

The Importance of Prosody in a Proper English Pronunciation for EFL Learners

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Abstract

The present article deals with the acquisition of Received Pronunciation (RP) English prosodic features namely word- sentence stress and intonation by Algerian learners of English as a foreign language. It aims at identifying ways of helping learners achieve a good pronunciation through the mastery of these features. The work was based on data retrieved from the observation and study of 30 third year students of English at the University of Oran as they majored in BA English. The corpus was collected through recordings which were carried out on two phases, prior and after being taught the prosodic features and their rules in order to evaluate their pronunciation accuracy. Results were analyzed acoustically with Praat software (Boersma, 2001) and show that by placing stress and intonation patterns in the right place in words and utterances, 20% of students achieved nearly a perfect pronunciation, 46% clear and 33% understandable, suggesting that the aforementioned features play an important role in pronunciation accuracy and speech intelligibility. Based on these results the current study makes recommendations for prioritizing supra-segmental features in pronunciation teaching classes, and suggests real and computerized environments to assess students' progress (Hardison, 2004).

Keywords: EFL Orani students, intonation, pronunciation, supra-segmental features, stress

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Introduction

In the field of applied linguistics, pronunciation with its different aspects is considered as a subcategory of speaking skill and a central factor which contributes to intelligibility, yet its study has always been marginalized. In fact, Baker & Murphy (2011) recognize that “an overall neglect of pronunciation teaching has been observed in teacher preparation programs” (p. 30). This lack of awareness seems to have some influences on teachers, learners and to a lesser extent the development of English where this language has got the status of a foreign language. Algeria might be considered as an example in case.

It is found that, in our specific context- the English Department at the University of Oran and certainly in other academic environments in Algeria, teaching pronunciation is neglected while teaching grammar and vocabulary is important. (Lightbrown & Spada, 2006). This is generally based on the belief that pronunciation is just a pretty musical note used to make speech sound beautiful (Derwing & Munro, 2005, p.384). This restricted understanding of pronunciation leads to the neglect of teaching it properly. As a consequence, Algerian learners of English cannot develop and enhance their pronunciation skill in this language. It is precisely why the authors have decided to pay a special attention to pronunciation, stress and intonation in particular and interpret the correlation between the improvement of students’ intelligibility and pronunciation when using these supra-segmental features.

The present article focuses on two prosodic elements, stress and intonation. Its main objective is to interpret their impact on Algerian EFL students’ spontaneity in speech, intelligibility and communicative competence. Another objective is to investigate a possible correlation between prosodic features targeted lectures and pronunciation accuracy.

Literature review

Before the writers engage into the phases of their study, they thought it would be important to have a brief review of the literature on stress and intonation and the functions of these prosodic elements in speech.

The Function of Stress

In real life, stress generally refers to the worried or anxious situations that people suffer from 24hours a day; however, stress in linguistics is a means to reach a good pronunciation as well as to develop skills in communicative competence for EFL learners. This significant feature of English pronunciation generally refers to the emphasis that we put on certain syllables in a word and even in a sentence during the process of speaking. (Roach, 1991). Therefore the achievement of an accurate pronunciation and an intelligible communication requires appropriate use of stress patterns.

Actually, stress has a crucial role in the intelligibility of speech. To start with, placing stress patterns in the wrong place in both words in isolation and context may seriously impair meaning and understanding. In fact, according to Culter & Clifton study (1987), shifting stress position may not only compromise intelligibility, but also entail a change of vowel quality, as shown in this example WAllet waLLET -- /'wolit/ -- /wo'let/. Thus, misplacing stress can undoubtedly damage the global understanding of words.

It is also important to consider the psycholinguistic function of stress in speech processing. Grosjean & Gee (1987:148) discoverer that a listener can recognize a word in his mind only by hearing its stressed syllable. Hence, the latter is considered as a code that links directly to the word. Said differently, a stressed syllable guides the search of word in processing speech. For example; /hæ/ guides the listener for the search for the word (happy)/hæpi:/, as the syllable /næ/ for the word (international) /ɪntə'næʃənl/.

