investigate why the students think they make errors, what errors they think they make, and their views on goals or importance of phonetics course. The trouble is that students often do not know precisely what their difficulties are in pronunciation. As a matter of fact, administering a test could be an extra tool to help us identify the problems.

This experimental study was carried out over a five-week period. Two groups of 46 students (experimental 22 students and control 24 students) from 3rd year classes, oral expression module, each session was conducted in one hour and a half, and met for twice a week (15 hours in total). In the first session, we administered the pre-test for both groups as well as the questionnaire. The pre-test and the questionnaires were administered in the first class meeting after the course (tuition) began, and before the pronunciation instruction period for the experimental group started.

3.4.2.1. Research Materials

3.4.2.1.1. The questionnaires

First, we administered two questionnaires: one for the teachers of phonetics, and another for the students. We did not direct similar questions to teachers and students to avoid repetition, and questions relevant to teachers may have not been suitable for students. Further, students have their own problems which teachers themselves may not directly and easily notice. It is worth noting that I am quite aware that we need many more questions to find out about what is going on in class, but somehow to avoid lengthy questionnaires, we had to limit the number of questions involved.

Concerning the teachers' questionnaire *(see appendix 1)*, the rationale for the choice of the various questions is summarised as follows:

➢ Questions 1, 2, 3 and 4 explore the objectives of the phonetics course and the teachers' aims in teaching this module.

   • Question 1 and 2 aim at finding out the assumed/perceived efficiency of the English phonetics and phonology course, whether the phonetics programme fulfils the course objectives or not, and in particular, the extent to which the course has been helpful in teaching the acquisition of stress.

   • In question 3 and 4, we want to know the ultimate objective of the teacher from the phonetics course, whether to assess the students' phonetic knowledge or pronunciation abilities or both together.

➢ Questions 5, 6 and 7 explore the content and type of practice in phonetics used in class.

   • Question 5 aims at finding out the kind of practice work teachers follow in the phonetics course.

   • Questions 6 and 7 aim at getting to know whether teachers implement different modes of practice in class or not, and what obstacles they may face.

➢ Questions 8, 9 and 10 aim at evaluating the course of phonetics and potential problems of students' pronunciation abilities mainly word-stress assignment. That is, when, how, and why students have difficulties with stress.

   • In question 8 we want to know the level of students in some particular pronunciation features, a kind of evaluation of their progress and achievement.

- Questions 9 and 10 aim at finding out the kind of error students make, be it a wrong syllable stress, or equal stressing of the same syllable, or both together.

- Question 11 aims at getting to know the kind of difficulties students have: for example with longer words, unfamiliar words or whatsoever cases.

- Questions 12 and 13 and 14 aim at inquiring about the origin of the problem and the reasons of the phonetics course failure to achieve the desired objectives (which is that of helping students develop their production of word-stress). We want to know the causes of stress errors from different angles.

- In question 14 we want teachers to suggest possible ways for improvement, especially the production of word-stress patterns according to the choices given.

- Question 16 is an open question for teachers suggest any further points they wish to address within this research topic.

In fact, during the administration of the questionnaire, I met each teacher individually, and anything that needed further clarification, was discussed on the spot. Not to mention that the number of the participating teachers was very few, two teachers were contacted face to face, and the third teacher was contacted via email.

For the students' questionnaire (*see appendix 2*), it can be summarised as follows:

➢ Questions 1, 2, 3 and 4 deal with the perceived possible benefits gained from the phonetics course

- The aim behind questions 1, 2 and 3 is to know the way phonetics may have helped students whether it helped them acquire good pronunciation skills or they just receive theoretical knowledge, and the extent to which the course has been helpful in enabling them to assign stress at the word level.

- Question 4 aims to detect and diagnose potential problems of particular pronunciation features related to stress, such as schwa recognition, vowel reduction, syllable identification, sound/spelling connection, clusters, and overall pronunciation skills.

- In question 5, we want to find out whether students have problems with stress placement.

- Question 6 aims to spot the areas of difficulty whether at the reception level, the production level or sound/spelling level.

- Question 7 aims at examining the students' views and attitudes as to whether the practice work done in the language lab was helpful or not.

- In questions 8, 9, 10 and 11, we try to detect the causes behind the problems of marking stress, by providing a list of suggestions, or allowing students to suggest any other cause(s).

- The aim behind question 12 is to leave students free to note down any further ideas or concerns they might have and which I haven't issued in the subject at hand.

The questionnaire was distributed to both groups (control and experimental) in the first class meeting, and the number of students was limited because many students were absent at the beginning of the academic year, and some others were not serious enough to fill in the questionnaire and return it back on time. So, I counted only for 46 copies of the respondents, which is the same total number of subjects who have done the pre-test.

3.4.2.1.2. The tests

We administered a pre-test and a post-test. The aim was to compare the current level of both the experimental group and control group concerning their capacities and difficulties in producing correct word-stress.

According to Roach (1991: 88), in order to decide on stress placement, a number of things need to be considered:

a) Whether the word is morphologically simple, or whether it is complex as a result of containing affixes, or of being a compound word.

b) The grammatical category to which the word belongs (noun, verb, adj., etc).

c) The number of syllables in the word.

d) The phonological structure of those syllables.

These points were taken into account and helped us build up our pre-test. So, subjects were tested not solely in marking stress directly, but also in identifying syllables and schwa incidences alike. In this way, the pre-test aimed at testing the students' strengths and weaknesses in specific pronunciation features related to word stress, such as syllable division and schwa identification. The latter were considered later on in the teaching material.

Two tests were designed; a pre-test (*see appendix 3*) for both groups (experimental and control) before the programme of instruction began, and a post-test *(see appendix 5)* to both groups after the experimental group finished the instructional period. The pre-test helped us diagnose the students' main problems with stress assignment at the word level, and evaluate their achievement and current level by assessing their production abilities of proper stress. The post-test helped us to test the

efficiency of our followed strategy, and see if there was any improvement or change by comparing the results.

The selection of test items was based on various types of words. These include dissyllabic and polysyllabic words, different word class, single-stressed words and words bearing both primary and secondary stress (also called double-stress[1]), as well as simple, compound and complex words, homographs (word-class pairs), common and unfamiliar words. This variety will help us explore the most common mistakes that students make in different word categories.

Our test aims at testing the students' production abilities of word-stress. We devised four exercises.

a) In exercise 1, students are given a list of words and are asked to classify them according to the number of syllables in each word, to see if their spelling affected their identification of syllable division.

b) In exercise 2, students had to categorize a list of words according to their appropriate stress pattern, and then they have to underline the incidences of schwa, so that to see whether they can distinguish between the notion of stressed and unstressed syllables.

c) In exercise 3, they had to do *a discrimination* task where they had to find out whether the pairs of words (some of which are spelt the same, like homographs, and word families) had the same stress pattern or not, they had to circle the stressed syllable.

d) In exercise 4, students had to transcribe a list of words (the selection of words was based on those words which may cause difficulties for learners such as

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[1] This term is used by Yowell (1980).

compound nouns, phrasal verbs, complex words, homographs, and words which seemed to cause troubles for Arab learners) and tried to indicate the correct placement of stress with (') and locate syllable boundaries with a dot, to see whether students had any pronunciation problems, and whether they were able to predict stress properly and divide the word into syllables appropriately.

This variety in designing the exercises is due to the fact that some students are not good at transcribing and using symbols properly, so instead of marking stress with the phonetic symbol ('), we provided patterns of small and big circles (the smaller circle represents the unstressed syllable, and the bigger one for the stressed syllable). Here is a summary of the pre-test marking scales for each exercise:

- The marking scale for each test item is 0.25 point (except for exercise 1 and 2: 0.5 point for each tested item), 20/20 in total.

- Exercise 1: classifying words according to their number of syllables (4/4 points)

- Exercise 2: schwa identification + predicting stress patterns: (5/5 points)

- Exercise 3: discrimination test (same or different)+circling the stressed syllable: (4/4 points)

- Exercise 4: transcription+locating syllable borders+marking stress: (7/7 points)

The aim behind the post-test was to evaluate any impact (if any) in the performance of the experimental group concerning their production of word stress and compare it to that of the control group, to see whether the experimental teaching was effective or not. For that reason, the post-test comprised two parts: a written part as done in the pre-test, and an oral part. Five exercises have been devised.

a) Exercise 1 was similar to that of exercise 3 of the pre-test. The aim was to assess the student's discrimination abilities.

b) Exercise 2 was the same as that in exercise 2 of the pre-test, but the difference was that students were asked to provide the stress patterns by themselves.

c) In exercise 3 –similar to exercise 4 in the pre-test-, students were to transcribe a list of words by marking stress and counting syllables, but the difference was that, this time students did not have to locate syllable borders as in the pre-test, but just mention the number of syllables in a separate column.

d) Exercise 4 and 5 concern the oral part. Students were asked to read aloud a transcribed sentence in exercise 4, to enable students who had problems of pronunciation to concentrate on the production of word stress, so that the spelling did not get in their way. Then in exercise 5, students read aloud a list of words.

Students were allowed enough time to read through the sentence and list of words silently. Students performed individually, and a score was given for each of the target words correctly stressed.

Although the ultimate aim of the post-test was to test the students' prediction and production of correct word stress in particular, we nevertheless considered syllable and schwa identification and spelling awareness.

Here is a summary of the post-test marking scales for each exercise:

- The marking scale for each test item is 0.25 point, 20/20 in total.

- Exercise 1: discrimination test (same or different)+circling the stressed syllable: (2/2 points)

- Exercise 2: schwa identification+predicting stress patterns+counting syllables: (5/5 points)

- Exercise 3: Counting syllables+transcription+locating syllable borders+marking stress: (7/7 points)

- Exercise 4: Oral test: reading aloud a transcribed sentence+a list of words with the proper stress: (6/6 points)

3.4.2.2. Teaching Materials

3.4.2.2.1. Rationale

Our subjects already had knowledge background in word stress, so we focus on the troublesome areas which have been identified through the questionnaires and the pre-test. This means that we did not have to repeat what had been dealt with previously in the traditional phonetic course *(see appendix 6 for programme details)*. The teaching materials adopted here are based on different models of the communicative approach suggested by Bowen (1972), Scarcella and Oxford (1994), Celce-Murcia et all (1996), and Morley (2000), who all tried to apply the principles of the communicative approach to pronunciation teaching albeit in different ways. However, they had a lot in common and can be summed up as follows:

- As recommended by Bowen (1972), Celce-Murcia et al (1996) and Scarcella and Oxford (1994), each lesson should give some phonetic descriptions and explanations about the target feature only when they are helpful and necessary. Lessons should be kept to the practice type.

- Celce-Murcia et al (1996) and Morley (2000) suggested pronunciation-oriented listening exercises: giving discrimination and identification tasks on word-stress (perception-based exercises mainly with stress and word formation, homographs, common and unfamiliar words and a variety of exercises on words regardless of their grammatical categories).

- One of the techniques suggested by Scarcella and Oxford (1994) is the design of a variety of communicative activities for practicing word stress through the following steps:

  a. Identify the target pronunciation feature(s) students need to learn.

  b. Find lexical and grammatical contexts that have a number of natural occurrences of the target pronunciation feature.

  c. Develop communicative tasks that incorporate the contexts.

  d. Develop at least three or four exercises so that the teacher can recycle the target feature and provide students with adequate practice of the target feature in new contexts.

Celce-Murcia et al (1996) and Morley (2000) proposed three practice modes (imitative, rehearsed, and extemporaneous)

- Imitative (controlled/dependent) speaking practice: assigning controlled pronunciation drills following a model. This will be introduced as a short-term component within any practice context, and during the lab sessions.

- Rehearsed (structured/guided) speaking practice: devising oral script reading, in which making a student read written chunked texts (rich with vocabulary), poems and dialogues, and then the remaining students check the right use of

word-stress in context and give their feedback. These scripts have their recordings.

- Extemporaneous (free/independent) speaking practice: students are assigned pre-prepared short presentations through which they can produce the targeted feature in a communicative context and receive feedback at the end. In addition, students are assigned spontaneous presentations and self-generated content through which they can learn how to focus on content and the appropriate marking of word-stress, and they get feedback from their peers when necessary.

- We also tried to apply Bowen's (1972) idea of contextualisation, for example, short and long vowels were contrasted and presented in sentences and short poems, instead of making students practice them in isolation. Furthermore, to practice stress prediction, key vocabulary was also introduced in texts, dialogues, and a transcribed text, instead of teaching word stress in a discrete way out of context.

- For Morley (2000), a crucial part of the instructional planning in pronunciation teaching is the practice dimension, and sound/spelling awareness practice is recommended: raising awareness about schwa representation, syllable identification, words written in the same way do not necessarily carry stress in the same position, and the addition of certain affixes may shift the placement of stress in certain cases. Thus, some discrimination and awareness raising tasks were emphasised accordingly.

Following the communicative practice framework explained above, and considering students' previously identified difficulties, we devised lessons that covered

any point that affect word stress correct production. We moved from controlled to guided and finally free practice. Since our finding showed that students had problems in identifying syllables and schwa, lessons on these two features were presented the first especially that they are constantly referred to whenever stress is marked. The arrangement of lessons was organised according to the complexity and simplicity order, like teaching the different morphological and grammatical categories of word stress.

The aim behind the design of the teaching units in this study is to improve the students' use and acquisition of word stress by dealing with their most troublesome pronunciation areas previously identified. The ultimate objective is to make students practice word stress orally through three modes (imitative, guided, and free). It is different from the ordinary phonetic course in the way the feature of word stress is taught and practised. That is, the oral practice is not limited to modeling and imitation. The focus is put on the production of the target feature in context and everyday talk. Further more, the activities are more communicative, and the tasks are varied in order to reinforce the targeted feature. Attention is also given to the practice component rather than mere theoretical phonetic explanations.

The rationale behind the selection of the assigned teaching materials was to address the students' weaknesses identified previously. We also tried to follow a teaching strategy that fits with the communicative framework introduced above, and which is based primarily on three modes of speech practice respectively: controlled, structured, and freer.

Following Roach (1991), marking stress goes through different stages, starting from dividing a word into syllables, counting the number of syllables and locating their boundaries, examining the quality of these syllables, and checking the grammatical class of the word and its morphological structure. The teaching units were dealt with in that order, but we paid attention to the most troublesome features without further details.

First, we introduced the first unit on syllable division in cases like words ending in '-ed' and '-s', words containing vowel elision, where the aim is to increase their sound/spelling awareness concerning syllable division. The next unit covered schwa occurrences and vowel reduction. The aim was to show students the difference between stressed and unstressed patterns. The nonsense syllables exercise helped us to focus the students' attention on the production of stress regardless of the orthographic form of the nonsense word, and to make them aware that there is no direct correspondence between sound and spelling.

Then, in the following units, word stress rules and clues were introduced to help students use generalities for predicting stress in different situations. All possible grammatical and morphological words were dealt with separately, in order not to allow any room for ambiguities regarding particular word categories. It follows that, phonetic explanation was provided only in few cases, because we aimed to give more opportunities for speaking practice. For instance, big and small circles were used to simplify the indication of stress rather than mere phonetic transcriptions. Besides, in many situations we incorporated listening clips whenever needed. We intended to deal with perception before production.

Another technique was used to recycle the newly learnt points, which was the design of a variety of activities to present the target feature in different contexts for reinforced practice. For example, we have implemented types of exercises like matching, close tests, multiple choice, etc. Further, activities were presented in context to help students determine the right placement of stress. For example, compound words were used in sentences to let students know whether the word is a compound or an adjective + noun, a noun or a verb. Further, in a listening task, students were asked to discriminate between words pronounced in the same way, these words should be given in context and not in isolation to show the difference (e.g., for tea/forty).

After all the targeted features have been taught in the preceding units, then we came to apply the three speech practice modes. The first mode was conducted in the lab for the ease of using the headphones. The structured mode was conducted through reading different types of text aloud, like poems and chunked[1] paragraphs for their ease of reading, and feedback was provided after each performance either by the teacher or the classmates. After word stress have been explicitly taught and practiced enough under the teacher's supervision, then came the final step of the free practice mode which was done through oral presentations of a homework assignment and in-class discussion, and the targeted points were supervised by the teacher.

Finally, the aim behind the assigned homework was to prepare students for the type of activities that would be done in the test, as well as to add further support to their newly acquired pronunciation points.

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[1] Chunking in prosody refers to the division of speech into word groups so that they sound complete. The chunked text makes reading easier for students, i.e they know where to pause appropriately.

Thus, we implemented the following course content (*See appendix 4 for teaching materials*):

3.4.2.2.2. Content and structure of the teaching units

All the lessons go through the following same sequence:

❖ A warm up activity to review of previous knowledge by asking questions;

❖ A brief explanations of the target feature are provided;

❖ Sample examples are often provided in the activities for illustration.

The materials used for each lesson are exemplified in worksheets (*see appendix 4*), associated with audio clips when necessary, except for the last lesson which requires students' self-generated content performing presentations. Each class session takes about 1 hour and 30 minutes, except for the lab session that takes just 1 hour for administrative regulations. Units 5, 6, and 7 involve the three production practice modes (controlled, guided, and free). When all the units are presented in class, homework is assigned to students for revision and recapitulation, including a variety of activities that cover all the points dealt with previously in the whole units.

*Unit One***:** As a starting point, this lesson was designed to raise students' attention to syllable division mainly with words ending in '-ed', '-s', and words with fewer syllables than expected (schwa elision). Identifying syllables remains constantly practised throughout all the lessons that follow. The main objective of this lesson is to help students learn how to identify the number of syllables in words, as well as locating syllable borders. We try to focus their attention on the way syllables are divided through pronunciation rather than spelling. The concept of syllable is well explained as having no direct relation with spelling, for example, the word *'general'* which seems to

have three syllables in writing, has in fact only two syllables when pronounced. This is called schwa elision. Attention is given to the addition of final '-s' and '-ed' to certain words which could produce an extra syllable, for example, wish (1 syllable) and wish*es* (2 syllables), hate (1 syllable) and hat*ed* (2 syllables). After providing some rules and clues for all these points, four exercises are suggested for aural/oral practice and spelling awareness, with examples.

- In exercise 1 (schwa elision task), students are given a list of words and then asked to predict and cross out the vowel sound which is omitted in its usual pronunciation.

- In exercise 2, students are presented with a list of regular verbs, and they must write the past tense of these verbs from the box in the correct part of the table. Then they listen, check and repeat.

- In exercise 3, students are given a list of words with –s endings in a table, and they must count the number of syllables in each word.

- In exercise 4, students must circle the word which has a different number of syllables from the other words in the same list.

Unit Two: Another related feature is targeted here as an introduction to stress, that is vowel reduction and schwa recognition. Students listen and identify stressed and unstressed syllables, and conduct a controlled practice using sequences of nonsense syllables of varying lengths. In this lesson students learn how to identify schwa and produce a reduced vowel through a production and recognition tasks. Thus, the objective here is to make students aware about how to give vowels (syllables) a full or reduced quality, and recognize schwa in different written forms. This is another way to

draw students' attention to stress from a different angle by focusing on unstressed patterns rather than stressed ones. First, students are introduced to schwa /ə/, which occurs most frequently in unstressed syllables. /ə/ is represented in different letter sounds, some spelling awareness are highlighted, and three activities are assigned:

- In exercise 1 (schwa identification task), students are presented with a list of words, and they have to cross out the reduced vowel (schwa) in each word.

- In exercise 2, students must decipher a list of transcribed words, and then underline the letters that represent schwa incidences.

- In exercise 3, this is a controlled practice of stress and unstress in nonsense syllables, where students have to place stress on each of the syllables in some nonsense words as shown by different patterns of stress (for example, the word 'dadada' is realized like this: da.'DA.da if stress is placed in the second syllable, or 'DA.da.da if stress is marked on the first syllable, etc). Then, they pronounce the words according to the provided pattern. They must carefully produce schwa in the unstressed syllables. The aim behind the use of nonsense syllables is to focus students' attention on the appropriate production of stressed and even unstressed patterns, regardless of the spelling form of the word. This "DA DA" exercise trains students to place stress on different positions in a word (initial, middle, and final).

Unit Three: Word stress rules which students have already learnt in their last year programme are reviewed, bearing in mind that, they may have forgotten or have not grasped them very well. Reference is made to exceptions of certain rules to avoid over-generalisation. Some identification and discrimination tasks were devised. After

establishing some background on syllable division and vowel reduction, we move to deal with word stress rules, although they cannot be totally generalized but they can help as good clues for placing stress in core vocabulary, words with affixes, compound words, and words which have a dual role. Word stress here is not defined with phonetic terms, but it is introduced as simply as possible focusing on its production and recognition. Demonstration of the stressed syllable is done through exaggeration of the stressed syllable more loudly, for example, than the remaining syllables. Stress is presented either by the ordinary phonetic symbol, or by using capital letters, or through the use of bigger and smaller circles in particular. The latter help to show the number of syllables in a word as well. Four activities are designed:

- In exercise 1 (a multiple choice activity), a set of words are listed with their syllables divided, students listen to the audio tape, then decide which syllable is longer and louder than the others?

