IMPROVING THE QUALITY OF TEACHING ENGLISH STRESS AND INTONATION TO UNIVERSITY STUDENTS WHO ARE LEARNING ENGLISH AS A FOREIGN LANGUAGE USING MULTIMEDIA

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Abstract

This study aims in investigating the effect of using multimedia in improving the quality of teaching English stress and intonation to university's female students who are learning English as a foreign language. The sample of the study consisted of forty female students who are studying English language and literature at the University of Jordan/Aqaba. However, they were assigned to experimental and control groups. Data were collected within a four-week period via a pre-posttest design for equivalent groups. The findings of the study indicate that there were statistically significant differences ($\alpha=0.05$) between the achievement of the experimental group and the control group in the use of English stress and intonation in favor of the experimental group which was taught via multimedia. Based on the findings of the study, the researcher suggests the following recommendations:

1. Multimedia should be introduced as a major tool for teaching English stress and intonation.
2. Further experimentation under different conditions for longer time duration is recommended.

Keywords: Stress, intonation, multimedia

Introduction
Background
Computer applications have a great effect in many fields especially in education, linguistics and psychology. For this reason, there is a wide scholarly inquiry which has led to the creation of sub-disciplines which are directly relevant to Computer- Application in Second Language Acquisition (CASLA). One of these sub-disciplines is known as "educational technology". It is a specialization within the study of education by which

researchers try to find out the best methods of using computer technology for instruction, as well as finding ways of evaluating its effectiveness. Educational technology is not limited to certain subject areas. However, it has many applications across subject areas which has led many researchers to declare that computer-assisted language learning (CALL) has its root in educational technology (Chapelle, 2005).

According to Carlson & Earl (1995), multimedia refers to a content that uses a combination of different forms. Therefore, this contrasts with media that uses only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia includes a combination of text, audio, still images, animation, video or interactivity content forms.

Multimedia is usually recorded and played, displayed or accessed by information content processing devices such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content (Carlson & Earl, 1995).

In Jordan, the Ministry of Higher Education and Scientific Research encouraged the use of technology for its potential advantages. Thus, some of these advantages include involving students more actively in the learning process by working collaboratively outside the classroom via the internet, which is a good opportunity for students to promote independent learning. In addition, the Ministry of Higher Education and Scientific Research also encouraged the advancement in technological innovations. Therefore, in many classrooms, traditional methods are being replaced by innovative educational methods where computers are used as tools in the teaching/learning process (MoHE, 2002).

Everyday language use is so tied to technology such that learning languages through technology has become a fact of life with important implications for all applied linguists, particularly for those concerned with facets of second language acquisition (SLA). At present, there are a variety of computer applications available including vocabulary, grammar, and pronunciation tutors, spell checkers, electronic workbooks, writing and reading programs, as well as various authority packages.

Many modern language teachers have come to accept multimedia as a viable means of teaching language acquisition. Those who use multimedia as a teaching tool discovered that it adds more interest to the class, and students tends to learn more language skills as a result of their interest in computers. Furthermore, the integration of multimedia is more effective than using the teacher center model solely. Multimedia effectiveness lies in the ability to expose students to real situations, language use and pronunciation through video, sound, graphics and computer interaction

Regarding phonetics, there are many reasons for using multimedia as a technique in phonetics teaching. These reasons include innovation and increased efficiency which are necessary and essential for phonetics to have a good position in linguistics and language teaching. Moreover, using multimedia in phonetics motivates students to learn because the process of learning becomes more enjoyable and more interesting. In addition, if multimedia is to be used effectively, there are two important principles to be observed. First, it should perform a task that a human teacher cannot do, or at least cannot do effectively .The second principle is that it should leave the user with interesting tasks to carry out (Leech and Candlin,1989).

Consequently, there are many technological developments in phonetics. Some micros have special keys which can be programmed to print phonetic symbols directly. Regarding transcription, the computer is used in two different ways. In the first one, an ordinary written text is inputted, and a program produces a phonetic transcription automatically. In the other way, texts are stored in parallel orthographic and transcribed versions, and the program produces the transcription simply by reading a stored transcribed version. At present, a serious work in phonetics regarding speech synthesis has begun. Therefore, a phonetic transcription is a kind of code by which the symbols represent the speech sounds. To end a program with a transcription is to give up in the middle of the job, as the next logical step is to speak the transcription aloud (Candlin. & Leech, 1989)**.**

However, the teaching of stress and intonation has at times been considered a luxury in the ESL/EFL curriculum, unlike reading, writing, listening and general speaking fluency. But in recent years, stress and intonation have come to be recognized as essential components in most ESL/EFL instructional programs. Thus, one way of teaching stress and intonation is via multimedia.