This suprasegmental feature appears to be an important element in determining the semantic and grammatical meaning of homophones. Its function is to distinguish between lexemes that have the same spelling while they are different in meaning when used in context. For instance, I present /pre'znt/ to you this present /'preznt/. In this utterance, stress gives both grammatical and semantic functions of the word 'present'. When stress is put on the first syllable, the word takes the function of a noun and means 'gift'; however, when it is on the second one, the word functions as a verb and means 'to give'.

The Function of Intonation

We may consider intonation as the backbone of English pronunciation (Bailey, 2005; McDonough& Shaw 2003; Cook 2001). It is an essential prosodic feature that plays an important role in all aspects of speech. Patel (2008) defines it as the melody of speech, where we study how the pitch of the voice rises and falls. This feature also carries different functions which contribute to the achievement of meaning and intelligibility in conversation. This point is sustained by Bolinger (1986) arguing that:

Intonation is important for who is speaking, for who will be taking the next turn, for how the act is to be understood (explanation, apology, challenge), for how the speaker will be evaluated (as an individual, as a native speaker, as a member of social class)—to mention only a few of the things that affect our roles as speakers and listeners. (p. 21).

This quotation embodies the view that intonation is a meaningful feature that has a role which is central in interactions. As a matter of fact, it carries different functions which are essential at determining the nature of a conversation and the meaning of an utterance. Intonation contours that characterize a stretch of an utterance are used to send specific signals that express various pieces of information which lighten the meaning of the message (explanation or apology for example), and give a clear image of the speaker's identity and his intention (native or foreign speaker). Tench (1996:22) lists five major functions of intonation, which are:

1. Organization of information

Organizing information in an utterance is seen as the most important function of intonation. In an utterance we can distinguish between two kinds of information, *given (not important)* and *new (significant)*. These pieces of information are distinguished and determined by the use of pitch. English High pitch indicates that a syllable in a word is the most important and has a contrastive focus in an utterance; therefore, regarded as the new information. Below are examples illustrating this

John bought a red car. (Not David or Francis).
 John bought a **red** car. (Not a blue or yellow one).

2. Realization of Communicative Functions

Intonation is able to modify the function of an utterance by altering a simple statement to a question, request or an order. For instance:

1-John is coming to Algeria. (Statement; falling intonation)

2-John is coming to Algeria? (Question; rising intonation)

We can notice from the above examples that both sentences are morpho-syntactically equivalent. Yet, if we use a falling intonation, a simple statement will be uttered; however, if we use a rising intonation keeping the same order of items, the utterance will be interpreted as a question.

3. Expression of attitudes

4.

Intonation has an important role in expressing attitudes. Researchers try to make rules regarding the choice of tone that correspond to a particular attitude. For example

Table1. Examples of Expressing Attitudes

| Tone | Attitude | Example |
|------|--------------------------|---|
| Rise | -Encouraging -Listing | - It won't / <u>hurt</u> . - <u>Red</u> / <u>blue</u> / <u>yellow</u> / or \green. |

5. Indication of Syntactic Structure

Intonation is used as a punctuation marker to indicate grammatical units in order to help the listener understand what is uttered. In example a, the pitch changes are wrongly used, thus the meaning of the sentence will be altered.

while EAting my DAD my SIsTer and MOther were in the living room



while EAting my DAD my SIsTer and MOther were in the living room



6. Discourse Function

Another important function of intonation is the regulation of discourse which leads to successful conversations. Actually, it regulates the flow of a conversation and its behaviour by indicating the beginning and the end of speaking, or turn taking process. For instance, low pitch, reduced loudness, and rallentando (lengthening of turn-final elements) indicate the end-of-turn in a conversation with an air of finality.

It was very succe s s f u l.