- In exercise 2 (a matching activity about familiar words), students have to put a number of words into the correct columns, according to their stress pattern. Then they look at the words again and mark all the incidences of the sound /ə/. Students must know that there are other vowel sounds that are unstressed like syllabic consonants, and more often /i:/, /ɪ/, /u:/, and /ʊ/.

- In exercise 3 (unfamiliar words), students must predict the stress patterns of a set of words. Then, they use their dictionaries to find out what the words mean and check the right transcriptions. Next, they repeat the words after the recording, and discuss any differences between their predicted answers and the correct ones.

- In exercise 4 (a discrimination task about homographs), students listen to a number of homographs used in sentences from the audio clip, and then they decide whether they hear a verb or a noun?

Thus, the main goal of this lesson is to enable students to identify and predict stress patterns in common words, unfamiliar words, and homographs.

Unit Four: This lesson is divided into two sessions. Special attention is given to stress and word formation. In the first part of the lesson we focused on words with affixes, and the second part dealt with compound and phrasal stress. The objective is to enable students to recognize and produce the proper stress in longer words (complex words and compound words) and to increase their awareness about spelling variations and grammatical functions.

The 1ˢᵗ Session in Unit 4: This session is about stress in words with affixes. After providing some explanations (most of which were given in unit 3), the following activities are assigned:

- In exercise 1, students are asked to use some affixes which do not cause stress shift to make longer words from the words listed. Then, they listen and check if they get the same words as on the recording. After that, they listen and repeat.

  E.g.: child   childhood   childish   childishness   childless

- In exercise 2 (Root and derived words), students will transcribe the root and derived words provided, so that to make them notice the sound changes and stress shift. E.g.: sign /saɪn/   signal /ˈsɪgnəl/

- In exercise 3, students will learn how to combine a list of words with one of the endings from the box below, and give the stress pattern of their new obtained

word with big and small circles. They may need to change or add other letters

to the first word.

-ion / -ic

E.g.: inform: information ooOo.

- In exercise 4, students make a word ending in –ity from a list of words, and

  give the appropriate stress pattern. E.g.: author: authority   oOoo

- In exercise 5, students fill in the gaps with the word which is missing from the

  family. Then, they listen, check and repeat.

  E.g.: society, ...sociology….. (ooOoo), sociological.

  The 2ⁿᵈ Session in Unit 4: This second part of the unit is devoted to stress

in compound words and phrasal verbs. After providing some explanations, the

following activities are assigned:

- In exercise 1, students listen to an audio clip containing compound words

  mixed with (adjective + noun) phrases, and they are expected to predict the

  appropriate word stress by writing out the syllable that they expect to be

  stressed. Then, they listen to targeted words used in sentences to decide whether

  they hear a compound noun or an adjective + noun phrase.

- In exercise 2, students read sentences and underline all the compound nouns

  (each sentence has two). They try to find out whether the main stress is in the

  first or second part of the compound. At the end, they check their answers from

  the recording.

- Exercise 3 is similar to exercise 1 but the focus is put on phrasal verbs. Students

  listen to a number of phrasal verbs employed in sentences, and try to predict the

stress depending on whether the phrasal verb functions as a verb or a noun, by writing the syllable they think should be stressed. Then, they listen to a set of phrasal verbs from the audio tape and decide if it is a verb or a noun depending on the placement of stress.

- In exercise 4, students listen and practise a list of phrasal verbs, each word is given a particular number. They have to focus their attention on stress, listen carefully and try to decide which word is being mentioned in the audio clip (e.g.: PRINTout=12). Then, they use these words to complete the sentences with blanks in the worksheet. Finally, they practice saying each sentence with correct word-stress.

Unit Five: A special focus is put on a controlled oral/aural practice of word stress in the language lab. Students have to listen and repeat, practise identification exercises like detecting the odd word with different stress pattern. In this unit, students undergo a controlled practice of all the word categories which they have dealt with in the preceding units. The aim is to enable students to distinguish and discriminate the different stress placement, be it on the fist, middle, or final position. Similar tasks might be repeated in order to reinforce the feature being studied and to provide a sufficient amount of practice. There are 16 production and recognition tasks:

- Exercise 1: Students listen and practise a list of words where the stress is at the beginning.

- Exercise 2: Students listen and practise a list of words where the stress is put at the end.

- Exercise 3: Students listen and practise a list of words where the stress is at the beginning. Students must find the word which has a different stress placement from the others.

- Exercise 4: Students listen and practise a list of words where the stress is at the end. Students must find the word which has a different stress placement from the others.

- Exercise 5: Students listen and practise a list of words where the stress is at the beginning.

- Exercise 6: Students listen and practise a list of words where the stress is in the middle.

- Exercise 7: Students listen and practise. They say whether stress is at the beginning or the end position, then, they must find the odd word with different stress pattern.

- Exercise 8: Students listen and practise a list of words where the stress is at the end.

- Exercise 9: Students listen and practise a list of words where the stress is at the beginning.

- Exercise 10: Students listen and practise. They say whether stress is at the beginning or end position, and they find out the odd word out.

- Exercise 11: Students listen and practise. The stress is at the beginning but one word is different, students must circle it.

- Exercise 12: Students listen and practise. Stress is in the middle, students must circle the odd word.

- Exercise 13: Students listen and practise. Stress is at the beginning but they must identify the odd word and write it down.

- Exercise 14: Students listen and practise. The stress is in the middle, and they try to find out the odd word.

- Exercise 15: Students listen and practise. Then, they say whether stress is at the beginning or in the middle by classifying each word in the correct column.

Unit Six: Students take turns in reading aloud a chunked text to approximate a natural speaking activity and make appropriate pauses, role play dialogues, and decipher a transcribed text. As one student speaks, the others mark stress on their task sheets. This is a guided oral practice unit. Its aim is to make students understand how to produce correct word stress in context, and enable them to distinguish between short and long vowels. Students have to read aloud chunked texts, limericks, rhyming sentences, dialogues, and a transcribed text, they try to correct their mistakes on word stress placement, and distinguish between long and short vowels, and they receive feedback from their peers and the teacher.

- First, they read two chunked texts silently. Then, they check the pronunciation of any unknown words in the dictionary. After that, they read the short text aloud. Finally, they compare their reading with the recording.

- Second, after explaining the form of the limerick (a funny poem of 5 lines) students read aloud a transcribed limerick about schwa. They have to decipher (decode) the limerick and practice reading it aloud, then they compare it with the original version.

- Third, students practise short and long vowels in rhyming sentences and limericks. In this way, they will practise them in context rather than in a discrete way. Fourth, students listen and act out a number of dialogues on various topics. Attention is given to the right production of stress. The dialogues give all students equal opportunity to take part.

*Unit Seven***:** This is a free communicative practice lesson, in which students make oral presentations to the class. The objective is to assess their correct production and evidence of self-monitoring of word stress. The main objective is to train students in giving attention to the right production of word stress while performing their speech, and combine form and content of language simultaneously.

- First, pre-prepared task: every student prepares a short famous story or joke they know well to be told in class. While speaking, the other students check word stress mistakes if any.

- Second, students are asked to talk spontaneously on topics inspired by question prompts like introducing oneself and summer stories.

For a summary of the whole teaching units see table 6.

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3.4.1. Method of Analysis

To elicit the information obtained from the teacher's and students' questionnaires, the responses were listed in a table, and were thoroughly analysed. Since this research is an experimental study, all the findings from both experimental and control groups were recorded, calculated, then compared in terms of the mean scores obtained from the pre-test and post-test of the students from both groups, so that to contrast the results obtained.

3.5. The Pilot Study

The students' questionnaire and the pre-test and post-test were piloted with the cooperation of three volunteer students from third year classes, whereas the teacher's questionnaire was piloted with the help of a teacher of phonetics from the Foreign Languages Department.

Concerning the tests, the piloting helped me to better determine the time allocation, and whether it was relevant to the students' level. In general the instructions were clear and detailed, and examples were provided for almost every exercise. However, the expression of '*schwa incidences*' (which appears in exercise 2 of both tests) was somehow ambiguous simply because they were not used to such kind of activities. But I could explain it just orally that they have to underline any letter that represents schwa sound, without reformulating the concept.

Concerning the students' questionnaire, a number of problems were raised. The term '*sound sequences*' in question 4, for example, was not clear enough, so a further explanation was supplied at the bottom of the page as a footnote. Furthermore, in

question 4 the statement of *'identifying the number of syllables'* was replaced by 'counting the number of syllables. The same was done with *'identifying stressed and unstressed syllables'*, which was changed into distinguishing stressed and unstressed syllables.

Besides, in question 9, I noticed that all volunteers answered in the negative, and this made me doubt on whether they got the point or not. So I reformulated the question from: *'If you don't know the right placement of stress in a word, do you have resort to another language to manage the problem?'* to *'If you don't know the right pronunciation of any word in English (esp. the placement of stress), do you have resort to another language to manage the problem?'*

As for the teacher's questionnaire, no serious problem was reported, except for question 8, which was a little bit difficult to answer. There were 7 options. The volunteer teacher argued that the 2nd option concerning the *'Ability to give vowels full or reduced quality'* should be normally divided into two separate questions since it contains two different elements. However, I preferred to keep it as it is because the two features go together, we cannot notice one without the other. Within the same question, option 6, the teacher suggested that I should have divided it into three further options for the word has three different classes (simple, compound, and complex). In fact, I could have specified which category I refer to, but this will be dealt with in question 11 in some detail.

3.6. Limitations of the Study

We encountered some hurdles while conducting this study. Firstly, unlike the written part of the post-test, the oral part was difficult to handle. Because of the time

constraints and the lack of the necessary equipments, I could not record the students' performance, and further still, I was the only judge/listener there. However, the written part of the test was quick and easy to administer, and many targeted pronunciation features could be fairly tested and easily evaluated.

It would have been more efficient if we could have recorded the subjects' performance before and after the programme of instruction so that to compare both versions. However, this was difficult to conduct. Furthermore, in order to look at what was causing errors in word stress, it would have been a good idea if we had recorded the students' speech to be analyzed in detail. There are good computer software by which we can show students a visual image of their speech and the same utterance spoken with the target pronunciation. Without recording it is hard for teachers to see exactly what is going on. Moreover, it would have been more valuable if we could get a native speaker's judgement on the students' performance to determine what errors of word stress that may hinder meaning, so that the teacher would know what to pay attention in class.

3.7. Conclusion

The questionnaires and the pre-test helped us in the elaboration of this study especially in diagnosing particular problems facing students in the placement of word stress. Later, after the experimental instruction was over, the post-test helped us to evaluate the efficacy of the teaching materials. To check the effectiveness of our pronunciation instruction, we test the improvement made per subject on the placement of stress in targeted words.

4. Discussion and Interpretation of the Results

4.1. Introduction

This chapter focuses on the analysis of the data collected from the questionnaires and the tests. Thus, all the results of the experiment are reported here and will be discussed in details. A potential answer to our research question would be obtained if the subjects in the experimental group are found to make fewer mistakes in determining word-stress placement than the control group students.

4.2. The Results

4.2.1. Questionnaires

It should be mentioned that some of the questions required respondents to choose from more than one option at a time. For this reason, we will deal with each alternative for the same question separately when necessary. The total answers may exceed the number of teachers involved because of these multiple answers. In addition, some percentages are rounded.

4.2.1.1. Analysis of the Teacher's Responses

Question 1: Has the teaching of phonetics been of use for your EFL students in assigning the right placement of stress at the word level?

Response	yes	No	Don't know	Total
Number of respondents	3	Ø	Ø	3
Percentage	100 %	Ø	Ø	**100 %**

Table 7: The efficiency of the phonetics course in helping students determine word

stress

All the teachers responded in the affirmative. They agree that the phonetics course is really helpful for students, particularly with the placement of word stress. Next, another follow-up question is added in case they answer in yes.

Question 2: If yes, to what extent has it been helpful?

Response	Very helpful	helpful	Quite helpful	Not helpful	Don't know	**Total**
Number of respondents	2	1	Ø	Ø	Ø	3
Percentage	66.66 %	33.33 %	Ø	Ø	Ø	**100 %**

Table 8: The extent to which the course of phonetics is helpful

Teachers agree that the phonetics course is very helpful, though one teacher thinks that the course must be just helpful for students in making them aware of word stress rules.

Question 3: How do you assess students in class?

5 alternatives	**Number of teachers**	**Percentage**
Transcription test	3	100 %
Oral test	Ø	Ø
Aural test	3	100 %
Question and answer test	1	33.33 %
Other: minimal pairs	1	33.33 %

Table 9: Assessment techniques

One of the teachers added another kind of test that can be done in the classroom which is the production of minimal pairs. This teacher preferred to teach and test minimal pairs through the reading aloud technique to make sure students heard the difference.

With this question we wanted to know the ultimate objective from the teaching of phonetics. The results show that all the teachers do not assess the students' oral

capacities. As a matter of fact, I interviewed teachers about the reasons behind such a gap, and they claimed that the number of students is too large and conducting an oral test would be time-consuming and too demanding. So, they prefer to do a written test as it is easy to administer. Thus, although the aim of the course must be that of improving the students' perception and production skills alike, it is up to the teacher to decide on the type of test procedure. This shows that the oral element is not given due attention in assessments, and this might have subsequent effect on students, who as a consequence, will pay less attention to their progress in production skills since they are not assessed in this area.

Question 4: Do you assess your students'

- Phonetic & phonological knowledge? (option 1)

- Pronunciation productive abilities? (option 2)

- Pronunciation perceptual abilities? (option 3)

- All? (option 4)

- Other (specify): Contrasting sounds (option 5)

N.B.: As mentioned earlier, the total number of answers exceeds the number of teachers because they could answer many sections at a time.

Response	Option 1	Option 2	Option 3	Option 4	Option 5	**Total**
Number of respondents	2	Ø	2	Ø	1	3
Percentage	66.66 %	Ø	66.66 %	Ø	33.33 %	**100 %**

Table 10: The end objective from the assessment of Phonetics

A teacher added another suggestion, that is: contrasting Arabic and French sounds and English counterparts.

The results show that the aim of two teachers is to assess both theoretical knowledge and performance of students at the same time although the latter is tested only through written assignments. Both teachers argued that assessing the students' productive abilities is hard to conduct because of large classes. This is why they did not tick option 2. The teacher who opted solely for the third option was interviewed about the reasons for her choice, and she argued that she is used to teaching 1st year students, and their syllabus requires emphasis on familiarizing them with individual segments, so their perception is the main focus at this stage and best suit this level.

Question 5: In your phonetic course do you provide:

- Spelling-oriented pronunciation practice? (option 1)

- Listening-oriented pronunciation practice? (option 2)

- Speaking (speech) pronunciation practice? (option 3)

- All of these (option 4)

- None of these (option 5)

- Other (specify) ………………. (option 6)

Response	Number of teachers	Percentage
Option 1	Ø	Ø
Option 2	Ø	Ø
Option 3	Ø	Ø
Option 4	3	100 %
Option 5	Ø	Ø
Option 6	Ø	Ø
Total	**3**	**100 %**

Table 11: The kind of practice provided in the content of phonetics programme

All the teachers agree that all the practice areas related to pronunciation from spelling-based pronunciation practice to pronunciation-based listening practice and pronunciation/speaking practice, are all integrated in their lessons. However, the teachers were interviewed about the type of speaking/pronunciation practice that they conduct in class: they claimed that this practice was done through modeling and imitation solely. The next question would clarify this point further.

Question 6: Do you implement ALL the production practice modes[1] in your classes?

Response	Yes	No	Total
Number of teachers	Ø	3	3
Percentage	Ø	100 %	**100 %**

Table 12: The use of different modes of practice in class

They all answered in the negative, which means that not ALL practice modes are done in class simultaneously. The next question was aimed at identifying the reasons.

Question 7: If no, for what reason?

4 alternatives	Number of teachers	Percentage
Large classes	3	100 %
Difficult to conduct	1	33.33 %
Nature of the course	Ø	Ø
Other: Lengthy programme + lack of time	1	33.33 %

Table 13: The possible reasons behind the non-use of all the practice modes in class

One of the teachers added that the programme is over-loaded, intensive and too long that the time allocated for teaching the module is insufficient. Hence, teachers cannot cover every point in details.

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[1] There are 3 speaking practice modes: controlled (repetition/reciting), guided (reading aloud), free (spontaneous speech).

The results indicate that the nature of the course permits the implementation of any mode of pronunciation/speaking practice, but for some external circumstances such as large classes and the difficult learning and teaching conditions, make it hard if not impossible to be done in class.

Question 8: How much progress do you notice in the students' pronunciation in the following areas?

There are seven options for this question. Numbers from 1 to 5 represent the scales (weight) given. 1= low progress/5= high progress

7 alternatives Teachers	teacher 1	teacher 2	teacher 3
Schwa recognition	1	4	4
Ability to give vowels full or reduced quality	5	3	3
Identifying the number of syllables in a word	1	4	4
Pronunciation of specific sound sequences	1	4	4
Ability to make a syllable longer, louder & higher	1	3	3
Predicting word stress	2	2	3
Overall pronunciation	2	3	3

Table 14: Evaluating students' progress in pronunciation features related to stress

A teacher suggested that this evaluation should depend on each individual student, so a judgement, as such, is difficult to be generalised. For this reason, I asked teachers to try to give an approximate evaluation for the majority of students not mentioning special cases and keeping in mind that some students may have made some progress while others did not.

The table shows that, in general, students' level at predicting stress is somehow low compared to the other features mentioned. The same can be said on their overall pronunciation and the ability to give vowels a reduced or full quality, though these are

referred to by two teachers as being medium (average level). As it seems, there is a teacher whose evaluation was extremely different from the others. This can be explained in terms of the teaching experience of each level of education. Teacher 1 is used to teaching 1st year students, though she taught 2nd year students once. Teacher 2 had good experience dealing with 3rd year students in particular. Teacher 3, the most experienced teacher in phonetics, taught all the levels during his life career. Thus, may be teacher 1, being in constant contact with 1st year students could inform us better about the students' level in phonemes (like schwa recognition), and at the same time she could inform us very little about other pronunciation features not included in 1st year syllabus. However, this cannot be taken for sure because there is no evidence that those students still keep facing the same difficulties after they move to another stage of study or not.

Question 9: Do your students misplace word-stress?

Response	Yes	No	Don't know	**Total**
Number of teachers	3	Ø	Ø	3
Percentage	100 %	Ø	Ø	**100 %**

Table 15: The placement of word stress

These answers reinforce our assumption that students really have problems with word stress placement.

Question 10: If yes, what kind of error do they often make with the production of word-stress?

6 alternatives	Number of teachers	Percentage
Wrong syllable stressed	3	100 %
Stressing more than one syllable	2	66.66 %
Stress missing or absent in all syllables	Ø	Ø
All of them	Ø	Ø
Don't know	Ø	Ø
Other: Stress almost missing in speech	1	33.33 %

Table 16: The kind of errors made with word stress marking

The results showed that according to teachers, wrong stress is the most common error made by students, followed by overstress. In addition one teacher claimed that stress is almost absent in his students' speech. This may show that students' main difficulties lies at the production level in particular.

Question 11: The students' difficulties in determining stress arise when they encounter:

8 alternatives	Number of teachers	Percentage
Unfamiliar words	3	100 %
Words with affixes	3	100 %
Compound nouns & phrasal verbs	3	100 %
Homographs (words having dual role)	2	66.66 %
Words containing specific sound sequences	Ø	Ø
Words containing specific vowels	1	33.33 %
Don't know	Ø	Ø
Other	Ø	Ø

Table 17: The possible cases in which students face difficulties with word stress

All teachers agree that students face difficulties with marking stress when they encounter unfamiliar words and longer words (i.e. compound and complex words). The teacher who ticked the option 'words containing specific vowels' was interviewed

about this choice, and she answered that strong vowels, such as diphthongs and long vowels, are usually stressed.

Question 12: If you choose one of the items above, can you explain why?