In the above example we understand from the pitch changes (low pitch with lengthening) that the speaker has finished his utterance, and is ready to turn the floor to the hearer or somebody else.

Research Methods

The Participants

The present paper is based on a micro qualitative experimental research procedure administered to a sample of thirty students from the English department at the University of Oran, Algeria. These informants majored in BA English and seem to have a satisfactory command of English after a number of years studying this language. The participants' ages vary from 21 to 25. The sample choice is a random one.

Data Collection and Procedure

The corpus of the study was collected through audio recordings which were carried out during two phases. The first phase is referred to as the diagnostic phase (before prosodic features targeted lectures); whereas, the second one is labeled the experimental phase (after prosodic features targeted lectures). The authors prepared three sentences containing different types of word stress, sentence stress and intonation to be read by the students and then recorded.

To examine the recordings, variables were proposed to detect and try to interpret the possible sources of pronunciation and intelligibility problems. These variables are mistakes that students may make when uttering. These are the following mistakes: 1. mispronunciation of sounds, 2. problems with word stress, 3. Difficulties in sentence stress 4. Inadequate loudness 5. problems with articulation 6. speed 7. tone level. Praat speech analyzer software was used in order to analyze acoustically the recordings.

The aim of the first recordings is to find out whether Algerian students of English have problems with stress and intonation. The writers hypothesize that the elicited sample are native speakers of Algerian Arabic. This language variety has a stress and intonation systems that is different from the English one. Subsequently, the purpose of the second recordings is to discover whether students improve their pronunciation when using the right stress and intonation contours and prove the sub-hypothesis of whether lectures in pronunciation are helpful to the improvement of students' performance.

Before the writers started recording the respondents, each one of them was given three minutes for preparation in order to get familiar with the sentences. After this short period of time, the informants were recorded individually so that they would not be distracted by other students and be fully concentrated on the sentences.

Results

The Results of the First Recordings

After the first recordings were collected and analyzed. The findings are highlighted in a graph demonstrating the amount of mistakes made by the students. The different colours in the graph symbolize the variables: Word stress problems, sentence stress problems, tone level, sound mispronunciation, speed, inadequate loudness and problems with articulation.

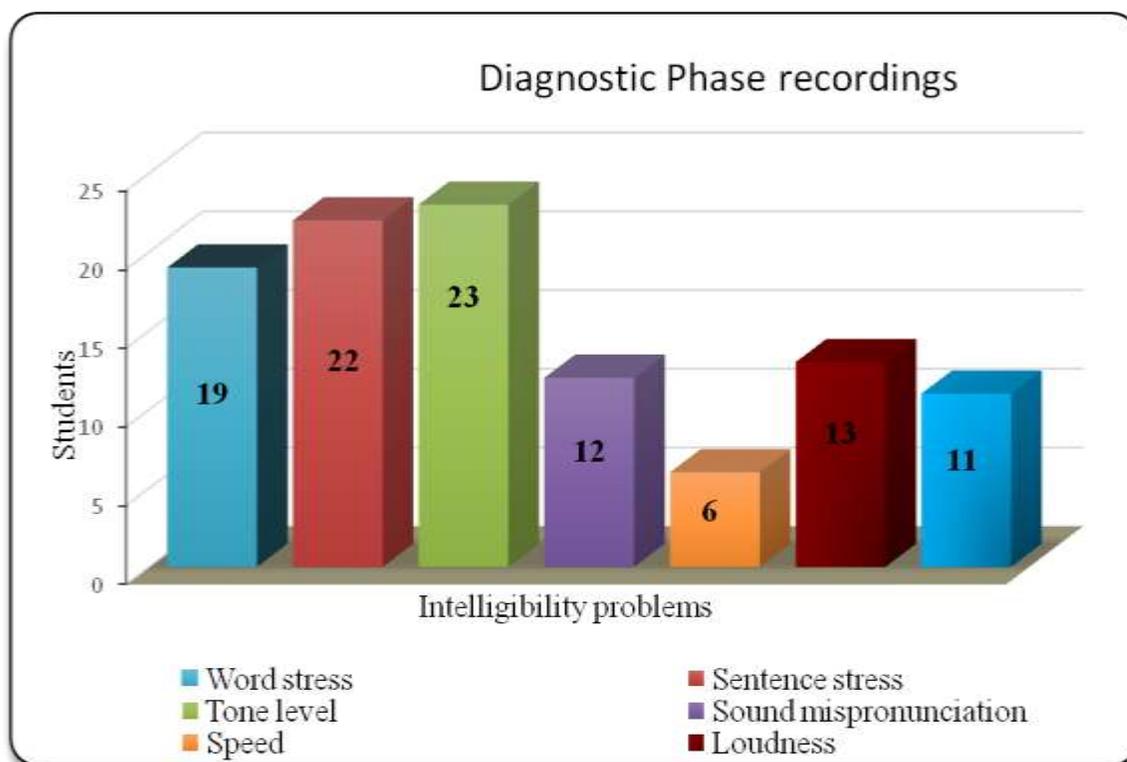


Figure1. Diagnostic Phase Recordings

As shown in Figure1, it is clear that all the students have problems with supra-segmental features with differing levels. In nearly all cases they make mistakes when putting stress in the right place. Besides, they do not produce the correct tone level which leads to a wrong intonation of utterances. This might be interpreted by the difference between the Algerian Arabic and British English stress and intonation systems. Therefore, there also seem to have some kind of correlation between these supra-segmental features and students' performance problems.

First, there seems to be a general tendency in the sample that most of the students' pronunciation performance is relatively low. The three sentences are very easy to read with no difficult words. The first two sentences have exclamation mark which facilitates or predicts the right tone which helps detect the right stress in the sentence. However, the informants did not seem to use this key and some of them didn't even notice it. We may suggest that students' performance might be challenged by anxiety in addition to the prosodic features.

The findings of this analysis prove that the most significant threat to intelligibility is posed by intonation and stress errors. The highest percentages are given to tone level, sentence stress and word stress mistakes, where 76% of the students made tone level mistakes. For instance, student26 did not use the needed falling tone at the end of the exclamation utterance; instead he used a level tone. As a result, her/his speech sounds monotonous.

Table2. Intonation mistake

| | Correct tone | Wrong tone |
|-----------|--------------------|--------------------|
| Student26 | You look TERRIBLE! | You look terrible! |

In addition, 63% of the students made word stress mistakes and 73% sentence stress. Some of them put the stress in the wrong word or syllable and others didn't use it at all. It is also important to note that the percentages of students making tone level and sentence stress mistakes are approximately the same, accounting for 73% sentence stress, and 76% tone level mistakes. We might interpret that sentences stress (tonic stress) is a key element to determine where to put the right tone level.

Second, in addition to stress mistakes, 43% of students had troubles with loudness. Some of them used it when not necessary; student 2 and others avoided it completely. This might have resulted in an influence in their intonation, pronunciation and intelligibility. In addition, 40% of the students mispronounced some phonemes. This could be related to the influence of their mother tongue sound system. For instance, some of them troubled pronouncing the / ɪ / in **working**, because / ɪ / sound does not occur in Algerian Arabic dialect, it is imitated and replaced by /nk/ or /ng/. They have also problems of final ed. For example, student 1 pronounced the word 'Crashed' /kræʃt/ as /krætʃɪd/. However, this variable does not considerably affect their intelligibility or pronunciation. This is followed with articulation mistakes with 36%. Some students tended not to articulate words correctly especially when reading the second sentence. Others seemed to swallow some phonemes and this leads to a mispronunciation of phonemes and the whole word. Look at these examples:

Table3. Articulation errors

| Informants | Articulation Errors | | The nature of the error |
|------------|----------------------|--------------------|-------------------------|
| | Correct Articulation | Wrong Articulation | |
| Student7 | /'kræʃt/ | /'kræ/ | Omission |
| Student28 | /i:tn / | /'i:tɒn/ | Distortion |

Finally, only 20% of students' speed was not constant. Some of them read the sentences too quickly and others were too slow. This variable influences their rhythm and intonation, because when reading slowly the sentences, in particular exclamatory ones, rhythm seems to be somehow biased; therefore, the occurrence of rise and fall is not respected.