8 alternatives	Number of teachers	Percentage
Over-generalization of certain word-stress rules	2	66.66 %
Stress mobility	2	66.66 %
Secondary stress confused with primary stress	2	66.66 %
Difficulty pronouncing certain sound sequences	Ø	Ø
Tendency to stress strong vowels	1	33.33 %
Misconception of word-stress	1	33.33 %
Don't know	Ø	Ø
Other	Ø	Ø

Table 18: The possible reasons behind students' difficulties

This is an extension to the previous question. As it stands, the majority of teachers attribute the reasons behind students' difficulties in determining word stress to the over-generalization of certain rules, stress mobility (in suffixes), and secondary stress confused with primary stress.

Question 13: According to you, what is the origin of word stress problems?

7 alternatives	Number of teachers	Percentage
Difficulty to identify schwa	Ø	Ø
Inability to reduce vowels	1	33.33 %
Difficulty to locate syllable borders	2	66.66 %
Mispronunciation	2	66.66 %
Spelling effect	3	100 %
Don't know	Ø	Ø
Other: (refer to the quoted comment below)	1	33.33 %

Table 19: The origin of word stress problems

One teacher commented that:

> "Stress is not easy to learn on account of too many exceptions…Should we really teach stress rules, which have so many exceptions that they become practically useless, or should we advise students to learn the stress of every single word as they learn the meaning of that word?"

As it seems, all of the teachers agree that spelling is the main source of trouble. Further options were selected. Two teachers think that locating syllable borders and mispronunciation can be also influential. Besides, word stress is said to be difficult to predict as there are no regular rules for each individual word.

Question 14: According to you, why do students still have problems with word-stress although they have learnt about it in the phonetics course?

7 alternatives	Number of teachers	Percentage
Inability to link form and content of language	1	33.33 %
Difficulty to apply phonetic theory	2	66.66 %
Influence of another language	3	100 %
Ill-perception	Ø	Ø
Lack of practice	3	100 %
Don't know	Ø	Ø
Other: Self-practice	1	33.33 %

Table 20: Other factors affecting the students' production of word stress

This is a further extension to the previous question, too. One teacher claims that there is a lack of teaching aids and materials, and the number of students is huge.

100 % of teachers agreed that, the negative factors affecting the production of word stress are the interference of another language namely French, as well as the lack of practice. Teachers claimed that, most of the time students tended to pronounce

words in the same way as the French language, and they gave examples on some

cognates which were usually pronounced with the main stress on the first position such

as: "identity", "commerce", "consume".

Question 15: In your opinion what is the best way of improving the students'

pronunciation skills, especially their proper production of word-stress?

5 alternatives	Number of teachers	Percentage
Pronunciation-based spelling, listening and speaking practice	Ø	Ø
Teaching the stress pattern of each word at first exposure	Ø	Ø
Studying phonetics and phonology	Ø	Ø
All of them	3	100 %
Other	1	33.33 %

Table 21: Possible suggestions and solutions to remedy the existing situation

All teachers agree on all the proposed options altogether. These are thought to

improve the students' performance in this pronunciation feature. However, one teacher

suggests that students should do self-practice, that is practicing word stress on their

own.

Question 16: Please feel free to add any further comments on the topic at hand, which

you think are worth-mentioning here.

This is an open-ended question for further comments which may enrich our

research. One of the teachers commented that some teachers themselves are not

qualified or less competent enough to take in charge the course of Phonetics. Besides,

she suggested that practice should be encouraged in and outside class, and intensive

listening to native speakers should be highly recommended.

Another teacher made the following comment

> "Students should be afforded more opportunities to interact orally, so they can correct their stress errors. Moreover, they should be encouraged to read extensively, so that they encounter new words which should prompt them to use a pronouncing dictionary to look up the pronunciation of these words. More importantly, they should check the pronunciation of the most common words, because more often than not it is these seemingly easy words which are mispronounced".

These comments illustrate further our belief that oral interaction and intensive practice are necessary to improve the students' proper use of word stress. Common words should not be ignored, as they constitute the basis and starting point for learning the appropriate stress pattern of other unfamiliar vocabulary items.

Further problems are identified by a teacher who is currently teaching sophomore students after finishing the correction of the first term examination. To help his students with pronunciation, in his next exam sheet, he transcribed all the questions and instructions phonemically with stress mark, even his name! His comments on the commonest mistakes of word stress are listed as follows:

- Putting stresses on weak and unstressed syllables such as: *'protect*, and *'phonetic*.
- Stressing the word 'speech', which is a monosyllabic word, as /s'pi:tʃ/. I'm not sure if this mistake is due to inattention or carelessness on the part of students, or it is because they believe that /s/ forms a syllable on its own!
- Some students place stresses randomly without respecting the rules of word stress placement.
- Some words have the same pronunciation regardless of their part of speech, for example, the word 'protest' whether it is a verb or a noun it is transcribed as: /prə'test/ all the time.

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As it seems, the overwhelming majority of students misuse the appropriate stress in words, either because they violate the rules, or they could not grasp this new phonological feature of the target language well enough. In addition, the written exam done with those 2nd year students shows that when students do not know the right placement of stress, they tend to put it randomly on any position in the word.

4.2.1.2. Analysis of the Subjects' Responses

N.B.: As mentioned before, in some cases the total number of answers exceeds the number of subjects because they could answer many options at the same time.

Question 1: Has the phonetics course helped you acquire good pronunciation?

Response	Yes	No	Don't know	Total
Number of subjects	43	3	Ø	**46**
Percentage	93.48 %	6.52 %	Ø	**100 %**

Table 22: The efficiency of the Phonetics course

The results indicate that 93 % of subjects agree that Phonetics is really helpful and important.

Question 2: If yes, in what ways has it been helpful?

5 alternatives	Number of subjects	Percentage
Become aware of phonological rules	4	8.69 %
Acquire good pronunciation abilities	14	30.43 %
Both	25	54.35 %
Don't know	Ø	Ø
Other:	Ø	Ø

Table 23: The ways in which Phonetics can be helpful

One student noted that Phonetics improved his/her pronunciation, but still, it was not perfect, that is s/he was not quite satisfied with her/his level. In anyway, the majority (54 %) think that phonetics helped them gain both knowledge and skill.

Question 3: If not, what seems to be the problem?

Options given	Number of subjects	Percentage
The course is highly theoretical	Ø	Ø
Restriction of practice time	1	33.33 %
Indifference & lack of attention	1	33.33 %
Don't know	Ø	Ø
Other: a lack of communication	1	33.33 %

Table 24: The reason why Phonetics cannot be helpful

One student added this remark: "there's a lack of communication". Perhaps s/he meant that there is a lack of oral interaction in the classroom. The other two students attribute the inefficiency of phonetics course to the restriction of practice time, or students themselves might be indifferent and inattentive in class.

Question 4: Note any problem you have with the following pronunciation areas:

Options given	The problems mentioned
Schwa /ə/ recognition	Confused with /e/ and /æ/
Pronunciation of specific sound sequences	/ɜ:/, /tʃ/, /ʃ/, long vowels: /ɔ:/ and /u:/
Counting the number of syllables in a word	Esp. in longer and compound words
Distinguishing stressed and unstressed syllable	Difficulty in identifying first stress
Ability to produce word-stress correctly	Not very well
Predicting word stress	Unable to predict stress all the time
Sound/spelling connection	Not always easy to recognise
Overall pronunciation	Poor pronunciation

Table 25: Potential problems with specific pronunciation features related to word

    stress

This is an open-ended question. Some students left the space blank, others put a cross in front of the difficult feature, some others put yes / no, percentages (50 % …), or frequencies such as (sometimes, often …). So, I tried to collect here only the problems mentioned, which were then put in the table.

A student listed another feature which is not included within our selection, and I thought it would be very relevant to take it into consideration. S/he complained that s/he cannot differentiate between long and short vowels.

The table indicates that certain pronunciation features which are not yet mastered may cause difficulties with the placement of word stress, like poor pronunciation, inability to predict stress all the time, spelling effect, and inability to recognise schwa sound.

Question 5: Do you have any problems in word-stress placement?

Response	Yes	No	Don't know	**Total**
Number of subjects	40	6	Ø	46
Percentage	86.96 %	13.04 %	Ø	**100 %**

Table 26: The placement of word stress

These results suggest that the majority of students have problems with word stress placement. One of the six students, who answered in no, claimed that the course of phonetics was well taught in class and all that he needed was just reviewing. Another student argued that he made his own efforts, and did not consider word stress as a major problem. The rest did not justify their answer.

Question 6: What are your main difficulties in learning word-stress? At which level?

6 alternatives	Number of subjects	Percentage
Perception	5	10.87 %
Production	13	28.26 %
Sound/spelling relationship	11	23.91 %
All of them	16	34.78 %
Don't know	3	6.52 %
Other	1	2.17 %

Table 27: Difficulties with learning word stress

A student added another comment concerning the fact that s/he does not know whether a diphthong can be stressed or not. This shows that students still have problems with vowel sounds. The majority of students (35 %) claimed that they have a problem at the level of perception, production and sound / spelling correspondence altogether. Mainly with production (28 %), followed by sound / spelling correspondence (24 %).

Question 7: Do you think that the practice work done in the language lab is enough to help you learn word-stress efficiently?

Response	Yes	No	Don't know	Total
Number of subjects	5	37	4	46
Percentage	10.87 %	80.43 %	8.69 %	**100 %**

Table 28: The efficiency of practice work done in the language lab

80 % of subjects agree that practice done in the language lab is not enough. This means that students are not quite satisfied with the quantity of the language lab practice. The causes are identified in the following question.

Question 8: According to you, what are the causes behind your problems with word-stress?

7 alternatives	Number of subjects	Percentage
Little practice opportunities outside class	30	65.22 %
Unvaried practice tasks & activities in class	15	32.61 %
Unvaried speech practice modes in class	13	28.26 %
Ill-perception (bad ear)	6	13.04 %
Difficulty to apply phonetic theory	12	26.09 %
Don't know	8	17.39 %
Other	Ø	Ø

Table 29: The causes of word stress problems

The majority (65 %) think that their problem with word stress is due to the little practice opportunities outside the classroom. Then, the distribution of their answers extend to the lack of variety in practice tasks and activities in class (33 %), followed by unvaried speech practice modes in class (28 %), after that, the difficulty to apply phonetic theory (26 %), and finally, the ill-perception (13 %). This suggests that the majority of students do not have major problem with reception of word stress.

Question 9: If you don't know the right pronunciation of any word in English (esp. the placement of stress), do you have a resort to another language to manage the problem?

Response	Yes	No	Don't know	Total
Number of subjects	18	19	9	46
Percentage	39.13 %	41.30 %	19.56 %	**100 %**

Table 30: The influence of another language on marking word stress

39 % of subjects believe that there must be some influence of another language in their placement of word stress. However, 41 % think that there is no direct influence. Both negative and positive answers are somewhat analogous. This may show that students are not aware of this effect, because it may happen unconsciously.

In fact, it is difficult to decide whether the L1 or L2 has any influence on marking the English word stress.

Question 10: If yes, which language?

Options given	Number of subjects	Percentage
Your mother tongue (L1) (specify it)………	2	11.11 %
Second language (specify it)…………….	6	33.33 %
Both	10	55.55 %
Other	Ø	Ø

Table 31: Determining the language influencing the placement of English word stress

This is a continuation to the previous question. 55 % of the population thinks that both mother tongue and second language affect their placement of stress. 33 % of the subjects emphasized the second language, which is French for the majority (as it is mentioned by 9 subjects). Not all the subjects specified their first or second language, so no calculations were made for this open-ended question. However, one student mentioned Arabic, and another one mentioned Kabyle, but no local dialect was specified. The dialect may have some influence on the placement of stress from one student to another. But this is beyond the scope of our study.

Question 11: When you speak, can you focus on both the proper production of word stress *and* what you want to say at the same time?

Response	Yes	No	Don't know	Total
Number of subjects	10	26	10	46
Percentage	21.74 %	56.52 %	21.74 %	**100 %**

Table 32: Linking between form and content of language in speech

While speaking some students tend to focus on the content of the message they wish to convey, that they cannot concentrate on the formation of correct use of stress

and the right choice of vocabulary even though they might know the appropriate word stress assignment, simply because this may interrupt the flow of ideas. Such difficulties also occur in writing not only while speaking. But this is not the case with pronunciation, 57 % of the subjects claimed that they can pay attention to their pronunciation as well as the content of the message.

Question 12: Please feel free to add any further remarks on the topic at hand**.**

This is an open-ended question. These are some of the points and issues raised by students: One of the students attributes his/her weaknesses in pronunciation in general to the teacher's responsibility. The teacher can be either not interested or lacks competency. Other students claimed that the study of phonetics requires practice in and outside the classroom with guidance. Another student would like to be given clues, and simplified rules to enable him/her to put stress on the appropriate syllable. A student suggested that more examples and models should be supplied in any language aspect of any other language course apart from phonetics.

Some other students complained that they have problem understanding native speakers, and that learning a foreign language is not an easy task. They wished for more lab sessions to be organized, in addition to giving extra attention to the oral skills as well. Furthermore, some students argued that the teacher should focus on the production of word stress as well as spelling. A student reported that s/he has spelling problems, especially with words containing diphthongs and triphthongs.

Here is a comment made by one of the students quoted as the following:

"I want to beg your attention to the addition of practice opportunities to allow the students recognize their mistake and correct it".

This shows that students are aware of their mistakes and difficulties, and that they are in need for more practice opportunities in class with adequate constructive feedback, which can help them carry over their learning on their own. On the whole, students expressed their desire to improve their placement of word stress, and emphasized the importance of practice. Further still, the students' comments were too general, which means that they are not quite aware about their real problems with word stress, and often they do not know precisely what their difficulties are in pronunciation.

4.2.2. Results of the Post-test

From table 33 below, we can notice a remarkable difference between the students' scores in each task of the post-test. For instance, in the first task, the experimental group's marks range between (0.25/2 to 1.75/2), which are higher than those of the control group whose marks range between (0/2 to 1/2). The same can be said on the other tasks.

Marking scale for each task is put in brackets.__ **Worst & best score**	**Task 1: (2/2)** Discrimination + circling the stressed syllable	**Task 2: (5/5)** Schwa identification+ predicting stress+ counting syllables	**Task 3 : (7/7)** Counting syllables+ transcription+ syllable borders+ marking stress	**Task 4: (6/6)** Oral test: Reading aloud written &transcribed text
Control group	0 – 1	0.25 – 2.5	0 – 2.5	4 – 5.25
Experimental group	0.25 – 1.75	0.5 – 3.5	1 – 5.25	4.25 - 6

Table 33: Post-test results in each task for both groups

For more detailed scores of each student in each task see tables 38 and 39 in appendix 7.

4.2.3. Pre-test / Post-test Scores

Table 34 below clearly summarizes the contrast between both groups (control group and experimental group) concerning their pre-test and post-test results. For more detailed scores of each student see tables 36 and 37 in appendix 7. The numbers in parenthesis are percentages of the total sum of scores for both groups in each test.

N.B.: *All scores are to be read out of twenty.*	Experimental group 24		Control group 22	
	Pre-test	**Post-test**	**Pre-test**	**Post-test**
Total sum of Scores	178.75 41 %	263 60 %	179.50 37 %	183.50 38 %
Mean (M) **Median** **Mode**	8.12 7.75 7.00	11.95 11.75 11.00	7.48 7.50 6.00	7.65 7.75 6.00
Standard Deviation (SD)	1.05	2.34	2.47	1.60

Table 34: Contrasting the results of both groups

As table 34 shows, the total sum of scores for the experimental group is 41 % in the pre-test, with a mean of 8.21/20, whereas the total sum of scores for the control group is 37 % with a mean of 7.48/20. The difference at this level is not that big between the two groups. However, in the post-test, things have changed. While the total sum of scores for the experimental group increased to 60 % with an average of 11.95/20, the control group obtained 38 % as a total sum with a slight increase in the mean which is 7.65/20. The results show that the designed teaching materials have been successful to some degree since the experimental group scores are higher in the post-test and higher than those obtained by the control group. The oral test used in the post-test is behind the little increase in the scores of the control group as we will discuss later.

All scores are to be read out of 20	Experimental group Number of students: **22**		Control group Number of students: **24**	
Category of scores	**Pre-test**	**Post-test**	**Pre-test**	**Post-test**
Above 10	4 = 18 %	17 = 77 %	4 = 17 %	2 = 8 %
Below 10	18 = 82 %	5 = 28 %	20 = 83 %	22 = 92 %
Between 12 and 16	0	11 = 50 %	1 = 4 %	0

Table 35: Differences acknowledged between pre-post tests average scores

Table 35 is best illustrated in the following pie charts:
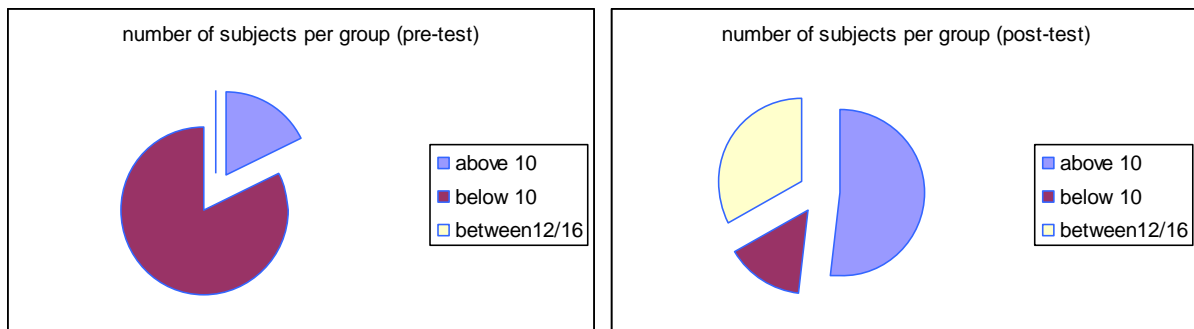
Figure 1: Experimental group's categories of average scores

Figure one above shows that, in the pre-test only 18 % (shown in blue colour) of subjects from the experimental group obtained the average mark, and the majority of about 82 % (in maroon colour) had below 10, while nobody was classified under the category between 12 and 16. However, in the post-test the number of subjects who obtained scores under the average was reduced into 28 % (marked in maroon colour), and the rest had above 10, that is 77 % (in blue) had above 10, and 50 % (in yellow colour) of them were classified within the category between 12 and 16. These results show the extent of the improved achievement of the experimental group.
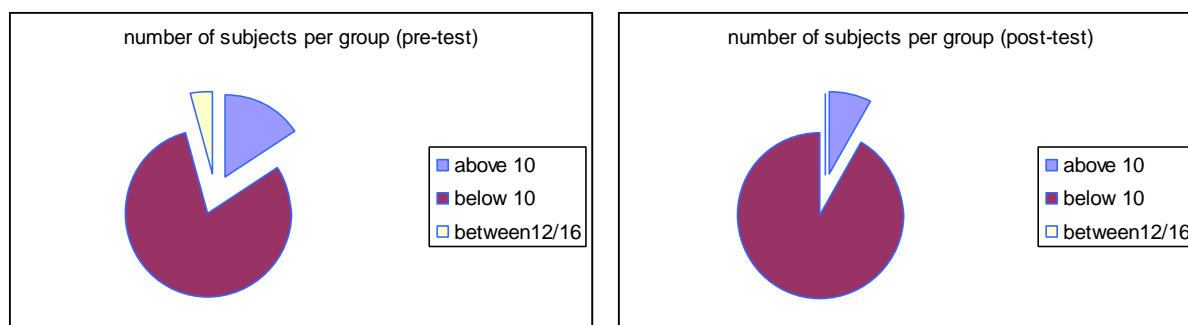
Figure 2: Control group's categories of average scores

Figure 2 concerns the control group results. In the pre-test, the maroon shows the number of students who had lower than 10, that is 83 %. The colour blue represents 17 % of those who had above 10, and only 4 % (yellow colour) who obtained more than 12. In the post-test, no-one exceeded 12, the maroon shows 92 % of students who had below the average mark, and the blue covers a smaller percentage of students who had above 10, that is 8 %.

4.3. Discussion of the Results

Here we come to discuss our students' word stress problems, which were identified from the questionnaires and the pre-test results. We shall not, of course, take the questionnaires' responses totally for granted. The pre-test results will help us sustain the views and attitudes suggested by the questionnaires. From both questionnaires we may deduce different points of view. There are some areas of agreement and disagreement, too. Both teachers and students agreed on the fact that the phonetics course is quite helpful in enabling students mark proper word stress, though practice in class is not considered sufficient enough.

According to teachers the type of errors made are wrong stress placement and overstress (i.e. stressing more than one syllable in a single word), and that many

students face difficulties in predicting stress. Such errors occur when students face unfamiliar words, words with affixes, compound nouns, phrasal verbs, and homographs. The reasons behind these mentioned cases are attributed to the overgeneralization of rules, stress mobility and double-stress. Other factors affecting the use of word stress are the effect of spelling, difficulty in locating syllable borders, mispronunciation, influence of another language mainly the second language, which is French in this context, lack of practice and the difficulty to apply phonetic theory (i.e., students know about the phonological rules of the target language but still misuse them and find them difficult to apply), although these factors need to be confirmed and supported by the pre-test.

The students' questionnaire gave us some further views. Students mentioned a number of difficulties with word stress and other related details. Some of the students had difficulties with schwa recognition, which is often confused with other sounds like /e/ and /ɪ/, and they still had problems with distinguishing short from long vowels. They did not know how to give vowels full or reduced qualities, did not fully distinguish between stressed and unstressed syllables, and could not identify first stress (front-weighting). They were unable to identify the number of syllables especially in longer words. Most importantly, they were not able to produce correct stress, that is, they could not make a syllable longer, louder and higher, and they assumed that their overall pronunciation was poor. The majority of these students thought that the causes of their difficulties were due to the little practice opportunities outside class, the lack of variety of practice tasks in class, and the absence of the different practice modes.

According to teachers, students' level in producing stress was taken to be satisfactory in general, while for students it was not the case. The majority of students claimed that their main difficulty with word stress was in production. So, production of correct word stress was the main difficulty for students, a thing which teachers did not raise or pay enough attention to.

Results from the teachers' questionnaire show that the production component in phonetics module was not tested, and this might have an impact on the students' motivation. Students would tend to pay little attention to their production skills. Furthermore, both teachers' and students' questionnaires showed that practice work was thought to be insufficient, that practice activities were not communicative, and that not all modes of pronunciation speaking practice were done in class. Besides, the majority of students' complained that their major problem in learning word stress was at the level of production.

In fact, there was a contrast between the students' perceptions of their learning and those of their teachers'. It seemed that teachers either could not directly notice or know their students' problems, or that they might have expected students at this stage of learning as advanced learners to do extra efforts on their own to achieve the desired objectives. On the other hand, students, too, might expect a lot from the phonetic class, and hence whenever they meet a difficulty they claim that there is a gap somewhere in the teacher's competency for example.

Moreover, the students' perceptual and productive performances alike are not easily observed by teachers of phonetics. For the recognition skill cannot be noticed and evaluated since it a hidden process, unless a listening activity is done on the target

feature. The same should be said on the production component. One of the teachers claimed that his phonetic lecture is so based on theory to the extent that he rarely, if never, give opportunities for oral production in class. The reason is that it is nearly impossible to be done with the huge number of students. Consequently, teachers could barely hear their students' oral performance. The only course in which students can practise or use their language orally is the oral expression class. However, in this course, the teacher may correct only minor pronunciation features, and feedback is given occasionally, if ever done.

The best way to better determine which word stress errors may hamper the students' speech intelligibility, it would be more helpful if we try to get a native speaker's judgement on the students' speech. In such a way, the teacher can know what to focus on when teaching word stress.

Meanwhile, the pre-test not only confirmed the assumptions which were made, but further still, two other important areas of weaknesses were identified as we will see later: i) the students' tendency to stress strong vowels, and ii) the ignorance of word stress rules. The pre-test also showed that students still have some problems with syllable division namely in words ending in past '-ed', possessive and plural '-s', and in words where specific vowels are not pronounced (the case of schwa elision). Moreover, we found out that schwa is confused with other vowel sounds especially /e/, and students still have problems distinguishing between short and long vowel sounds. Furthermore, other inconveniences identified concern the prediction of stress in either familiar or unfamiliar words, complex and compound words, and homographs.

Students had problems in identifying the number of syllables in a word, as well as locating the boundaries between syllables. Some words incorrectly received additional syllables such as those with fewer syllables than normally expected due to schwa elision. For example, words like: *'separate'*, *'several'*, and *'traveler'*, have only two syllables, but students thought that they had more than two syllables because of the effect of spelling. The same thing happened with words ending in past '–ed'. For example, *'asked'*, and *'tired'* were thought to consist of two syllables, while in fact, they are monosyllabic words. This could be attributed to the difficulty of pronouncing the final consonant clusters, or it could be due to the influence of spelling.

In some other cases, the number of syllables was reduced in some particular words in which the syllable might consist of only one vowel (neither preceded nor followed by a consonant). For instance, 'society' was wrongly transcribed like this: /sə.'saɪ.tɪ/ (the dot indicates the syllable border), while in reality it has got four syllables like this: /sə.'saɪ.ə.tɪ/ where the fourth syllable is /ə/. Similarly, words ending with '–s' like 'advantages' were wrongly thought to have less than three syllables, though the correct answer is that it has four syllables. The word 'boxes' also was incorrectly classified as having one syllable.

Furthermore, some students thought that a syllable could contain a triphthong. For example, words like: *'towel'*, *'our'*, and *'power'*, which have two syllables, were mistakenly considered to be only monosyllabic words. On the other hand, some other students thought that syllabic consonants could not be a separate syllable on its own. The word *'nation'* was misperceived as having one syllable only, though in reality, it is a disyllabic word. Concerning the schwa sound, the most serious problem identified

was that some students stressed syllables containing the schwa /ə/. For example, 'essential' was given this wrong stress pattern: ooO.

Thus, the pre-test results show that the major problem identified so far was the syllable division. As it seemed, students either identified more syllables than expected, or the number of syllables was reduced. Worse still, they did not know where to break words appropriately. This means that students could not understand the concept of English syllabification in its full meaning, and even though they know about the rules of stress placement, they still misplace stress on the appropriate syllable.

Moreover, some unstressed syllables or syllables carrying secondary stress all received some sort of stress, i.e., some students gave full value to almost all the syllables of a word (overstress). For instance, *'thir'teen*, *'Chi'nese*, *'Ox'ford*, etc. Moreover, it was clear that students had difficulties identifying first stress (front-weighting), that is, stress on first position. Words like *'fertile*, *'amplify*, *'advertise*, and *'capsule*, for example were all stressed on the second or final syllable.

These identified errors showed that students still confused between primary and secondary stress especially in their realization. This means that students had not yet understood the concept of English word stress, and they still confused it with that of their L1 (Arabic) and even their L2 (usually French), this was clear in their tendency to put stress in the middle or final position more often.

Mispronunciation of certain words caused students some difficulties and greatly affected stress placement. For example, 'novice' was mispronounced /nə.'vaɪs/, consequently, stress was shifted to the second syllable. Again, 'soldier' was mispronounced as /sɒl.'dɪ.ə/, while the correct stress should normally be placed on the

first syllable and should be pronounced like the following: /ˈsəʊl.dʒə/. In fact, this could be a pronunciation error related to spelling. In such a case, the student tried to pronounce the word as it was written, because s/he was not aware how to pronounce it. Or the student over-generalized the stress rule, for the word 'novice' was mispronounced to rhyme with 'vice', and 'soldier' is mispronounced like the word 'engineer'. Another example related to pronunciation/spelling error was the word 'colony', which was transcribed by some students like this: /kɒ.lɒ.nɪ/. However, it is either that students must have mispronounced these words, and as a matter of fact transcribed them incorrectly, or they could have been unable to use phonemic symbols properly and as a consequence, they did not know how to represent sounds.

In the discrimination exercise, students confused between words written in the same way but having different stress marking. Also, words of the same root or family but with different affixes were also confused along with words which have the same spelling but differ in pronunciation and the stress pattern. Here are some word pair examples: electrician/electrical, hotel/model, forty/fourteen, Africa/Alaska, etc. Moreover, students had problems with phrase and compound stress, they confused these pairs of words: send-off (noun)/send off (verb), greenhouse/green house.

Thus, we may infer that although the rules of compound stress and stress in homographs are the easiest to be remembered, students seemed to be unaware of these rules as the pre-test results showed. This type of error may inform us that students were indifferent and forgot the rules, or this was the result of their mother tongue influence where stress is given due place in each part of the word. In fact, in their L1 Arabic, compound words do not exist.

So far, we have tried to identify the students' errors of word stress and the possible causes. After we have conducted our experiment, we come to assess the outcome of the teaching units, which were designed to help students acquire correct word stress. And more than that, we tried to help them overcome their difficulties with syllable division and vowel reduction, since they constitute the major problem for students.

As we have stated earlier, the present study was designed to test the role of word stress teaching based on three modes of practice in helping students improve their production of correct word stress. The crucial question guiding the present study was whether practice in pronunciation teaching would help learners improve their acquisition and use of correct word stress. The results obtained in our study point to a positive answer, since the experimental group presented a noticeable progress in producing correct word stress after they have been submitted to our teaching units. Contrary to the experimental group, the control group's scores were almost similar in the pre-test and post-test. However, there was some improvement in the oral part of the test, thanks to their correct pronunciation of some familiar words. In fact, knowing the correct pronunciation of a particular word is an advantage, because stress is the property of the word and part of its identity.

As can be seen from table 34, the pre-test mean frequency per subject in the experimental group (M = 8.12; SD = 1.05) was a little higher than that of the control group (M = 7.48; SD = 2.47) before the instruction began. The results of the post-test indicated that the prediction of word stress increased noticeably after instruction (M = 11.95; SD = 2.34), the median was 7.75 and became 11.75, and the mode increased

from 7 to 1. While for the control group, its performance remained the same especially in the mode, which remained 6, and the same can be noticed on the median and (M = 7.65; SD = 1.6) due to the complexity of tasks which they were not much familiar with. Moreover, tables 36 and 37 in appendix 7 show that the pronunciation instruction helped all subjects in the experimental group increase their awareness, and thus improved their production of word stress somehow. This was noticed in the oral part of the post-test; whenever a student found any difficulties in producing correct word stress, s/he informed me about the right placement without uttering the word, as if to show that s/he knows the correct stress pattern, but not yet ready to produce this pattern. This may explain that they are still in the process of learning, and their awareness and comprehension have improved to some extent.

Table 35 shows some further details on the average scores obtained for each group in both tests. We can notice that the range of marks between 12/20 and 16/20 were that of the experimental group students (50 %), while the control group students could not achieve such a progress (0%). In addition, there is a remarkable increase in the experimental groups' marks exceeding 10, when we compare between their scores in the pre-test and the post-test. Further illustration is provided in figures 1 and 2.

Table 33 shows the control and experimental group's post-test results in each exercise. The marks of both groups in the oral test were somehow analogous as tables 38 and 39 show in appendix 7, though the scores of the experimental group are a little higher. This can be explained by the fact that knowing the right pronunciation of a particular word can be helpful in determining the appropriate production of stress. We

can also notice that the experimental group students did well in all the other tasks, which means that their awareness about correct word stress use increased a great deal.

Table 38 shows the experimental groups' scores in each exercise of the post-test. Their marks in the first task (discrimination test) were higher than in the pre-test. They also showed some progress in task 2 (schwa identification + predicting stress patterns + counting syllables). Similarly, their performance in task 3 (counting syllables + transcription + locating syllable borders + marking stress) also improved and their marks ranged from 4/7 to 5/7 for the majority of them. In the oral test (reading aloud a transcribed sentence + a list of words with the proper stress), experimental group subjects were the high achievers when compared to their counterparts in the control group. In general, the majority did well in most of the tested items with minor troubles. Thus, the obtained results from the written tasks suggest that there was an increase in the experimental group's awareness about their acquisition of word stress, schwa recognition and syllabication. Moreover, their progress in the use of word stress was also remarkable from their performance in the oral test.

As table 39 shows, the achievement of the control group students in the three post-test tasks was a bit lower when we compare it to the experimental group's results, mainly in the first task. If they could discriminate between two-pairs of words as being different, for example, they could not show this difference by circling the appropriate stressed syllable. And hence, in this task students had the lowest marks because the tested items were strictly marked and no mistake was tolerated. This was done to see whether the students grasped the intended features satisfactorily. So, 11 students out of

24 obtained 0/2 in this particular exercise, and the rest did not exceed 0.75/2 except for 1 student who had half the mark. In task 2, students tended to mark stress as if randomly, because in some cases, even though they could detect the schwa incidences, they put stress on the syllable bearing that weak vowel. Some others could not recognize most of schwa incidences and the same thing with syllabication. More troublesome was the location of syllable boundaries rather than counting the number of syllables in a word. Marking syllable borders was confusing for students and they often separate between consonant clusters belonging to the same syllable. As a matter of fact, they did not do well in task 3, and the best mark did not exceed 2.25/7. A good example on such a mistake was the word "witches" which was wrongly divided as /'wɪt.ʃɪz/, and the word "abbreviate" divided as /əb.'riː.vɪ.eɪt/. Many students either in the experimental group or in the control group had difficulties in using phonetic transcriptions. Many of them missed marks because of the ill-use of phonetic symbols.

4.4. Conclusion

As we have seen from the figures, only a minority in the experimental group could get the average in the pre-test, & nobody could reach 12/20. However, in the post-test, a great majority got above the average; 30 % of them between 12 & 16. The control group's performance is almost the same, though there's a slight change which doesn't make a great difference. Besides, students' performance cannot be a hundred per cent the same or constant all the time. If we compare between the level of both groups in the pre-test, we can say that the difference is not that big (the red colour shows the marks below 10). But in the post-test, the difference is very great.

5. Pedagogical Implications

5.1. Introduction

As mentioned in the preceding chapters, the aim of this research was to investigate the role of a pronunciation teaching based on three modes of practice and various tasks in helping students improve their production of appropriate word stress. The experiment was carried out to test the extent to which such experimental teaching was effective or not. This chapter deals with the summary of the findings, implications of the study, and some further suggestions to guide future research as well as for practitioner teachers.

5.2. Summary of the Findings

Our research tools helped us identify other features which had a lot to do with word stress prediction such as schwa and syllable identification. Thus, we devised units on syllable division, vowel reduction and schwa recognition, with various exercises on stress and different word classes and categories, homographs (words having dual role: having the same spelling but differ in word stress placement), common and unfamiliar words. Each lesson began with a review of the previous lesson, correction of homework, or a warm up activity. Furthermore, texts designed for reading aloud were rich of vocabulary items, and the dialogues gave more opportunities for students to take their turns to read aloud. We assumed that there was a need for devising a variety of activities that drew attention to sound/spelling correspondence especially those concerning schwa and syllable identification, in addition to designing pronunciation-based listening activities that focused on

recognition and discrimination tasks on word-stress to overcome their difficulties in marking word stress, we particularly gave emphasis to an integration of three speaking practice modes.

The most common word stress problems identified by the questionnaires in general and the pre-test in particular are listed here:

- **Schwa recognition:** problems with vowel length + confusion between schwa sound & other vowels (e.g.: /i/ & /ə/).

- **Word class:** Inability to predict stress in all word categories: homographs, familiar and unfamiliar words, complex and compound words.

- **Syllable division**: Inability to locate syllable boundaries & to identify the number of syllables + ignorance of the fact that schwa & syllabic consonants can stand as separate syllables.

- **Mispronunciation:** e.g.: the word "soldier" is mispronounced to rhyme with "engineer" or "career", "model" & "hotel" & thus stress is misplaced. Consonant clusters are divided into separate syllables, & syllabic consonants are confused with consonant clusters.

- **Spelling inconsistencies:** e.g.: again with the same example of «soldier» is wrongly stressed on the last syllable.

- **Vowel quality:** (esp. in dissyllabic words) students do not know how to make some unstress patterns: e.g.: the 1st syllable of «thirteen» is given full quality instead of a reduced quality because it's a strong vowel (long vowel).

- **Influence of another language:** e.g.: «civil» mispronounced as in French, instead of putting stress on the 1st syllable.

- **Stress mobility:** some students keep using the same stress pattern for a word in all occurrences whatever affixes are added. E.g.: "a'cademy vs aca'demic", "e'conomy vs eco'nomics".

As it seems, students' problems identified above are interrelated, that is, every problematic area causes the other one.

The results of the pre-test determined the students' background knowledge in word stress placement, schwa identification and ability to identify syllables. Based on the mean scores for both groups in the pre-test, the results showed that the students' previous knowledge on the items tested was approximately the same level with each other. By referring to the results of the post-test, they showed that the experimental group's performance had improved compared to the former results. However, the scores of the control group decreased a little, if we compare between the results of both pre-test and post-test. As a whole, the findings indicated that using three modes of speaking practice and a variety of tasks in the teaching of word stress could be useful to help improve the learners' production of word stress.

Generally, we can say that students who followed our teaching strategy did well in the post-test, thanks to the variety of tasks, greater opportunities for speaking, richness of vocabulary, etc. Also the gradual move from controlled to less-controlled speaking activities was fruitful. The main issues raised in this study are listed as follows:

- The experimental group showed an increased awareness and sensitivity towards the use of word stress, especially in the discrimination, identification and prediction tasks.

- The placement of word stress requires knowledge and awareness of: vowel reduction, syllabication, recognition & identification of schwa & syllabic consonant, spelling clues, affixation, grammar and even context.

- Production is not tested in the phonetic examination, the thing which may affect the students' motivation in paying attention to their performance.

- The students' perception and production skills are hardly observed and hidden for the teacher, and thus students' problems are not easily noticed. Consequently, no feedback is provided.

- Both teachers and students acknowledge the usefulness of the phonetic course; however, there is an ardent need for further in-class communicative practice opportunities.

- Good pronunciation is an advantage in marking stress. That is, having a good pronunciation habit can be very helpful in producing correct word stress.

5.3. Implications and Suggestions

Several pedagogical implications and suggestions can be derived from this research. These can provide language learners and practitioners with useful materials and techniques for effective teaching of pronunciation in general and word stress in particular. Here we come to answer our research question, which investigates whether the assignement of three types of oral activities in the language class, may improve the learners' use of word stress more efficiently and enable them to overcome their difficulties.

As explained earlier, pronunciation represents a mental and physical activity that requires practice and skill development. The role and objective of practice is to serve the physical and performative component of learning, namely pronunciation study. Practising pronunciation can be done in relation to the following areas: pronunciation-oriented speaking practice, pronunciation-oriented listening practice, spelling-oriented pronunciation practice.

Word stress can be practised and studied in different ways. Production-focused practice can give learners a way of intervening in their own learning of word stress placement, and make them change the way they stress a particular syllable in a word once they become aware about the appropriate context of its use. Thus, our study suggests that imitative, rehearsed and extemporaneous speech practice along with the diversity of communicative tasks assigned on word stress can help learners improve their production in this pronunciation feature to a great extent, as it has been shown in the pre-and post-tests results.

Students themselves welcomed the proposed teaching units with high motivation and even attended the make up sessions organized for this purpose with great appreciation. They also wished for more similar lessons on other pronunciation features especially in connected speech. Further still, they claimed that they would welcome receiving feedback on their pronunciation while speaking or performing a presentation.

Certain suggestions can be made for teaching word stress. We suggest that practice should be given full credit especially in the phonetics course. There should be plenty of practice opportunities in class, mainly if practice tasks are fairly varied so

that to make all students understand the concept of word stress according to their different learning preferences. Some students preferred to rely on clues and rules of word stress to mark stress properly. Others used dictionaries with phonemic scripts. Some others liked the exercise of nonsense words very much especially that it was pleasant and enjoyable, and increased their awareness on patterns of stress and unstress and vowel reduction. Matching, multiple choice and close test exercises, etc, were also appealing.

Further, perception work paves the way for effective production abilities, and hence should precede any oral practice. Indeed, the assignment of pronunciation-oriented listening activities exemplified in recognition and discrimination tasks were quite helpful. We can show students how word stress functions in English through demonstration and explanation. And we can also draw the stress to their attention every time they appear on a tape or in our own conversation. In this way, we gradually train the students' ears. When they can hear correctly they are on the way to being able to speak correctly.

The type of communicative activities should give students the chance to practice word stress in context, in which students have to use the appropriate stress pattern in a given situation. For instance, homographs can be presented in sentences so that to test students' abilities in using the right stress pattern either on the first position or on the second one, depending on whether the word is a verb or a noun. The same thing can be done with phrasal verbs. Besides, the teaching of compound stress, where we incorporate compound nouns within a sentence, can make students figure out the proper placement of stress on the appropriate element. For example, in adjective +

noun expressions, all elements retain their dictionary stress: *'BEAUtiful DAY'* (capitals indicate the stressed part), *'RED baLLOON'*. In noun + noun compounds, the modified noun is unstressed: *'BOOKcase'*, *'WHEAT field'*, unless the modifying noun is a key material or ingredient: *'BEEF STEW'*, *'CLAY POT'*.