In conclusion to the diagnostic phase, it is noticed that the commonest mistakes made by the majority of respondents of the elicited sample are tone level, word and sentence stress. The results of the diagnostic analysis seem to corroborate the hypothesis that the researchers have put forward in the beginning of the research. And, advocates that Algerian Arabic students in English departments may have challenges with these supra-segmental features. These challenges also seem to have a direct influence on the students' English pronunciation.

The findings of the diagnostic phase give the researchers a somehow clear picture on the challenges of their informants in relation to pronunciation and prosody. They then move to the second phase of their study. This experimental phase is directed towards the improvement of students' performance in relation to the supra-segmental features investigated during the first phase of the study. The second phase tries to reveal whether the practice of stress and intonation permits the achievement of an accurate pronunciation.

The Results of the Second Recordings

During the experimental phase the second phase of recordings is carried out. Firstly, before starting the recordings, students were taught about word-sentence stress and intonation with a hypothesis that this might have influences on their language performance and oral skill. The informants were co operative and conscious during the whole process. The lectures were about the prosodic features, including exercises which show to the informants where to put the right stress and intonation patterns in the sentences.

The elicitation procedure of the second recordings gives insights on the possible correlation between stress and intonation and the acquisition of a proper English pronunciation. In addition, it reveals whether learners' practice of pronunciation is helpful to intelligibility and communication. The resulting pieces of information from the evaluated recordings are, like in the previous case, collected and presented in the following graph.