To help students understand the concept of word stress, stress can be presented in different forms. In our study, we tried out exaggeration on certain stressed syllables, capital letters to indicate the main stress, and we also used bigger circles for the stressed syllable and smaller ones for unstressed ones. Word stress production was also highlighted through nonsense syllables, not to mention the phonemic representations of words and transcriptions through which students were asked to mark stress and locate syllable borders.

The teacher can exaggerate the difference between stressed and unstressed syllables more than in the ordinary way by making stressed vowels longer and louder than usual. Besides, students can be encouraged to exaggerate if they cannot differentiate stress patterns in their own speech. What seems like an exaggeration to them may sound normal to an English ear.

Stress can also be taught through the demonstration of both stressed and unstressed syllables by using *nonsense syllables,* or 'dada language'**,** where the stress patterns can be illustrated with a substitution of one syllable of a word with another simple nonsense syllable such as 'da' or 'la'. E.g., we can represent the word *ba'nana* into *da DA da*, where 'DA' in capitals indicates the stressed syllable. Such an exercise may function as a warm-up activity at the beginning of a pronunciation lesson, to demonstrate and practice proper production of stress patterns. This is just another

common way of drawing our students' attention to stress issues by showing where the weak vowel sounds occur in words, rather than focusing merely on the stressed syllables themselves.

In addition, practice should start from a controlled stage, followed by a guided one, and ending with an independent stage, the things which lead the students to pay more attention to their mistakes and correct them gradually. These three modes of pronunciation/speaking practice go hand in hand with the principles of the communicative approach, which was referred to earlier in chapter two of the literature review. The effectiveness of controlled and guided practice can be evaluated by measures of student success in the independent practice phase. That is, if students show success in the subsequent independent practice tasks, it means that the former practice modes have been conducted appropriately.

Reading a written text *aloud* is one of the techniques followed in this study to provide a guided structured practice. According to Kelly (2000), reading aloud offers opportunities for rehearsal and linking between spelling and pronunciation without spending much effort thinking about what to say and allows learners to concentrate on how they are speaking. Many features of pronunciation can be highlighted and practiced through reading aloud.

However, there are two main disadvantages with this technique. First, the reading might be less natural especially if students find difficulties recognizing words within the text. Second, there are differences between written and spoken language. That is, written sentences can be longer and grammatically more complex, and usually

the written text is not designed to be spoken, and this might give the learner a false impression of the spoken language.

This is why texts should be carefully chosen to fit with the lesson objectives and students needs. Reading a chunked text aloud is a good practice for learners who tend to speak too fast, and to pause too little or in inappropriate places (Marks, ?[1]). Here are some examples of texts which might be used in class proposed by Kelly (2000):

- Short biographies of well-known people

- Texts about students' own countries or hometowns

- Accounts of places that students have visited

- Short sketches or dramatic pieces

- Poetry

Poems are usually written to be read. For instance, limericks which are a five-line humorous poems, can be useful for working on rhyming words, and any wrong pronunciation will be very noticeable because of their limited structure (Kelly, 2000). For Hewings (2004), limericks are good for practicing many pronunciation features in a controlled way. They are recited with a steady rhyme, and this requires lengthening and shortening sounds, using weak forms, and putting stress in appropriate places.

While the targeted feature has been explicitly taught and practised under the teacher's directions in reading tasks and written exercises, then comes the phase of instruction that involves the application and the use of word stress in familiar natural formats or tasks to reinforce its acquisition. After familiarizing students with self-monitoring and evaluation, oral homework -which involves oral production instead of

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[1] Date not specified

written or reading assignments-, can be introduced at an advanced stage to allow for more independent speaking practice. Assignments must be prepared, rehearsed, and then recorded on video or audio tape, if possible. The advantage of using recordings in this way is that it will give the learners a context for the task, and a clear purpose for speaking, an aspect which is often missing from oral practice.

There are a variety of oral homework assignments that can be done in class. In our study we used a story-telling task in which students were asked to prepare a story to be told in class. To allow for more free oral speech, students can be given question prompts to push them to talk about a specific subject matter. Then, feedback can be provided by the teacher, or there is an opportunity for peer evaluation and comments on the targeted pronunciation points, or the learner assesses him/her own performance using a scoring criterion supplied by the teacher.

The focus on word stress should be integrated into other language courses, mainly the oral expression course, since it allows for more interaction, aural and oral work. In addition, the oral expression course involves regular teaching of spoken English and has the advantage of addressing pronunciation issues as well. In this way, work on producing appropriate word stress can be ongoing and teachers should correct their students' pronunciation mistakes whenever possible not necessarily in the phonetics course.

Students should be encouraged to speak in class, and receive constant feedback. While students are acting out or role-playing a dialogue, the teacher can ask them to concentrate their attention on using appropriate word stress, and make them aware that monosyllabic words cannot be stressed, i.e. they do not carry *word* stress. At this

stage, the teacher can start up introducing other related pronunciation features that may follow, on a more advanced stage. In this process, the teacher can demonstrate the difference between sentence stress and word stress for example. Further issues can be raised such as stress shift in certain phrase combinations in connected speech, a good example can be the word *'incoRRECT'* (the word stress is indicated in capitals) when used in an expression like *'an INcorrect answer'*, the main stress shifts to the first position replacing the secondary stress.

Moreover, the pronunciation instruction followed in this study covered many pronunciation features that may affect the placement of stress, such as vowel reduction and syllable division, which means that all language points are related together and cannot be separated. So, it is advised that word stress should be taught on account of many other integral parts that form a whole.

A good case in point is that there is a link between stress placement in a word and vowel quality. In fact, stress placement determines vowel quality. That is to say, the vowel in the stressed syllable of a word will be a full vowel, and that the vowels in unstressed syllables will be reduced to schwa. So, FL learners must learn how to use both stress placement as well as vowel reduction together.

Students must be made aware of the notions of syllable, schwa, and affixation, because these affect word stress placement, and they do not only have relevance to other aspects of English language use alone, but also linked to spelling/pronunciation correspondence. Students must develop a concept of the syllable, something which many students still have problems with. They may divide syllables according to the way words are written (morphological divisions), instead of focusing their attention on

sound identification. By making students follow the dictionary syllabication conventions they will be sensitized about the appropriate location of syllable borders, for example, the word *'attract'* should be divided as *'a TTRACT'* rather than *'at TRACT'* (the capitals indicate the stressed syllable). The teacher should also note words with fewer syllables than expected due to schwa elision, such as *'family'*, *'conference'* (2, not 3 syllables), and *'vegetable'* (3, not 4 syllables), though in some cases, this division depends on whether the speaker is speaking rapidly or not.

Students should also be made responsible for their learning and can benefit from the available rules of word stress placement with special attention to exceptions. For instance, they can learn that words ending with the diphthong /əʊ/ are usually stressed on the first syllable like the words: *'follow* and *'photo*, but they must also bear in mind that this rule is not always feasible, because of some exceptions like the word *be'low*, which is stressed on the second position. They should look up the transcription and stress mark of words they are not sure where to stress them correctly. Thus, the dictionary remains a good reference and companion for students whenever the situation goes soar.

Furthermore, students may practise their proper production and realization of word stress by recording their speech and listening to it later to see what they can modify. Alternatively, they can listen to a model from a native speaker's talk, try to imitate it through recording their performance, and then, they compare it against that model and check the right pronunciation of the target words. Moreover, students can learn from their peers' errors and try to avoid them.

It is also worth-mentioning the fact that, assessing students' pronunciation progress is not an easy matter. In fact, progress is a long-life process; we cannot get quick results within a limited period of time. Miller (2000) defined progress in pronunciation as follows:

> "Progress in pronunciation happens in stages and does not proceed linearly. Some of the early changes, such as improved listening or increased pronunciation awareness, may not be immediately evident in speech, but they prepare students for future pronunciation changes. Errors are a natural part of the process, and being able to recognize and correct one's own errors is a major advance"

(Miller, 2000)[1]

Thus, we should not expect a lot from the students of the experimental group to show greater progress at such a short time. Progress should be considered as a long-term objective. Students will not necessarily be able to learn all the stress patterns of English words without consistent, focused instruction and practice. When such support and continual practice is given, they can make progress, although it will be slow. It is unreasonable to expect rapid change. Nobody knows how long it takes for improvements to be achieved especially in spontaneous speech. This implies that learning about word stress must be carried out even outside the classroom. In order to encourage this kind of practice, assigning activities as homework can be a helpful technique to engage students into further studies outside the classroom environment.

Following Avery and Ehrlich (1992), we suggest that in order to help students overcome their pronunciation problems and carry over their learning process even

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[1] Refer to website in the bibliography

outside the classroom environment, the teacher should base his/her teaching on four crucial areas:

- *Motivation*: Students should be made aware of the importance of accurate pronunciation.

- *Explanation*: Students need to learn about the rules underlying the pronunciation of the target language, that is description and analysis of the new system is necessary.

- *Practice*: Appropriate and varied practice opportunities are needed to establish the newly studied points and recycle old ones.

- *Feedback*: Teacher and peer constructive feedback will also add support.

This suggests that the combination of motivation, explanation, practice and feedback will help learners generate self-monitoring and self-modification strategies to carry over learning on their own, by defining the appropriate roles for both the teacher and the student. Thus, the learners' role is to collaborate and become responsible for their learning, and the teacher provides support and guidance only when needed (Morley, 2000). To get the maximum achievement, the teacher should develop the students' self-monitoring skills by raising their awareness, self-observation skills and positive attitudes by giving concrete suggestions for monitoring throughout their performance, developing self-rehearsal techniques (talking and listening to oneself), and moving from dependent to more independent monitoring. Students on their turn should develop self-modification skills (self-correction). It is the learners who should correct themselves, whereas the teacher gives cues to help them identify what, where

and how to modify their word stress placement. It is high time for the teacher to substitute repeated modeling by cueing.

It should be stressed that, phonetic knowledge is of great value and it is part of the consciousness-raising process. If learners are not aware of phonetics of English, they can not know how to monitor their speech or employ any other metacognitive learning strategies. In other words, students must be aware of the phonological features and patterns underlying the target language so that to be able to self-monitor their errors and correct them.

By explanation students will be aided and made conscious about phonetic and phonological facts. This method may not be helpful for some students who are not able to control their speech production by following instructions and directions. Another disadvantage is the use of labels; the learner is faced with the problem of identifying these labels in much the same way as identifying the corresponding sounds themselves. Furthermore, Adrian Underhill (1996) pointed out the following:

> "the mainstream way of approaching pronunciation teaching
> and learning is rather cerebral and disconnected, resulting in
> approaches that are either too academic (theoretical rather than
> experiential) or too much based on habit formation (leading to
> dull repetition of correctness at the expense of insight,
> curiosity, awareness)"

(Underhill, 1996)[1]

Thus, we cannot deny and ignore the role played by the phonetics course, only that it should not be too emphasised at the expense of practice. The challenge which pronunciation teachers have to meet is the fulfilment of the practice objective, by

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[1] Refer to website in the bibliography

providing meaningful and effective learning environment so that to help learners monitor and modify pronunciation without hindering communication. For Morley (2000), there is a need for developing pronunciation methodologies, techniques and materials. Also, she insisted on the necessity for investigating the effects of specific pronunciation procedures on the development of the learners' pronunciation.

In fact, receiving lessons on word stress as it was done in our present study, can only serve the short-term memory for the meantime. In order to consolidate the studied feature and make it established in the long-term memory of our students, practice makes perfect. Researchers have stressed the need for students to practise their new knowledge or skill under direct teacher supervision. They note that "new learning is like wet cement, it can be easily damaged. An error at the beginning of learning can be easily set so that it is harder to eradicate than had it been apprehended immediately"[1]. This is what students really need after receiving enough instruction on the targeted feature, which is word stress in our case.

It goes without saying that, unlike other languages, English stress is not predictable and so complex, and the rules of word stress are not regular and reliable in many cases, let alone the difficulty of learning stress word by word. So it is advisable to train students to learn stress through the rules along with the stress patterns of each individual word, in both ways. On the one hand, stress must be marked when dealing with new vocabulary. On the other hand, teaching a few rules regarding stress shift in related words belonging to different parts of speech can help solve some recurring problems. One example is: do not stress the final '–ate' syllable in verbs, even though '-a-' is stressed in nouns ending with '–ation', e.g. *'graduate-gradu'ation*; *'vibrate-*

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[1] Unknown author, check web URL of "*Glossary of terms and links*" in the bibliography.

vibr'ation. Thus, giving such rules and tricks to students can be a good reference for them to follow.

On the whole, conscious knowledge about the English word stress patterns facilitates the learners' acquisition of the new phonological system. As Kenworthy (1987) stated:

> "once learners are aware that English words have a stress pattern, that words can be pronounced in slightly different ways, that the pitch of the voice can be used to convey meaning, then they will know *what* to pay attention to and can build upon this basic awareness"

<div align="right">(Kenworthy, 1987: 27)</div>

Students should be sensitized to the fact that word stress is important for intelligibility and plays a major role in conveying meaning. For instance, the difference between the same contrasts is signaled by stress placement, e.g., *ob'ject* (V)/*'object* (N), *'send-off* (N)/*send 'off* (V), or *'blackboard (noun+noun)/black 'board (adjective+noun)*. While all the techniques discussed here are all useful and important ones in themselves, the ultimate goal of our teaching approach to word stress is to help students develop the sensitivity necessary to continue to learn and improve on their own.

So, concentrating on schwa sound, showing where to locate syllables in a word, making students aware of where words should be stressed, and how stress can be realized, all these things give them extra information about spoken English and help them achieve the goal of improved comprehension and intelligibility.

Questions that can be raised here to guide future research are listed as follows:

- Would the practice of word stress in context better improve the learners' placement of word stress?

- To what extent does intensive practice improve the EFL learners' production of word-stress?

- Do students, speaking different dialects of the same L1, differ in their attainment of the proper English word stress?

- How can errors of word stress production affect the intelligibility of the FL learner's speech?

- How does correct syllable division relate to the placement of appropriate word stress?

- How much teaching assistance is required to improve the learner's level in the acquisition of word stress of the target language?

5.4. Conclusion

So far, we have been investigating the role of practice in improving the learners' production of word stress. This practice is based on the teaching of word stress, with three modes of pronunciation/speaking practice (controlled, structured, and free).

Students' problems with word stress were identified, and teaching units were designed accordingly. The experiment was conducted, and the results gave us a positive answer to our research question, in that imitative, rehearsed and extemporaneous practice of word stress could help students improve their production abilities in word stress. In addition, devising a variety of communicative tasks and activities on word stress was also a helpful technique. Thus, the designed teaching procedure increased the learners' awareness and self-reliance. Diverse tasks and activities along with gradual practice types followed in this study should be highly

recommended, not only in the teaching of word stress, but also for any other feature of target language pronunciation.

As conclusive remarks, we will address the following main points:

- Practice should be given due place in phonetics teaching. Tasks should be varied to cope with the different learning preferences & opportunities for participating and speaking in class should be increased.

- Word stress should be taught and practised meaningfully in context, rather than discretely. Words should be presented in sentences, for instance, so that to know the function of the word and decide about the right placement of stress.

- Pronunciation should be treated as a skill to be fully practised. Pronunciation is not all phonology and not only part of the language system. It also involves practice in three areas: listening, speaking and sound/spelling awareness.

- Pronunciation practice in the three modes of speaking trains students to become autonomous learners and sensitises them to the importance of word stress in the communication of meaning. Students should know that stress is part of a word's identity

- Constant feedback is recommended. Attention to pronunciation should be extended to the other modules, namely oral expression, to encourage intelligibility of speech in the language class. Every language lesson is a pronunciation lesson.

- Since word stress is not predictable all the time, students must learn word stress rules, and try to learn the right pronunciation of every new word they may encounter.

- Word stress should be taught along with other related features such as the syllable, vowel quality, and schwa elision, etc. for example, schwa elision is introduced separately in the 3rd year programme, why not introduced earlier with word stress.

- Progress does not come out immediately. It may show up in a later stage of learning. It can be better noticed through an increased awareness and self-monitoring.

On the basis of a comparison between the results of the pre-test, we can infer that the students in the experimental group performed better in their post-test. Thus, the teaching of word stress following different modes of pronunciation/speaking practice simultaneously and providing a variety of communicative tasks play a part in improving the students' correct production of word stress, at least to some degree.

However, the results obtained from the present work could not be thoroughly conclusive, and should not be definitely taken for granted, because of the inevitable limitations of this work, and the scope of the present study is limited to one population and setting. Hoping that, at least, we have provided an informative study that might raise other crucial issues in the area of word stress use, or any other related suprasegmental features, so that to guide future research. All in all, we aimed at highlighting the fact that, correct word stress production can be improved with feasible teaching procedures. Not to mention that, word stress correct production is essential for effective communication and mutual intelligibility, and an important part of communicative competence.

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GLOSSARY

- **Pronunciation**

It is defined as the act of producing the sounds of a language (Roach, 2002). It refers to "the production of sounds that we use to make meaning" (Yates, 2002: 1). It involves the production and perception of phonemes (units of sounds), which work in combination with prosodemes (longer chunks of language), in addition to features of voice quality[1] and gestures (Setter and Jenkins, 2005). Dalton and Seidlhofer (1994) provided a detailed definition of pronunciation as the production of significant sounds in two senses. In the first sense, sound is significant because it is used as a code of particular language, that is, each language has its own distinctive sounds. In this case pronunciation is "the production and perception of sounds of speech" (Dalton and Seidlhofer, 1994: 3). In the other sense, sound is significant, for it is used to achieve meaning in contexts of use, where the code combines with other factors to make communication possible. In this case, pronunciation is referred to as "acts of speaking" (Ibid).

The study of pronunciation includes two related fields: phonetics and phonology.

- **Phonetics**

It is the neutral study of speech sounds as phenomena in the physical world, and it is concerned with the physiological, anatomical, neurological, and psychological properties of human beings that make these sounds (Lass, 1984). It is also concerned with the transmission, reception and production of speech (Kelly, 2000). It is "the study and description of the nature of the raw noises and silences of speech" (Pennington, 1996:23).

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[1] Voice quality refers to distinctive characteristics of an individual's speech (Roach, 1992: 121).

- **Phonology** (Also called phonemics)

It is concerned with the interpretation and organization of sounds of language as linguistic items, and it deals with the system and patterns of sound within particular languages (Lass, 1984). It is "the study and description of the patterning of the noises and silences of speech in regular ways within particular languages" (Pennington, 1996: 23). Phonology is often described in terms of segmental system referring to the individual vowels and consonants and their distribution, and suprasegmental one (also called prosody[1]), which refers to stretches of speech such as patterns of rhythm and intonation (Celce-Murcia and Olstain, 2000).

- **Distinction between Pronunciation, Phonetics, and Phonology**

We need to clarify three overlapping and inter-related terms; pronunciation, phonetics, and phonology, in order to eliminate possible confusion. Pennington (1996) claimed that phonology is comparatively more general and more highly abstract than phonetics. Therefore Phonetics is said to be the basis for phonology. For instance, sounds which seem to be phonologically the same in a specific language (e.g., allophones), are phonetically considered distinct and different. So, phonetics is taken as a *'natural'* science, which studies the real sound of speech (Fraser, 2004), while phonology is a *'linguistic'* science. To illustrate our point, if we look at vowels for example, a description of *how* vowel sounds can be produced and perceived is the property of phonetics, while the analysis and description of *English* vowels is the concern of phonology (Clark and Yallop, 1990). However, it must be pointed out that such a sharp distinction between phonetics and phonology, as usually made by the Prague School, should not be so extreme, for we cannot study the linguistic function of sounds in language (phonology)

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[1] Suprasegmental is an American term, while *prosody* is a British term (Roach, 2002).

with no reference to their articulatory or acoustic features (phonetics), and vice versa (Malmberg, 1963). And since both belong to the same subject, they can safely be treated as one field of study and can be considered as a unique branch. As Malmberg put it:

> "Phonemics establishes the contrasts utilized and their mutual relationships. Experimental phonetics determines…the physical and physiological nature of the distinctions established. Without linguistic analysis of systems and functional units, the experimenter would not know what to do. And without the physical and physiological analysis of all the facts of pronunciation, the linguist would not know the physical nature of the contrasts established. The two types of studies are interdependent and condition each other. Consequently, it seems preferable to group them together under the traditional general heading of phonetics".
>
> (Malmberg, 1963: 97-98).

Having explained the relationship between phonetics and phonology, we need to clarify now another important distinction made between two notions in foreign language pedagogy concerning the terms phonology and pronunciation. Phonology embodies "knowledge about how the sound system of the target language works" (Burgess and Spencer, 2000: 191). This knowledge involves metalinguistic[1] awareness. However, pronunciation is concerned with "the practice and meaningful use of TL [Target Language] phonological features" (ibid). Thus, in pronunciation one does not need to define or label at all, but only practice listening and speaking by interpreting and producing phonological features adequately.

- **Vowel Reduction**

It is the process of weakening sounds in an unstressed syllable. In such syllables, vowels tend to become schwa-like, i.e., they are centralized (Roach, 1992).

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[1] Metalanguage is the use of language to talk about language, e.g., phonological terms are words used to refer to concepts of parts of words like: syllable, phoneme, stress, voiceless, etc (Fraser, 2004).

Appendix 1

Teachers' Questionnaire

Instructions   **(for teachers of phonetics, English Section)**

I will be very much obliged to you, if you kindly answer the following questions. This questionnaire is part of my research for a Magister in Applied Linguistics.

Please, tick in the appropriate box or fill in the blanks where necessary. You may choose more than one answer at a time.

1. Has the teaching of phonetics been of use for your EFL students in assigning the right placement of stress at the word level?

   - Yes   ☐

   - No   ☐

   - Don't know ☐

2. If yes, to what extent has it been helpful?

   - Very much helpful ☐

   - Helpful   ☐

   - Quite helpful   ☐

   - Not helpful   ☐

   - Don't know   ☐

3. How do you assess students in class? Is it through:

   - Transcription test   ☐

   - Oral test   ☐

   - Aural test   ☐

   - Question and answer test   ☐

   - Other (specify) ……………………….

4. Do you assess the students'

- Phonetic & phonological knowledge?   ☐

- Pronunciation productive abilities?   ☐

- Pronunciation perceptual abilities?   ☐

- All of them?   ☐

- Other (specify) ………………….

5. In your phonetic course do you provide:

- Spelling-oriented pronunciation practice?   ☐

- Listening-oriented pronunciation practice?   ☐

- Speaking (speech) pronunciation practice?   ☐

- All of these   ☐

- None of these   ☐

- Other (specify) ……………….

6. Do you implement all the production practice modes[1] in your classes?

- Yes   ☐

- No   ☐

7. If no, for what reason?

- Large classes   ☐

- Difficult to conduct   ☐

- Nature of the course   ☐

- Other (specify)……………………….

8. How much progress do you notice in the students' pronunciation in the following

areas?

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[1] There are 3 speaking practice modes: controlled (repetition/reciting), guided (reading aloud), free (spontaneous speech).

Circle your answer: 1 low – 5 high

- Schwa recognition   1 2 3 4 5

- Ability to give vowels full or reduced quality   1 2 3 4 5

- Identifying the number of syllables in a word   1 2 3 4 5

- Pronunciation of specific sound sequences[1]   1 2 3 4 5

- Ability to make a syllable longer, louder & higher   1 2 3 4 5

- Predicting word stress   1 2 3 4 5

- Overall pronunciation   1 2 3 4 5

9. Do your students misplace word-stress?

- Yes   ☐

- No   ☐

- Don't know   ☐

10. If yes, what kind of error do they often make with the production of word-stress?

- Wrong syllable stressed   ☐

- Stressing more than one syllable   ☐

- Stress missing or absent in all syllables ☐

- All of them   ☐

- Don't know   ☐

- Other (specify)…………………………

11. The students' difficulties in determining stress arise when they encounter:

- Unfamiliar words   ☐

- Words with affixes   ☐

---

[1] Sound sequences may refer to consonant clusters, for example, or word endings such as past –ed, plural –es, etc, which may change the pronunciation of certain words if attached to them.

- Compound nouns & phrasal verbs   ☐

- Homographs (words having dual role)   ☐

- Words containing specific sound sequences   ☐

- Words containing specific vowels   ☐

- Don't know   ☐

- Other (specify)…………

12. If you choose one of the items above, can you explain why?

- Over-generalization of certain word-stress rules   ☐

- Stress mobility   ☐

- Secondary stress confused with primary stress   ☐

- Difficulty pronouncing certain sound sequences   ☐

- Tendency to stress strong vowels   ☐

- Misconception of word-stress   ☐

- Don't know   ☐

- Other (specify) ………………………………..

13. According to you, what is the origin of word stress problems?

- Difficulty to identify schwa   ☐

- Inability to reduce vowels   ☐

- Difficulty to locate syllable borders ☐

- Mispronunciation   ☐

- Spelling effect   ☐

- Don't know   ☐

- Other (specify) ………………

14. According to you, why do students still have problems with word-stress although they have learnt about it in the phonetics course? Because of:

- Inability to link between form & content of language ☐
- Difficulty to apply phonetic theory ☐
- Influence of another language ☐
- Ill-perception ☐
- Lack of practice ☐
- Don't know ☐
- Other (specify) …………

15. In your opinion what is the best way of improving the students' pronunciation skills, especially their proper production of word-stress?

- Pronunciation-based spelling, listening & speaking practice ☐
- Teaching the stress pattern of each word at first exposure ☐
- Studying phonetics & phonology ☐
- All of them ☐
- Other (specify) …………

16. Please feel free to add any further comments on the topic at hand, which you think are worth-mentioning here, in the space provided below:

…………………………………………………………………………………………………

…………………………………………………………………………………………………

Thanks for your collaboration

Appendix 2

Students' Questionnaire

Instructions **(for 3ʳᵈ year students, English Section)**

I will be very much obliged to you, if you kindly answer the following questions.

This questionnaire is part of my research for a Magister in Applied Linguistics

Please, put a cross in the appropriate box ☒ or fill in the blanks where necessary.

You may choose more than one answer at a time.

---

1. Has the phonetics course helped you acquire good pronunciation?

- Yes ☐
- No ☐
- Don't know ☐

2. If yes, in what ways has it been helpful?

- Become aware of phonological rules ☐
- Acquire good pronunciation abilities ☐
- Both ☐
- Don't know ☐
- Other (specify) ………………………

3. If not, what seems to be the problem?

- The course is highly theoretical ☐
- Restriction of practice time ☐
- Indifference & lack of attention ☐
- Don't know ☐
- Other (specify) ………………..

4. Note any particular problem you have with the following pronunciation areas:

- Schwa /ə/ recognition ……………………………………………………….
- Pronunciation of specific sound sequences[1]…………………………………
- Counting the number of syllables in a word …………………………………..
- Distinguishing stressed and unstressed syllable……………………………….
- Ability to produce word-stress correctly …………………………………………
- Predicting word stress ………………………………………………………….
- Sound/spelling connection …………………………………………………………
- Overall pronunciation ………………………………………………………….

5. Do you have any problems in word-stress placement?

- Yes   ☐
- No   ☐
- Don't know ☐

6. What are your main difficulties in learning word-stress? At the level of:

- Perception   ☐
- Production   ☐
- Sound/spelling relationship   ☐
- All of them   ☐
- Don't know   ☐
- Other (specify) ………………

---

[1] Sound sequences may refer to consonant clusters, for example, or word endings such as past –ed, plural –es, etc, which may change the pronunciation of certain words if attached to them.

7. Do you think that the practice work done in the language lab is enough to help you learn word-stress efficiently?

- Yes ☐
- No ☐
- Don't know ☐

8. According to you, what are the causes behind your problems with word-stress?

- Little practice opportunities outside class ☐
- Unvaried practice tasks & activities in class ☐
- Unvaried speech practice modes[2] in class ☐
- Ill-perception (bad ear) ☐
- Difficulty to apply phonetic theory ☐
- Don't know ☐
- Other (specify)…………………………………

9. If you don't know the right pronunciation of any word in English (esp. the placement of stress), do you have a resort to another language to manage the problem?

- Yes ☐
- No ☐
- Don't know ☐

---

[2] There are 3 speaking practice modes: controlled (repetition/reciting), guided (reading aloud), free (spontaneous speech).

10. If yes, which language?

- Your mother tongue (L1) (specify it)……… ☐

- Second language (specify it)……………… ☐

- Both   ☐

- Other language (specify)…………………..

11. When you speak, can you focus on both the proper production of word-stress *and*
what you want to say at the same time?

- Yes   ☐

- No   ☐

- Don't know ☐

12. Please feel free to add any further remarks on the topic at hand in the space
provided below:

....

....

....

Accept my deep gratitude for your help

Appendix 3

Pre-test

Third year students, section A, Group: Name: (anonymous)

Exercise 1: *Group the words below into columns according to the number of syllables.*

<div align="center">

pedestrian conversation tired boxes

family advantages asked camera

traveler cartridges separate (adj) decided

supermarket trousers secretary definite

</div>

1 syllable: …………………………………………………………………………

2 syllables: ………………………………………………………………………

3 syllables: ………………………………………………………………………

4 syllables: ………………………………………………………………………

5 syllables: ………………………………………………………………………

Exercise 2: *Number the words with the appropriate stress pattern (from 1-5). Two examples are done for you. The big 'O' represents the stressed syllable, and the small 'o' represents the unstressed syllable.*

1 Oo	**2** oO	**3**Ooo	**4**oOo	**5**ooO

student **1**	essential	pronounce
und**er**stand **5**	computer	introduce
surrounding	rebel (n)	analyse
rebel (v)	learner	cassette

- *Using the words above, underline all the incidences of /ə/. (See the words 'student' and 'understand' above).*

Exercise 3: *Each of the pairs of words below has the same number of syllables. Is the primary stress of each pair on the same or on a different syllable? Put a cross where appropriate, and circle the stressed syllable.*

Pairs of words	Same	Different
dictionary / television	✕	
mistake / error		✕
forty / fourteen		
greenhouse / green house		
emphasizes / exercises		
arrive / balloon		
hotel / model		
Africa / Alaska		
send off (v) / send-off (n)		
electrician / electrical		

Exercise 4: *Transcribe the following list of words, locate the syllable boundaries with a dot (.), and mark the main stress with (').*

E.g.: information   ➔   /ɪn.fə.'meɪ.ʃ(ə)n/

abbreviate		development	
obsolete		upon	
amplify		Oxford	
fertile		democracy	
novelist		lemonade	
advertise		forgotten	
capsule		hairdresser	
ancestor		impossibility	
necessary		colony	
trustee		inconvenient	
rewrite		recreating	
shop-assistant		preparatory	
industrious		novice	
society		cashier	

Appendix 4

Teaching Units

- **Lesson 1: Syllable division**

Lesson type: spelling awareness, oral and aural practice

Time: 1 hour and 30 minutes

Materials: worksheet + audio cassette

Task: syllable division in –ed and –es endings/schwa elision in certain words

Objective: by the end of the lesson, students should be able to identify the number of syllables in words with less reference to spelling, as well as locating and counting syllable borders.

Explanation: The word *syllable* is used to talk about the *pronunciation* of words, not the writing. For example, in writing we can divide 'chocolate' into three parts like this: cho-co-late. But when we say the word, we pronounce only two syllables, like this: chocolate /tʃɒk.lət/ (the dot shows where the two syllables are divided). A number of other words may be pronounced with fewer syllables than in writing. Listen to these examples: different /ˈdɪf.rənt/   interesting /ˈɪn.trəs.tɪŋ/   general /ˈdʒen.rəl/

comfortable /ˈkʌmf.tə.bəl/   secretary /ˈsek.rə.trɪ/

The loss of weak vowels (schwa elision) usually happens when an unstressed vowel occurs between voiceless consonants and often after p t k, or in the case of syllabic consonants. E.g.: *tonight, perhaps, potato, bicycle, philosophy, sudden, awful, evil*. In other cases, there are two possibilities depending on whether the speech is rapid or careful. E.g.: *generous, pattern, deliberate, probably, properly*.

If the infinitive of the verb ends with the sounds /t/ or /d/, -ed or –d is a new syllable; the letter (e) is pronounced as a vowel sound.

For example: hate /heɪt/ = one syllable   hated /'heɪtɪd/ = two syllables

Sometimes, plural, third person and possessive endings are another syllable. For example, fax /fæks/ is one syllable, but faxes /'fæk.sɪz/ is two syllables. The –s should only form a separate syllable after:

- /s/   Chris' kisses, the nurse's purses, Max's faxes

- /ʃ/   Trish's wishes

- /z/   Rose's roses

- /tʃ/   the witch's watches

- /dʒ/   George's fridges

When the –s ending is another syllable, it is pronounced /ɪz/.

Exercise 1: *Predict and cross out the vowel sound which is omitted in its usual pronunciation.*

camera definite every factory family favourite history marvelous police

recovery reference secretary separate similar strawberry traveler average

Exercise 2: syllables: adding past tense endings

Write the past tense of the verbs from the box in the correct part of the table. Then listen, check and repeat.

hate walk need wash wait waste help taste phone dance ask	
1 syllable	walked
-ed = extra syllable Oo	hated

Exercise 3: syllables: plural and other –s endings

How many syllables are there in these words? Example: ages /'eɪ.dʒɪz/: 2 syllables

behaves	promises
brushes	sales
catches	services
classes	voices
confuses	pages
decides	Ms Foxes
faces	my niece's
glasses	the witch's
inches	Miss Bridges
languages	Mr Jones
messages	Anne's
notices	Chris'

Exercise 4: *Which word has a different number of syllables from the others?*

Circle it. Example: snakes ⟨sheep⟩ foxes cats

1. likes wants talks washes

2. wanted walked saved brushed

3. chicken chocolate afternoon different

4. about around asleep asked

5. fourteen forty fortieth hundred

6. builds rebuild builder building

7. supermarket waterfall holiday hairdresser

8. school texts over sports

- **Lesson 2: Vowel reduction and schwa identification**

Lesson type: controlled production and recognition practice

Time: 1 hour and 30 minutes

Materials: worksheet

Task: schwa identification and vowel reduction

Objective: by the end of the course, students are expected to be able to give vowels (syllables) a full or reduced quality, and recognize schwa in written words.

Explanation:

Schwa /ə/, pronounced as /ʃəwɑ:/ or /ʃvɑ:/, is a Hebrew word meaning emptiness or nothing. It is the most important vowel in English, which occurs very often in the unstressed syllable. It can be represented through spelling in a variety of ways. Here are some spellings, with the incidences of /ə/ underlined, though these may not always tally with the reader's own accent or variety of English.

> a, as in **_a_**_rise_
>
> e, as in _ph**e**nomenon_
>
> i, as in _pup**i**l_
>
> o, as in _t**o**morrow_
>
> u, as in _s**u**pport_

Sometimes whole syllables or word endings may be 'reduced' to /ə/, as in _butt**er**_, _thor**ough**_, _facilitat**or**_ and _pol**ar**_. This is common among British English accents, though not so common in US English.

At other times /ə/ is a central sound in a syllable, and several written vowels may represent the sound; this is very common in words ending in –ous (like _fictitious_),

and frequently in –al endings (like *topical*), in –ion endings (like *attention*), and –ate (like *delicate*).

Exercise 1: *Here is a list of words. Cross out the reduced vowel (schwa).*

Student   forget   lettuce   open   connect   syllable   banana   excellent   vowel experiment   communicate   button   develop   bogus   difficult   conscious   spatial session   accurate   capital   pronunciation   private

Exercise 2: *Decipher the following words, and then underline the letters that represent schwa incidences.*

/əˈraʊnd/		/ˈsʌlfə/	
/əbˈstrʌkt/		/ˈzefə/	
/ˈbækwəd/		/ˈseɪlə/	
/ˈpɜːmənənt/		/ˈʃəʊfə/	
/ˈmeʒə/		/ˈsentə/	
/səˈpəʊz/		/kəˈreɪdʒəs/	
/ˈfɑːðə/		/ˈpɜːʃə/	
/ˈkʌlə/		/ðə/	
/ˈdʒenərəs/		/ən ˈeərəpleɪn/	
/ˈterɪb(ə)l/		/ə ˈflaʊə/	

Exercise 3: Nonsense words (production practice of stress and unstress)

Instructions: The exercise uses nonsense words of three syllables with the same vowel sound in each syllable. Three possible stress patterns are provided. The learner must place the stress on the syllable indicated by the stress pattern, give full vowel quality to the stressed vowel, and reduce the other vowels to schwa. As the learners

work through the exercise, the teacher must carefully monitor their pronunciation. A simple form of transcription can used -capital letters or underlying of the vowel letter to show the full vowel value, and the symbol of schwa (/ə/) written over the stressed vowels. After each set of nonsense words with a particular vowel has been worked on, a real English word with that vowel can be given.

Place the stress on each of the syllables in the following nonsense words as shown by the patterns A, B, C. Pronounce the words. Be careful to use schwa in the unstressed syllables. The first three have been done for you.

	A	B	C
	Ooo	oOo	ooO
(/ɑ:/ as in 'far')			
	ə ə	ə ə	ə ə
Lalaka	lAlaka	lalAka	lalakA
Tapaka	tApaka	tapAka	tapakA
Malala	mAlala	malAla	malalA
(/e/ as in 'pet')			
Chepetet			
Lemepek			
Senewet			
etc			

- **Lesson 3: Introduction to English Word Stress**

Lesson type: prediction practice

Time: 1 hour and 30 minutes

Materials: worksheet + audio cassette

Task: rules of word stress/using dictionaries with phonemic scripts/identification and discrimination of stress patterns/multiple choice and matching tasks

Objective: by the end of the course, students must be able to identify stress patterns in common and unfamiliar words, and homographs.

Explanation:

In English, All words of more than one syllable have what is called word stress. This means that at least one of the syllables is longer, higher and louder than the others. This syllable is called the stressed syllable. If you do not use correct word stress, others may have trouble understanding you. In many cases, word stress must simply be learnt as new vocabulary is acquired. However, there are several rules for word stress which can make it easier to deal with. Word stress can be represented by simple patterns. For example, Small o's represent unstressed syllables. Big O's represent stressed syllables.

Examples: 1. building-------Oo

2. inside---------oO

3. understand---ooO

N.B.: The stress in these lessons is represented either with big Os, capital letters, and of course, with the phonetic symbol (') in transcriptions.

Rules of word stress with some exceptions

Core vocabulary: many everyday nouns and adjectives of two-syllable length are stressed on the first syllable. E.g.: SISter, BROther, WAter, TAble, COFfee, LOvely, etc.

- However, there are a number of exceptions to this general rule, for example *asleep*, *mistake*, *machine*, *alone*, which have stress on the second syllable.

Most two-syllable **verbs** have stress on the second syllable, for example, *repeat*, *escape*, *forget*, *relax*, *enjoy*.

- However, there are some exceptions, for example, *cancel*, *copy* and two-syllable verb ending in –er and –en, e.g. *answer*, *enter*, *offer*, *listen*, *happen*, *open*, which all have stress on the first syllable.

N.B.: words that end with the diphthong /əʊ/ are usually stressed on the first syllable.

Eg.: *'follow*, *'borrow, 'hollow*, *'photo*, though this rule cannot be all the time applicable (e.g., *be'low*, *he'llo*) and hence, should not be always generalized.

Prefixes & suffixes: these are not usually stressed in English and do not usually change the stress pattern of the root word. Consider: QUIet<u>ly</u>, oRIGin<u>ally</u>, <u>un</u>FEEling, and so on. (Note the *exceptions*, though, among prefixes, like <u>BI</u>cycle and <u>DIS</u>locate).

- *Exceptions* on some suffixes: some suffixes are themselves stressed:

-ade (e.g.: LEMon/lemoNADE)

-aire (e.g.: MILlion/millioNAIRE)

-cratic (e.g.: DEMocrat/demoCRATIC)

-ee (e.g.: ABsent/absenTEE)

-ivity (e.g.: SUBject/subjecTIVITY)

With some suffixes, the stress is usually on the syllable immediately before the suffix:

-cracy (e.g.: DEMocrat/deMOCracy)

-ety (e.g.: SOCial/soCIety)

-ial (e.g.: conSPIRacy/conspiraTORial)

-ian (e.g.: HIStory/hisTORian)

-ic (e.g.: SCIence/scienTIFic)

-ical (e.g.: biOLogy/bioLOGical)

-ify (e.g.: PERson/perSONify)

-ion (e.g.: CELebrate/celeBRAtion)

-ious (e.g.: VICtory/vicTORious)

-ive (e.g.: PRODuct/proDUCTive)

-ity (e.g.: eLECtric/elecTRICity)

N.B.: Do not stress the final '–ate' syllable in verbs, even though '-a-' is stressed in nouns ending with '–ation', e.g. graduate-graduation; vibrate-vibration.

Compound words: words formed from a combination of two words tend to be stressed on the first element. Examples are: POSTman, TEApot and CROSSword.

Words having a dual role: in the case of words which can be used as either a noun or a verb, the noun will tend to be stressed on the first syllable (in line with 'core vocabulary' rule above) and the verb on the last syllable (in line with the 'prefix rule'). Examples: IMport (n), imPORT (v); REbel (n), reBEL (v); and INcrease (n), inCREASE (v), print out (v); and print-out (n).