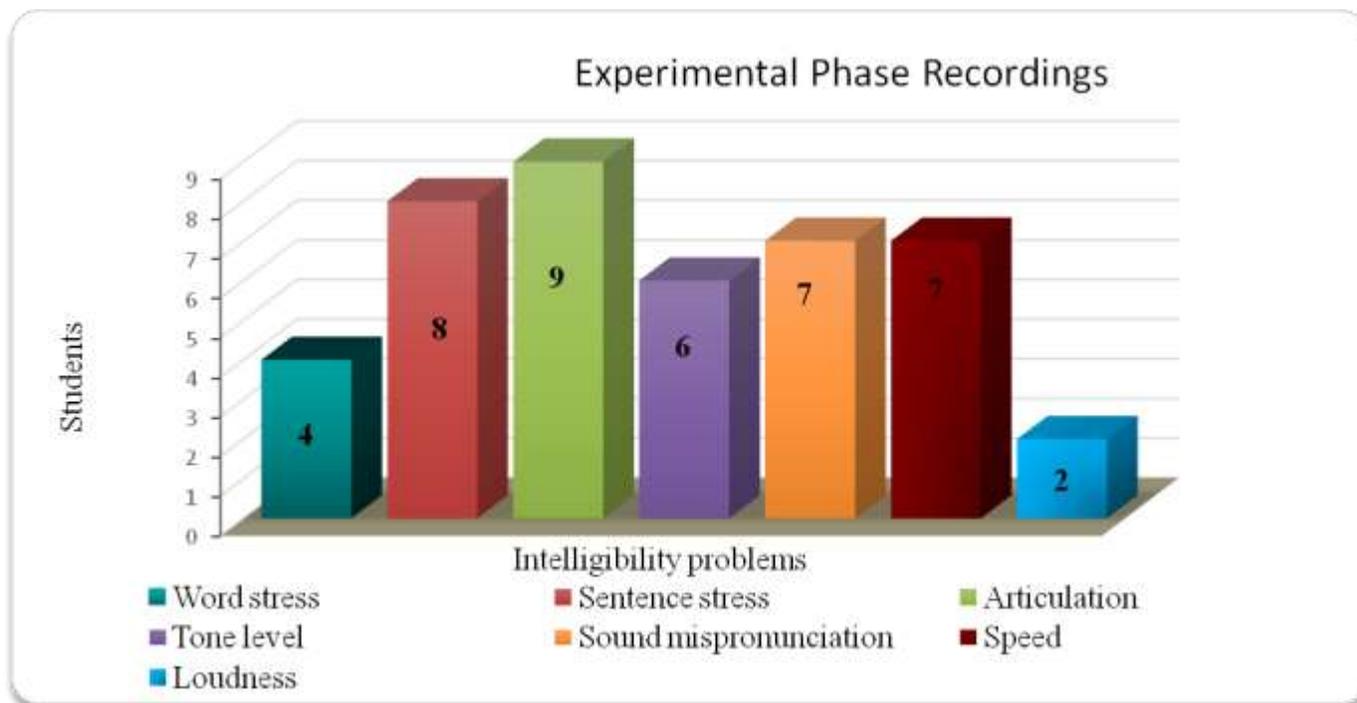


Figure2. Experimental Phase Recordings

As seen in Figure2, the percentages of mistakes in all cases have considerably decreased. The differences between the diagnostic and experimental phases seem to be significant in terms of progress. First of all, in comparison to the first recordings the number of stress and intonation mistakes decreased by 50% where only 13% of the students did not put the right stress in some

words. The researchers obtained similar results in relation to sentence stress. In fact, the decrease is obvious where only 26% of the students struggled when stressing some words in context in comparison to 73% of the first recordings. The mistakes are just in some words in the sentences, like student25 when reading the 3rd sentence.

Table4. Sentence stress errors

| | Correct Sentence Stress | Misplacing Sentence Stress |
|-----------|---|--|
| Student25 | What is she so PLEAS <u>E</u> D about? She looks like the CAT that's eaten the CREAM! | What is she so PLEAS <u>E</u> D ABO UT? She looks like the <u>cat</u> that's eaten the CREAM! |

Thus, it might be said that the lectures given during the experimental phase are of a great help in the respondents' pronunciation performance. The researchers observe that 60% of the students did not have problems with both word and sentence stress after the experimental phase. Students 1, 3, 20 and 27 achieved a clear pronunciation and intelligible speech after the training. Therefore, the sub-hypothesis that students need practice of supra-segmental features during their lectures is corroborated to some extent by the experimental phase. Students can benefit from pronunciation lectures in order to achieve a good pronunciation and be intelligible by the same way.

Secondly, based on these results, the hypothesis that stress and intonation are important elements in the achievement of a good pronunciation is confirmed. By placing the stress in the right place in words and sentences, 20% of students achieved nearly a perfect pronunciation, 46% of them achieved clear pronunciation and 33% of the elicited students achieved an understandable pronunciation. There were very few students who were not intelligible. 4 students only have made the same word stress mistakes and 8 of them had problems with sentence stress in addition to intonation patterns. The brief training was not that sufficient and the students' pronunciation was not satisfactory. One possible explanation of this finding is that the lack of practice at home considerably influences students' overall pronunciation abilities.

It is interesting to note that when students improved their use of stress in isolation and in context, their loudness mistakes have automatically decreased. In the first phase of the recordings, 43% of the student did not succeed performing loudness, but in the second one, only 6% of them did not. This feature seems to have a significant impact on student's performance. The writers hypothesize that loudness which is closely related to word stress, sentence stress and intonation is also important in the acquisition of a clear pronunciation. Actually, if a student achieves well in stress and intonation, her/his loudness will be correct.