- Exceptions: there is not always a change of stress in words that are both nouns and verbs. For example: *answer*, *picture*, *promise*, *reply*, *travel*, *visit* always have stress on the same syllable.

Exercise 1: *Listen to the audio tape. Which syllable is longer and louder than the others?*

1. photograph

    A.   pho?

    B.   to?

    C.   graph?

2. photographic

    A.   pho?

    B.   to ?

    C.   gra?

    D.   phic?

3. photography

    A.   pho?

    B.   to ?

    C.   gra ?

    D.   phy ?

4. committee

    A.   com ?

    B.   mit?

    C.   tee?

5. volunteer

    A.   vol ?

    B.   un?

        C.   teer?

6. Maryland

        A.   Mar ?

        B.   y ?

        C.   land?

7. society

        A.   so ?

        B.   ci ?

        C.   e ?

        D.   ty?

8. demonstration

        A.   dem ?

        B.   on ?

        C.   stra ?

        D.   tion?

9. character

        A.   cha ?

        B.   rac ?

        C.   ter?

10. referee

        A.   ref ?

        B.   er ?

        C.   ee?

Exercise 2: *Put these words into the correct columns, according to their stress pattern. Then look at the words again and mark all the incidences of the sound /ə/.*

Plumber electrician doctor journalist musician shop assistant teacher soldier

novelist architect carpenter actor policeman fireman lecturer florist

businessman artist farmer scientist researcher gardener designer

Oo	Ooo	oOo	Oooo	ooOo

- *What vowel sounds other than /ə/ also appear in the unstressed syllables?*

Unfamiliar words

Exercise 3: *predict the stress patterns of these words. Then use you dictionaries to find out what the words mean and to check your answers. Next, repeat the words after the recording, and talk about any differences between predicted and correct answers.*

Convene prospectus downpour fruitful surgery meander distinct increment

assent cookie synonym excursion effusive obstinate incur bullet

Oo	oO	Ooo	oOo

Homographs are words which are written the same way but which have different pronunciation. In English, there are many words which have the same spelling, but whose part of speech changes with the word stress. If you listen carefully, you will also hear that the vowel sounds change depending on whether they are stressed or unstressed. You can listen to these examples. The verb form is read first, followed by the noun. Examples: record progress present permit

Exercise 4: *Listen. Do you hear a verb or a noun?*

1. permit

    A.   noun ?

    B.   Verb?

2. digest

    A.   noun ?

    B.   Verb?

3. record

    A.   noun ?

    B.   Verb?

4. permit

    A.   noun ?

    B.   Verb?

5. present

    A.   noun ?

    B.   Verb?

6. digest

    A.   noun ?

    B.   Verb?

7. progress

    A.   noun ?

    B.   Verb?

8. present

    A.   noun ?

    B.   Verb?

- **Lesson 4: Stress and word formation**

Lesson type: spelling awareness + prediction practice

Time: 1 hour and 30 minutes

Materials: worksheet + audio cassette

Task: identifying stress in longer words

Objective: by the end of the lesson, students are supposed to be able to predict the proper marking of stress in longer words (complex words and compound words)

Explanation:

Session 4.1.: Words with affixes

We can build longer words by adding parts to the beginning or end of shorter words. Look at this example: the root word is *forget*

	for	get	ful	ness
	for	get		
	for	get	ful	
	for	get	ful	ness
	for	get	ta	ble
un	for	get	ta	ble

Here are the beginnings and endings which do not change the stress of the original word:

-able (drinkable)	in-/im- (impossible)	-ness (happiness)
-al (musical)	-ise (civilize)	-ship (friendship)
-er (player)	-ish (childish)	un- (unhappy)
-ful (helpful)	-less (childless)	under- (underpay)
-hood (childhood)	-ly (friendly)	-ous (humorous)

-ing (boring)   -ment (employment)   -age (percentage)

-ance (attendance)   -ancy (consultancy)   -cy (presidency)

-ist (geologist)   -or (decorator)   -ure (departure)

Exercise 1: *Use the beginnings and endings above to make longer words from the words below. Listen and check if you get the same words as on the recording. Then listen and repeat. Example: child   childhood   childish   childishness   childless*

1. believe …………………………………………………………………………….. .

2. enjoy …………………………………………………………………………… .

3. care …………………………………………………………………………….. .

Exercise 2: Root and derived words

Transcribe the root and derived words. Notice the sound changes, and stress shift.

E.g. : sign /saɪn/   signal /ˈsɪgnəl/

a. invite _____   invitation _____

b. courage _____   courageous _____

d. photograph _____   photographer _____

Exercise 3: *Combine each word with one of the endings from the box, and give the stress pattern of your new word. You may need to change or add other letters to the first word.*

-ion / -ic

Example: inform: information ooOo.

1. introduce …………………… ………   7. optimist ………………….. ……….

2. base ……………………... ………   8. celebrate …………………. ………

3. economy …………………... ………   9. diplomat …………………. ……….

4. describe …………………….   ………   10. operate …………………   ………

5. romance …………………….   ………   11. explain …………………   ……….

6. compete …………………….   ………   12. decide …………………   ……….

Exercise 4: *make a word ending in –ity from each of these words, and give the stress pattern. Example: author: authority   oOoo*

1. person ………………….   ………   5. nation …………………..   ……….

2. universe …………………   ………   6. real ……………………   ………..

3. public …………………...   ………   7. human …………………..   ……….

4. major ……………………   ………   8. electric …………………   ………

Exercise 5: *Write in the word which is missing from the family. Then listen, check and repeat. Example: society, ...sociology….. (ooOoo), sociological.*

1. civil, civilize, ……………………. (oooOo).

2. ………………………… (oOoo), biologist, biological.

3. personal, ……………………. (ooOoo), personalize.

4. legal, legalise, …………………… (oooOo).

5. ………………………… (Oo), authority, authorize.

Session 4.2.: Compound nouns and phrasal verbs

Compound stress

Compound nouns are single words made from two separate nouns or an adjective and a noun, and are written as two words (e.g. credit card), others are written as single word (e.g. toothpaste) or with the words joined by a hyphen (e.g. cross-section). Compound nouns with two syllables are always stressed on the first syllable.

BLACKboard   BLUEbird   TOOTHbrush

Compare these with regular adjective + noun phrases. In these, the noun gets the strongest stress:

black BOARD

blue BIRD

If a compound noun has more than two syllables, the strongest syllable is the syllable that is stressed in the first component noun, but occasionally in the second.

Exercise 1: *For items 1-5, try to predict the word stress. Write out the syllable that you expect to be stressed. For items 6-8, listen to the audio tape. Do you hear a compound noun or an adjective + noun phrase?*

1. black board

2. bluebird

3. toothbrush

4. bookstore

5. keyboard

6. Read the note that's on the _____.

            blackboard ?

black board?

7. There's a lovely _____ on the birdfeeder.

bluebird ?

blue bird?

8. Sara works in a _____.

greenhouse ?

green house?

Exercise 2: *Read the following sentences and underline all the compound nouns (each sentence has two). Find out whether the main stress is in the first or second part of the compound. Check your answers from the recording.*

1. I went out during the lunch hour and bought a newspaper.

2. When I have tea with my grandparents, they always give me jam sandwiches.

3. I'm meeting my girlfriend at the bus station in an hour.

4. I've only got a tape recorder, so I can't play CDs.

5. I never do any housework on weekdays.

6. It gets so hot in the sitting room that we've had to fit an air-conditioner.

7. He works as a shop assistant in the city centre.

8. My housemate is terrified of fireworks.

Phrasal stress

Phrasal verbs (a two-word or two-part verbs) are generally made up of a verb and preposition. For many of these, correct word stress is especially important as they have compound noun counterparts. Phrasal verbs are stressed on the preposition.

lookOUT   letDOWN   turnOFF

Their noun counterparts are stressed on the noun. They are also written as a single word.

LOOKout   LETdown   TURNoff

If a phrasal verb has more than three words, the first preposition gets the stress:

look DOWN on   fed UP with

Exercise 3: *For items 1-6, predict the stress. Write the syllable you think should be stressed. Then, for items 7-10, listen to the audio tape and indicate what you hear.*

1. This is where you should **turn off**.

2. The children built a **lookout** in the tree.

3. Let's get Chinese **takeout** for dinner.

4. Have you seen the **printout** from the travel agent?

5. That huge corporation is trying to **take over** our company.

6. Don't miss the **turnoff**!

7. Play the audio clip. What do you hear?

    A.   Noun?

    B.   Verb?

8. Play the audio clip. What do you hear?

    A.   noun ?

        B.   Verb?

9. Play the audio clip. What do you hear?

        A.   noun ?

        B.   Verb?

10. Play the audio clip. What do you hear?

        A.   noun ?

        B.   Verb?

Exercise 4: *Listen and repeat these phrasal verbs. Focus your attention on stress, listen carefully and say the number of the appropriate word (e.g.: PRINTout=12). Then use the words from part A to complete the pairs of sentences in part B. Finally, practise saying each sentence with correct word-stress.*

Part A

Verb   Noun

Verb	Noun
1 break OUT	**2** BREAKout
3 cover UP	**4** COVer-up
5 get toGETHer	**6** GET-together
7 hide aWAY	**8** HIDE-away
9 lie DOWN	**10** LIE-down
11 print OUT	**12** PRINTout
13 send OFF	**14** SEND-off
15 set BACK	**16** SETback
17 stop OVer	**18** STOPover
19 turn OUT	**20** TURNout

Part B

1. a. I must send off this parcel before the post office closes.

   b. We gave him a good send-off before he left for Australia.

2. a. He couldn't ………………… from his parents any longer.

   b. The robbers had a ……………………. In the mountains.

3. a. I'm not feeling very well. I'm going to have a ………………… .

   b. I'm tired. I think I might go and …………………. .

4. a. The government is accused of a ………………… of events at the demonstration.

   b. There's no point trying to ……………… the mistake. You'll just have to admit it.

5. a. We've got a spare room if you need a place to ………………….. .

   b. My ticket to Sydney includes a …………………….. in Singapore.

6. a. There's a …………………… of the report next to the computer.

   b. I'll …………………….. the report and give you a copy.

7. a. He felt a cold sweat ……………………. on his forehead.

   b. There's been a ……………………….. from the prison.

8. a. My brothers and I try to …………………… every month or so.

   b. We're having a ………………….. on Friday. Would you like to come?

9. a. There was a ……………………… of 95 % in the election.

   b. The play didn't …………………….. to be a great success.

10. a. Ronaldo suffered a ………… yesterday as he tried to get fit for the World Cup.

    b. The flooding …………………….. work on the building by weeks.

- **Lesson 5: Lab session**

Lesson type: controlled oral/aural practice

Time: 1 hour

Materials: language lab + worksheet

Task: listen and repeat + recognition focus (same or different task/identifying the placement of stress)

Objective: by the end of the course, students must be able to distinguish and discriminate the different stress placement, be it on the fist, middle, or final position

1 Listen and repeat these words. The stress is at the beginning.

pi<u>lo</u>t   airline   dentist   clinic   office   driver

2 Listen and repeat these words. The stress is at the end.

tai <u>chi</u>   guitar   before   Japan   Taiwan   routine

3 Listen and repeat these words. The stress is at the beginning, but one word is different. Write down the odd one.

yoga   German   Chinese   soccer   Monday   baseball

4 Listen and repeat these words. The stress is at the end, but one word is different. Write down the odd one: unkind   TV   CD   honest   yourself   below

5 Listen and repeat these words. The stress is at the beginning.

<u>re</u>latives   exercise   babysit   overtime   bicycle   Saturday

6 Listen and repeat these words. The stress is in the middle.

com<u>pu</u>ter   recorder   ambitious   romantic   aerobics   tomorrow

7 Listen and repeat these words. Is the stress at the beginning or the end? Write down the odd one.

camping   re<u>lax</u>   hotel   temple   hiking   behind

8 Listen and repeat these words. The stress is at the end.

to<u>night</u>   par<u>ade</u>   exch<u>ange</u>   put <u>up</u>   put <u>on</u>   Chin<u>ese</u>

9 Listen and repeat these words. The stress is at the beginning.

<u>lem</u>on   <u>en</u>tree   <u>chi</u>cken   <u>to</u>fu   <u>noo</u>dles   <u>mush</u>rooms

10 Listen and repeat the words. Is the stress at the beginning or at the end? Write down the odd one.

desert   degrees   New York   river   July   airport

11 Listen and repeat these words. The stress is at the beginning, but one word is different. Write down the odd one.

graduate   Wimbledon   Hollywood   separate   promotion   waterfall

12 Listen and repeat these words. The stress is in the middle, but one word is different. Write down the odd one.

recycle   potatoes   gasoline   banana   Sahara   Pacific

13 Listen and repeat these words. The stress is at the beginning, but one word is different. Write down the odd one.

chemistry   architecture   medicine   education   languages

14 Listen and repeat these words. The stress is in the middle, but one word is different. Write down the odd one.

repellent   mosquitoes   medical   binoculars   emergency

15 Listen and repeat these words. Is the stress at the beginning or in the middle? Write each word in the correct column.

~~sympathetic~~   ~~sociable~~   genuine   argumentative   uncaring   generous

- **Lesson 6: Reading a written text aloud**

Lesson type: guided oral practice

Time: 1 hour and 30 minutes

Materials: worksheet + audio cassette

Task: reading aloud chunked texts, limericks, rhyming sentences, dialogues, and a transcribed text, to practise words stress and long and short vowels.

Objective: by the end of this session, students are to be able to produce correct word stress in context, and can distinguish between short and long vowels.

Oral Scripts for reading aloud: chunked texts, limericks and sentences, a transcribed text, and dialogues

Instructions: *Read the two texts silently. Check the pronunciation of any unknown words in the dictionary. Is any of the vocabulary difficult to pronounce (clusters, difficult sounds)? Read the short text below aloud. Then compare your reading to the recording. Pay close attention to appropriate word stress.*

 Text 1

The health alert was over the next day,

but many in the territory remain alarmed.

Weeks of dry weather and unfavourable winds

caused air pollution to accumulate.

The main culprit,

according to a three-year study by the

Environmental Protection Department,

is the car.

It found that vehicle emissions

accounted for 98% of Hong Kong's air pollution

and that the worst offenders

are taxis, mini-buses and trucks that run on diesel fuel.

Only four years ago, the transport lobby

persuaded legislators

to reject a government proposal

that would require commercial operators

to switch from diesel fuel to cleaner-burning gasoline.

Fortunately things are now changing.

Text 2

People talk about 'creative artists',

and we tend to think of art as a process of creation,

even if we don't always like the results of the process.

But one artist decided to do the opposite

– to make a process of destruction into a work of art.

In a two-week 'exhibition' in London,

he smashed all his possessions

(all seven thousand and six of them)

into tiny pieces with a hammer.

One of the seven thousand and six items was a work of art –

presumably of a more traditional kind

– worth twenty thousand pounds.

What I want to know is,

how did he count his possessions

and manage to arrive at such a precise total?

That must have been a real work of art.

Reading aloud from transcription

Decipher (decode) the limerick below and then practise reading it aloud.

ə kɜːˈveɪʃəs jʌŋ fəʊˈniːm kɔːld ʃəˈwɑː ,

sed " aɪ ˈnevə fiːl ˈstrɒŋ ɪts bɪˈzɑː !

aɪm rɪˈtaɪrɪŋ ænd ˈmiːk ,

ænd aɪ ˈɔːlweɪz saʊnd ˈwiːk

bʌt ɪn ˈfrɪkwənsɪ ˈkaʊnts aɪm ðə ˈstɑː !"

Original version

A curvaceous young phoneme called schwa,

Said: "I never feel strong. It's bizarre!

I'm retiring and meek,

And I always sound weak,

But in frequency counts – I'm the star!"

Instructions: *The form of the limerick: 5 lines*

The rhyming scheme: A A B B A

The number of stressed syllables in each line: 3, 3, 2, 2, 3

Make appropriate stress, weak forms, line-end vowel sounds, and keep a steady rhyme.

Short and long vowels practice

Practising /ɑ:/ and /ʌ/

A limerick

There was a young man who had a guitar,

people thought he was just bizarre;

When they asked, 'Does it buzz?'

He replied, 'Yes, it does!'

But he never played his own guitar!

Practising /ɜ:/ and /ə/

A limerick

There was an old person of Hurst,

Who drank when he was not athirst;

When they said, 'You'll grow fatter,'

He answered, 'What matter?'

That globular Person of Hurst.

Practising /æ/ and /e/

- Jack said that he was very sad because he had broken his radio set .

- Send that man who landed on the sand a bag of sand .

- The man who is cooking with a pan is not one of the men who have bought the

  pens .

Practising /i:/ and /ɪ/

- You need to proof-read your report carefully before you submit it. Please read it

  again .

- Mr. Green was grinning from ear to ear when he knew that his six pretty little sisters living in the city were going to visit him.

- Sit on this seat and see if these slippers fit your feet.

- Jilly's a cheeky chick, I love her green eyes and her grin.

- Jim's feet still fit his shoes, and Billy's always sleeping.

Practising /u:/ and /ʊ/

- Look! Luke is pulling a fool out of the pool in the wood.

- June said to Sue, "You should bring along with you some food and wear proper shoes when visiting the zoo next Tuesday with Ruth".

- Who took away the cookery book?

Practising /ɔ:/ and /ɒ/

- John has bought a lot of sausages because he has sausages as breakfast almost every morning .

- Doctor Wong, who is pointing to the clock on the wall, is Uncle Tom's daughter.

- George is drawing four saws, four swords, four walls and four doors on the board.

Listen and act out these dialogues

Dialogue 1: Two students in a language school café.

A: Hi! I'm Hong lei. What's your name?

B: Hello, Hong Lei. My name's Ricky.

A: Hi Ricky. Are you a new student here?

B: Yes, I had my first lesson this morning. Are you a new student too?

A: No, I've been here for six months.

B: Six months. That's a long time.

A: It's not so long really. What class are you in? Intermediate or …?

B: Intermediate Three. And what about you?

A: I'm in Advanced One. Who's your teacher?

B: I can't remember her name, but she's got curly red hair.

A: Ah! Does she wear glasses?

B: Yes, I think so.

A: That's probably Anne Wallis.

B: Yes that's right. Do you know her? Is she your teacher too?

A: No. But she taught me last term. How long have you been here?

B: Only a week.

A: Wow, not long. Where do you live? With a family?

B: Well, I'm staying at the YMCA at the moment. I'm looking for somewhere more permanent. Do you know of any good places?

A: Yes. Actually my friend has a spare room in here apartment and she's looking for a flatmate. Would you like her phone number?

B: That would be great! Thanks for your help. Can I buy you coffee?

Dialogue 2: Husband and wife.

Wife: Hello darling! Did you have a good day today?

Husband: It was okay.

Wife: Would you like a drink?

Husband: No thanks, I'm not thirsty.

Wife: Dinner will be ready at six. Are you hungry?

Husband: Not really.

Wife: Oh. Did you pick up the suits from the cleaners?

Husband: Yes I did.

Wife: Good. Are you going to the pub tonight?

Husband: Yes. I'll be back at the same time as usual.

Dialogue 3: Visiting a friend

Hostess: Come and sit down. Would you like a drink?

Guest: Oh, yes please! I'd love a gin and tonic.

Hostess: Do you like olives? Or would you prefer crisps?

Guest: Oh, just olives please. What music is this?

Hostess: Do you like it? It's Irish music?

Guest: It's great! Where did you get the CD?

Hostess: Erm - I think it was in the CD shop in the Mall. Have you been there?

Guest: Yes. I buy a lot of stuff from there. It's a good shop, isn't it?

Hostess: Yes. Hey, I've got some photos of our holiday in Ireland. Would you like to see them?

Guest: Why not? I'd love to!

Dialogue 4: Making an appointment

Keith: Are you free on the thirteenth in the afternoon?

Cathy: No I'm afraid not. I'm meeting Ruth then. How about the fourteenth in the morning?

Keith: I'm sorry. I'm attending a meeting at the Hilton then.

Cathy: What about the next day?

Keith: No. I'm busy then too. I'm meeting Dorothy Heath at North Bridge

Road. Are you free on Thursday afternoon?

Cathy: Yes, I think I am. Let's meet for lunch at mouth restaurant.

Keith: Good idea! Is two o'clock okay?

Cathy: That's fine. See you there!

Dialogue 5: Planning the shopping

Barry: I'm going to the shops in a minute. What do we need?

Valerie: We're okay for vegetables but we should stock up on meat. Can you go to the

butcher's and get some veal and some beef?