After the experimental phase, the authors also noticed a progress in the phoneme pronunciation variable, where only 23% of the informants mispronounced some phonemes. In fact, there are students who corrected themselves unconsciously in the second recordings. Take this example:

Table5. Self correction of phoneme mispronunciation.

| Informant | First Recordings | Second Recordings |
|-----------|------------------|-------------------|
| Student2 | /kræʃid/ | /kræʃt/ |

These errors might be related to the lack of concentration and awareness. Learning rules of final /ed/ and /s/ can be very helpful. However, mispronunciation of phonemes does not influence a lot the informants' pronunciation, because a foreign learner is not able to achieve a perfect pronunciation of all phonemes.

The authors also tested the achievement of articulation on their informants because of its importance in speech perception. In fact, a good articulation leads to an intelligible and fluent pronunciation. Hence, when students misarticulated sounds and words, their pronunciation was not that clear; however, when reading several times the sentences and repeating the sounds, they became familiar with them and succeeded in correcting their errors. Consequently, during the recordings their performance has changed positively.

After the experimental phase, 77% of the students articulated correctly, thus their pronunciation was clear. The 23% students who did not articulate correctly did not have a clear pronunciation. For instance, student18 omitted the sound /s/ in the second sentence: what's she so 'pleased about? In addition, he/she substituted the sound /ʊ/ in look /lʊk/ with /u:/, resulting in /lu:k/. As a result, articulation feature is an important element to achieve a clear pronunciation in addition to word and sentence stress.

The analysis of speed revealed that 23% of the informants did not have a constant speed. Some of them were very rapid and other too slow. There seems to be no improvement of this feature. In fact, the results are approximately the same. In the diagnostic phase 20% troubled with this feature; whereas, 23% in the experimental one. However, speed variable does not influence pronunciation. Each student is characterized by his/her own speed and has his/her own manner of speaking.

Discussion

The present paper permits the readers to have several insights which highlight the contribution of stress and intonation on intelligibility and comprehensibility. The diagnostic phase reveals that students display many problems with pronunciation and their use of both stress and intonation are very low. During the training phase, the informants were administered lectures on the use and practice of stress and intonation. Shortly afterward they were recorded for the second time. The experimental phase corroborates the hypothesis that students' pronunciation might be improved by practicing the suprasegmental features. As a matter of fact, training has a positive effect on students' pronunciation accuracy and oral performance. These features should be an area of concern for pronunciation teachers.

The findings from the experimental phase also affirm the hypothesis that stress and intonation alone lead to a good pronunciation. Therefore, another central insight is that good articulation and adequate loudness are also important. They are essential features that shape

pronunciation because they include comprehensibility and avoid misunderstanding. In fact, as Thornbury (2006) puts it: “faulty pronunciation is one of the most common causes of misunderstanding” (p. 185). Thus, English language learners need practice in all areas of pronunciation (sounds, sounds in connected speech, word stress, sentence stress and intonation) if they are to become fully effective communicators.

It also comes clear that word and sentence stress in addition to intonation play an important role in the students’ pronunciation accuracy. Their pronunciation, performance during the diagnostic phase was low. The researchers further corroborate a significant progress in the informants’ pronunciation improvement after the training phase. Yet, it might need deeper analysis on a larger population and with a lengthier study. One might conclude, then, that the general hypothesis that stress and intonation might be helpful in achieving a clear and good pronunciation is confirmed.

Conclusion

Foreign learners of English in general and students of English department in Algeria universities do not need to have a perfect British accent, but good pronunciation is required. Systematic work of the students on pronunciation, which is regarded as a subcategory of speaking skill, can help them perceive and produce accurately the suprasegmental features. Thus, the issue at stake in this article is the impact of prosodic feature, stress and intonation, on learners’ intelligibility and speech accuracy.

It is fundamental for teachers of ESL/EFL to introduce the prosodic features in the classroom in order to improve students’ pronunciation of English and increase their fluency and comprehensibility. Yet, it should be done in a modern way by using real and computerized environments. Hence, the use of softwares like Praat and other research based approaches are highly recommended (Hardison, 2004; Pennington, 1999, 2002).

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