Barry: No problem. We also need bread, so I'll go to the baker's. I'll get some vol au

vents* for Victor's birthday bash* on Friday. We'll need balloons for that too.

Valerie: better visit the supermarket then. We'll need some other things for the party.

Get some vanilla ice cream, some butter and some vinegar and twelve bottles of beer.

Barry: Okay. The library's beside the baker's. I'd better take back the videos we

borrowed last week. They're overdue.

Valerie: I'll see you later then.

Barry: Bye! I'll be back before seven.

Dialogue 6: A wrong number

Melvin: Hello. Manchester 6739792.

Nancy: Hello. Is that Nicholas?

Melvin: Nicholas? Nicholas Nickleby? No. He doesn't live here any more. He's moved

to Morecombe.

Nancy: Never! Do you know his new number?

Melvin: Yes. I've got it somewhere. Let me see. Where did I put it? Ah – I remember,

it's on the memo. Here it is. Do you have a pen to write it down?

Nancy: Yes, I do. Go on.

Melvin: His number's 4945939.

Nancy: 4945939. Marvellous! Thanks for your help.

Dialogue 7: Ordering a meal.

Jean: Where shall we sit? Look! There are some free seats in the corner.

Jill: The seats by the window are better. It'll be cooler there.

Jean: Okay. What would you like to eat?

Jill: I'm really hungry. I think I'll have chicken and chips with baked beans.

Why don't you have chicken too?

Jean: I don't eat meat. It makes me ill. I'll have a cheese sandwich instead.

Jill: And what about drinks? I think I'll have some mint tea.

Jean: No that's really expensive! It's three dollars sixty cents! I'll have a coffee; it's

much cheaper.

Waiter: Good evening.

Jill: Good evening. We'll have one chicken and chips with baked beans and one cheese

sandwich please.

Waiter: No problem! What would you like to drink?

Jean: A mint tea and a coffee please. Oh - and please bring me some cream for the

coffee.

Waiter: Okay. Let me repeat your order. One chicken and chips with beans, one cheese sandwich, a mint tea and a coffee with cream.

Dialogue 8: Ordering pie

Assistant: Can I help you?

Customer: Yes, I'm in a bit of a rush. Could I have a piece of apple pie please?

Assistant: Certainly. Would you like it with cream?

Customer: No thanks.

Dialogue 9: Meeting an old friend

Sharon: How are you?

Steve: I'm fine thanks. How about you?

Sharon: I'm okay. What are you doing these days?

Steve: Not a lot, actually. Busy at work of course - we've got a big project coming up in Malaysia. I may have to go to KL in a few weeks.

Sharon: That's great. When are you starting?

Steve: Probably in a week or two. I'll let you know.

- **Lesson 7: Oral homework assignment**

Lesson type: Free oral practice

Time: 1 hour and 30 minutes

Materials: students' self-generated content

Task: pre-planned presentation (story-telling) to practise word stress meaningfully in context/non-prepared self-generated short presentations (introducing oneself/summer stories) with questions prompts.

Objective: by the end of the session, students should be able to give attention to the right production of word stress while performing their speech, and combine form and content of language simultaneously.

Instructions: prepare a short famous story or joke you know well, and present it in class.

Question prompts:

Introductions

- Your first name and surname - its origin and meaning if any. Your marital status.

- Where you were born and where he / she lives now.

- Why you decided to learn English.

- Which other subjects you have studied recently if any.

- What jobs you have done or you are planning to do.

- What interests you have - hobbies, entertainment and sport.

A summer sport or hobby

- Where do you play it?

- Who do you play with?

- How often do you play it?

- When do you play it?

- How long have you played it?

- Are you good at it?

Summers as a child

- Did you enjoy the summer when you were a child?

- Were the summers usually all the same or did you do different things each year?

- Where did you go? What did you do?

- Is there a special place that you remember?

- Did you have any friends that you only saw during the summer? Who were they?

Summers in your country

- What is the weather usually like in summer?

- When do most people have their summer holiday? Where do people go?

- Do tourists visit your country in the summer? Where do they go?

- Are there any important summer festivals? Where are they? What happens?

- Do you enjoy summers in your country?

A summer dish

- What is it called?

- What are the ingredients?

- How do you make it?

- When is the best time to eat or drink it?

- What do eat or drink it with?

- How did you learn about this dish?

- **Extra work (a variety of activities to be done at home for revision)**

Exercise 1: Counting syllables and recognizing word stress

Listen to the recording and write the number of syllables for each word in the space provided. Also read each word to yourself and find out where the stress is.

environment		probable		secondary	
church		able		protect	
walked		coughed		subtract	
probability		productive		enthusiastic	
economy		interfaces		purchased	

Exercise 2: Identifying weak syllables

Transcribe and find out the strong and weak syllables of the words below, e.g.,

together ⟶ /tə.ˈge.ðə/, *and then practise pronouncing the words aloud. .*

1 protect   2 subtract

3 purchase   4 estate

5 analysis   6 horizon

7 equipment   8 insurance

9 exhibit   10 representative

Exercise 3: *here is a list of words in pairs. See whether they are the same or different in stress pattern. You can put S for same, and D for different. Then circle the stressed syllable.*

e.g.: Purpose / prevent   D

     Possible / vegetable   S

Economy / economics

Before / maybe

Morning / table

Operate / beautiful

Coca-cola / lemonade

Exercise 4: *Odd one out? Here is a list of words. Spot the pattern which is different from the others:*

1. designate   emphasize   Portuguese   disregard   terrified

2. example   conductor   Kentucky   gentleman   preparing

    1. The word that is different is: ……………….

    2. The word that is different is: ……………….

Exercise 5: *You will hear each of these words once. Put it into the correct column, according to the stress pattern you hear.*

import   rebel   increase   export   decrease   insult   content

○ o	o ○

Exercise 6: listening cloze activity

Listen to the sentences. Fill in the gaps with the appropriate word (or words) that you hear. Pay close attention to word stress!

thirty

thirteen

comedy

committee

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seventy

seventeen

his story

history

blue bird

bluebird

1. Anna thinks this **………………………** is boring.

2. Peter enjoys this **…………………….** .

3. **…………………….. ** is very interesting.

4. **……………………….** is very interesting.

5. Paul turns **………………………………..** tomorrow.

6. Jan turns **………………………………** next week.

7. Harriet lives at **……………………………..** Maple Lane.

8. There are **……………………………….** students in the class.

9. Can you hear the **………………………………** singing?

10. There is a **……………………………….** on the feeder.

Exercise 7: word stress patterns: multiple choice activity

For this activity, read the word and choose the correct stress pattern. You can also

hear the word from the audio tape.

1. information

A.   Oooo ?

B.   oOoo ?

C.   oooO ?

    D.   ooOo?

2. photography

    A.   Oooo ?

    B.   oooO ?

    C.   oOoo ?

    D.   ooOo?

3. guarantee

    A.   ooO ?

    B.   oOo ?

    C.   Ooo?

4. photographic

    A.   oOoo ?

    B.   Oooo ?

    C.   ooOo ?

    D.   oooO?

5. seventeen

    A.   ooO ?

    B.   oOo ?

    C.   Ooo?

6. concentration

    A.   Oooo ?

    B.   oOoo ?

    C.   ooOo ?

       D.   oooO?

7. scientific

       A.   Oooo ?

       B.   ooOo ?

       C.   oOoo ?

       D.   oooO?

8. cafeteria

       A.   Ooooo ?

       B.   oOooo ?

       C.   ooOoo ?

       D.   oooOo?

9. record (V)

       A.   Oo ?

       B.   oO?

10. checkout

       A.   Oo ?

       B.   oO ?

Exercise 8: *All the words in each group have the same number of syllables. Circle the one with stress in a different place.*

Example: October   November   December   August

    1. Saturday   holiday   tomorrow   yesterday

    2. morning   fifty   fifteen   August

    3. table   tourist   tunnel   today

4. mistake   famous   become   remove

5. playground   shoe shop   first class   handbag

6. economics   economy   education   scientific

Exercise 9: *Write the words from the box in the correct column according to their stress pattern.*

~~economics~~ economy physics chemistry geography mathematics sociology history geology photography nation nationality				
Oo	Ooo	oOoo	ooOoo	ooOo
				economics

Exercise 10: *Write the words from the box into the correct part of the table according to the stress pattern.*

~~Population~~ telecommunication nation identification relation communication pronunciation scientific clinic romantic pessimistic investigation public discussion	
Oo	
oOo	
ooOo	population
oooOo	
ooooOo	
oooooOo	

- Listen to a song about the importance of stress in making English native speakers understand you: a rap music entitled *'stressful'*.

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Appendix 5

Post-test

Third year students, section A, Group: Name: (coded)

Exercise 1: *Each of the pairs of words below has the same number of syllables. Is the primary stress of each pair on the same or on a different syllable? Put a cross where appropriate, and circle the stressed syllable.*

	Same	Different
mistake / error		✕
mechanical / mechanizes		
China / Chinese		
suspect (verb) / suspect (noun)		
economy / economics		
turn off / turnoff		
black bird / blackbird		
cartridges / telephones		
interesting / interested		

Exercise 2: *Find the stress patterns of these words, and underline any schwa /ə/ incidences. Small o for the unstressed syllable, and big O for the stressed syllable.*

E.g.: inf**or**mat**io**n ⟶ __ooOo__

Pakistan	_____	discount (noun)	_____
detective	_____	security guard	_____
electrician	_____	mechanical	_____
substitute	_____	alphabetical	_____
mayonnaise	_____	forgetfulness	_____
repellent	_____	dramatic	_____
vegetables	_____	footballer	_____
preschool	_____	sculptor	_____
incorrect	_____	invisible	_____
engagement	_____	usherette	_____

Exercise 3: *Transcribe the following words, count the number of their syllables, and mark the main stress with ('). Write the number of syllables for each word in the space provided and locate the syllable boundaries with a dot (.).*

information	4	/ɪn.fə.'meɪ.ʃ(ə)n/	*important*	/ɪm.'pɔː.tənt/	3
concrete			pedestrian		
incline			unless		
solitude			childhood		
energy			speak up (verb)		
vocabulary			perishable		

prejudge			introduce		
unemployed			basically		
pedagogy			energetic		
comparison			make-up (noun)		
opportunity			tasted		
Wimbledon			police-man		
fortieth			geology		
witch's			nationality		
factory			ecstasy		

Exercise 4: *Decipher (decode) the transcription below and read it aloud.*

ˌintə'næʃənəl   kəˌmjunɪ'keɪʃən   'naʊwəˌdeɪzəz   kən'sɪdərəbli   'iːzɪə

ðənɪt   juːzdtə   biː   ɪtzərɪ'zʌltəv   'sætəlaɪt   'telɪkəˌmjuːnɪ'keɪʃən

əndðə   'waɪdspred   juːsəv   ðiː   'ɪntənet

Exercise 5: *Read through the following list of words silently then read it aloud.*

badminton, dinosaur, positive,

expected, romantic, pyjamas,

furthermore, magazine, helicopter,

vandalism, American, apology,

pedestrian, reservation, several,

bridges, batman, process (noun),

make-up (noun), purchase (verb)

Appendix 6

2ⁿᵈ Year Phonetics Course Programme

Content

- The syllable

- Strong and weak syllables

Strong and weak

The /ə/ vowel (schwa)

Close front and close back vowels

Syllabic consonants

- Stress in simple words

The nature of stress

Levels of stress

Placement of stress within the word

- Complex word stress

Complex words

Suffixes

Prefixes

Compound words

Variable stress

Word-class pairs

- Weak forms

Objectives

After familiarizing students with English phonemes in the 1ˢᵗ year programme, the 2ⁿᵈ year course introduces students to larger units of speech such as the syllable, stress, and weak forms. The general aim is to develop their pronunciation awareness, to improve reception and production skills in these features.

Material used: Roach Peter. **English Phonetics and Phonology**. Cambridge: Cambridge University Press, 1991. (Associated with audio cassettes).

Lab session: Normally it should be one hour per week. However, it all depends on the number of students. There are only two old language labs used by teachers of phonetics and oral expression. It can be done once a week, or once in a fortnight, if not occasionally.

Classroom lecture: One session of one hour and a half per week for the whole academic year.

Appendix 7

Control and Experimental Group's Scores and Results

All scores are read out of 20	Score obtained (Experimental group)	
Student number: 22	**Pre-test**	**Post-test**
Student A 1	03.75	07.50
Student A 2	05.25	08.00
Student A 3	06.25	12.00
Student A 4	06.50	12.25
Student A 5	06.50	09.50
Student A 6	07.00	11.00
Student A 7	07.25	11.25
Student A 8	07.25	10.75
Student A 9	07.75	11.50
Student A 10	07.75	09.50
Student A 11	08.25	13.00
Student A 12	08.25	09.50
Student A 13	08.75	10.50
Student A 14	08.75	13.25
Student A 15	09.00	14.00
Student A 16	09.00	11.75
Student A 17	09.50	16.00
Student A 18	09.75	12.50
Student A 19	10.00	15.00
Student A 20	10.25	14.75
Student A 21	10.50	14.50
Student A 22	11.50	15.00
Sum of the scores	**178.75**	**263**
Mean	**08.12**	**11.95**
Standard Deviation	**1.05**	**2.34**

Table 36: Scores on pretest / post-test (Experimental group)

All scores are read out of 20	Score obtained (Control group)	
Student number: 24	**Pre-test**	**Post-test**
Student B 1	03.50	05.75
Student B 2	03.75	05.50
Student B 3	04.75	07.50
Student B 4	05.50	08.50
Student B 5	05.50	05.75
Student B 6	05.50	06.00
Student B 7	05.75	06.00
Student B 8	06.00	07.75
Student B 9	06.25	09.00
Student B 10	06.50	08.50
Student B 11	06.75	05.75
Student B 12	06.75	06.75
Student B 13	07.25	06.00
Student B 14	07.25	07.75
Student B 15	07.50	06.75
Student B 16	08.50	07.50
Student B 17	08.75	10.75
Student B 18	08.75	09.75
Student B 19	08.75	08.25
Student B 20	09.75	06.75
Student B 21	11.00	11.00
Student B 22	11.00	09.00
Student B 23	11.50	08.75
Student B 24	13.00	08.50
Sum of the scores	**179.50**	**183.50**
Mean	**07.48**	**07.65**
Standard Deviation	**2.47**	**1.60**

Table 37: Scores on pretest / post-test (Control group)

numbers in parenthesis are the marking scale for each task	Score obtained in the post-test / experimental group			
	Task 1 **(2/2)**	**Task 2** **(5/5)**	**Task 3** **(7/7)**	**Oral test** **(6/6)**
Student A 1	0.25	0.75	1.25	5.25
Student A 2	1.25	1.25	1	4.5
Student A 3	1.25	1.75	4	5
Student A 4	0.75	3	3.75	4.75
Student A 5	0.75	2.25	2	4.5
Student A 6	1.25	1.25	3	5.5
Student A 7	0.75	1.5	4	5
Student A 8	1.25	1.25	3	5.25
Student A 9	1	2.5	3	5
Student A 10	0.75	2	2	4.75
Student A 11	1	2.75	4	5.25
Student A 12	1	0.5	3.75	4.25
Student A 13	0.25	1.25	3.5	5.5
Student A 14	1	2.75	4.25	5.25
Student A 15	1	3	5	5
Student A 16	0.75	3.5	2	5.5
Student A 17	1.25	2.75	6	6
Student A 18	0.75	3	3.75	5
Student A 19	1.75	2.75	4.75	5.75
Student A 20	1	2.75	5.25	5.75
Student A 21	1	2.5	5.25	5.75
Student A 22	1.75	2.75	5	5.5

Table 38: Experimental group's post-test results in each exercise

numbers in parenthesis are the marking scale for each task	Score obtained in the post-test / control group			
	Task 1 (2/2)	Task 2 (5/5)	Task 3 (7/7)	Oral test (6/6)
Student B 1	0.25	0.25	0	5.25
Student B 2	0	0.25	0.25	5
Student B 3	0	1.5	1	5
Student B 4	0.25	1.5	2	4.75
Student B 5	0	1.5	0	4.5
Student B 6	0.25	1.25	0	4.5
Student B 7	0.25	0.75	0	5
Student B 8	1	1	0.5	5.25
Student B 9	0.5	1	2.25	5.25
Student B 10	0.25	1.25	1.5	5.5
Student B 11	0	0.25	0.5	5
Student B 12	0	1.25	0.5	5
Student B 13	0	1	1	4
Student B 14	0	1	1.5	5.25
Student B 15	0	0.75	0.5	5.5
Student B 16	0	0.75	2.5	4.5
Student B 17	0.75	2.5	2.25	5.25
Student B 18	0	2.5	2	5.25
Student B 19	0.25	1	2	5
Student B 20	0	1.25	0.5	5.25
Student B 21	1	2.5	2.5	5
Student B 22	0.5	1.5	2	5
Student B 23	0.25	2.25	1	5.25
Student B 24	0.75	1.25	2	4.5

Table 39: Control group's post-test results in each exercise

الملخص

هذه الدراسـة التجريبيـة تتنـاول دور تـدريس نبرة الكلمـة في اللغـة الإنجليزيـة في تحسين أداء الطلبة،   و ذلك من خلال تصميم ثلاثة أنماط من الممارسة اللفظية (تقليدية، موجهة، حرة).

لاحظنـا أن الجانـب الشفهي لا يؤخذ بعين الإعتبـار بشكل كـاف في قسم اللغـات الأجنبيـة (فـرع إنجليزيـة) بجامعـة فرحـات عبـاس ــ سطيف، إذ أن ممارسـة الأنشطة و التمارين في مختبر اللغة تقتصـر   على التقليد و لا تسمح بممارسة التواصل الشفهي للعنصر المستهدف. و على هذا الأساس فإن سؤال بحثنـا يتمثل في مـا إذا كـان استخدام ثلاثـة أنمـاط مـن الممارسـة (تقليـد، موجـه، و حـر) علـى التـوالي تسـاعد الطلبـة علـى الإستعمال الصحيح لنبرة الكلمة بشكل أفضل.

مـن أهم أدوات البحـث التي استخدمت في هذه الدراسـة استبيان موجـه لأسـاتذة الصـوتيات، و آخر موجـه لطلبـة السنة ثالثـة إنجليزيـة، إضافة إلى الفحص الأولي و الأخير. نتائـج الفحص الأولـي سـاعدتنا   في تحديد و تشخيص بعض المشـاكل و الصـعوبات التي يواجهها الطلبـة   في تنبؤ و تحديد المكان الصحيح لنبرة الكلمة، و كذا الأسباب الممكنة المترتبة عن ذلك.

الطلاب المشاركون إما في العينة أو الشاهد، يدرسون الإنجليزية كلغة أجنبية في قسم اللغات الأجنبية (فرع الإنجليزية) بجامعة سطيف. الدروس المخصصة لهذة الدراسة هي ذات منحى شفهي   و تتمركز حول إعطاء الممارسة و التمرن الحظ الأوفر، التنـوع في تقديم الوظائف و كذا بعض الأنشطة التي ترمي إلى التوعية الهجائيـة و السمعية، بالإضافة إلى إدماج ثلاثة أنواع من الممارسـة اللفظيـة (تقليدية، موجهة، حرة)، مـع مراعـاة جميـع الصـعوبات التي تواجـه الطلبـة و التي لهـا علاقـة بتحديد نبرة الكلمـة كتقطيع الكلمة و تقليص حركات الإعراب.

و تشير النتائـج المحصل عليهـا من الفحص الأخير بـأن منهج التدريس المتبع في هذه الدراسة ساعد الطلبة في تحسين مستواهم في الإستعمال الصحيح لنبرة الكلمة إلى حد ما. العينة فاقت و تجاوزت قدرات الشاهد، حيث أن غالبية طلاب العينة أظهروا تحسنا في مهارات التنبؤ و كذا زيادة وعيهم في تقطيع الكلمة و تقليص حركات الإعراب.

هذه التجربة كشفت عن نجاعة البرنامج التعليمي المتبع في هاته الدراسة بعض الشيء. و بهذا يمكننا استخلاص جواب إيجابي لسؤال بحثنا، و ذلك أن استخدام ثلاثة أنواع من الممارسة اللفظية مفيد جدا في تحسين تحديد النبرة المناسبة للكلمة دون الإخلال بالنطق السليم الذي قد يؤثر سلبا على المعنى المقصود للكلمة. و هكذا يمكن تدريس نبرة الكلمة بتقليد نموذج، و بعد ذلك تمارس في سياق الكلام   مع التوجيه، و تدريجيا تتم الممارسة عن طريق التواصل الحر مـع بقاء النقد البناء من طرف المدرس أو الطلبة الزملاء.