Stress is defined as "the use of extra respiratory energy during a syllable. A stressed syllable is produced by pushing more air out of the lungs in one syllable relative to others" (Ladefoged, 1993, P.297). In addition, a stressed syllable is often louder, on a higher pitch, and has a longer vowel than unstressed syllable. There are many functions of using stress; they include: to give special emphasis to a word or to contrast a word with another, to indicate the syntactic relationships between words or parts of words, and to distinguish between a compound noun and an adjective followed by a noun.

Since the incidence of stress in English is unpredictable, this creates difficulty for Arab students. As a result of this, the researcher focused on practice in teaching stress. Thus, students were able to listen to any word, sentence or paragraph several times as they wanted.

According to Ladefoged (1993,p.23), tone is defined as "a pitch (the auditory property of a sound that enables a listener to place it on a scale going from low to high, without considering the acoustic properties, such as the frequency of the sound) that conveys part of the meaning of a word". Intonation is "the pattern of pitch changes that occur during a phrase, which may be a complete sentence".

Tone and intonation belong not only to the word but to the word group .The use of tone and intonation affects the meaning of the whole word group. Therefore, students should practice the use of tone and intonation to test how good they are in speech.

According to O'Connor (1980), there are many types of tones in English. These tones includes falling tone (the Glide- down tone), the first rising tone (the Glide-up), the second rising tone (the Take- off), and the falling rising tone (the Dive). The falling tone consists of a fall in the voice from a fairly high pitch to a very low one. In general, it is used in statements which are complete and definite, in wh-questions when we want the question to sound more business-like and to be interested in the subject matter, in short questions, for strong commands, and for strong exclamations.

Statement of the problem

As we all know, the application of multimedia in improving language teaching and learning is still on the beginning stage in Jordan. Language educators need to continue to explore possibilities of the feasibility of using multimedia to teach languages. Both theoretical and practical issues need to be addressed. Thus, we need to continue to carry out research on the effectiveness of using modern technology especially multimedia as well as its impact on the learning process. In this study, the researcher tries to explore the effect of using multimedia in improving the quality of teaching stress and tone.

However, there has been a very little consideration of how multimedia can be utilized in language pedagogy. In general, researchers have been busy with finding out how L2 learners acquire a second language. Here, the researcher makes use of multimedia programs to capture, and motivate learners' attention to stress and intonation.

Moreover, most students face difficulties in learning stress and tone. Learning stress and tone demand a lot of time and effort for practice. Students need new tools for learning stress and intonation in order to make it more interesting and encouraging.

Finally, the study comes as a response to the recent tendencies of the Ministry of Higher Education and Scientific Research in highlighting the crucial role of information technology and communication in the classroom.

Research Question
This study aims to answer the following question:
Are there any statistically significant differences (α=0.05) between the experimental group (multimedia) and the control group (traditional method) regarding their stress and tone achievement due to the method of teaching?

Purpose of the study
The purpose of the study is to investigate whether or not the use of multimedia contributes to the development of English stress and tone.

Significance of the study
This study may help educators and educational technologists to assess the advantages and utilize multimedia to assist or provide instruction. The study based on the researcher's knowledge appears to be the first study to investigate the effect of using multimedia programs in improving students' ability to apply English stress and tone correctly.

Review of Related Literature
"Humans devote much of their energies to processing and exchanging information. Recently, they have began to explain parts of this function on the computer" (Sampson, 1995, P.4). Thus, it is necessary to discuss the importance and the effectiveness of using computer programs and multimedia, particularly teaching in general and the improvement in the teaching process of English phonetics, mainly stress and tone in particular.
Barker and Yeates (1985) believed that computers can enrich a learning environment, enhance learning process, make education more widely available, and produce cost effective solutions in the dissemination of knowledge.
Brumfit et. al. (1985) pointed out that there are four distinct advantages of using the computer in the teaching/learning process. The first advantage is its capacity to control presentation. Unlike a book, it can present fragments which add up to a whole; and it can do so with any built-in time delay chosen by the student or selected for him. It can combine visual or graphic information with text; it can highlight features of the text using color and movement. Potentially, this is a great advantage over the linear fixed presentation of a book.
The second advantage is its novelty and creativity. The computer is creative in a trivial version of Chomsky's criterion in that it can produce or comprehend sentences that it has not previously encountered. Unlike any other classroom aid, it can vary the exercise each time it is done and adapt its language to what the student produces within certain limits. The third

advantage is the feedback. The computer is capable of analyzing what the student does, and one way of using this capacity is through error correction. Here, the student's mistakes can be characterized and the appropriate advice given to him; or the computer may base its next move on an analysis of what the student inputted. The fourth advantage is its adaptability. Computer programs can be adapted by the teachers to suit the needs of their students. Also, computers can present a text word by word, phrase by phrase, line by line, question by question or page by page. However, if the teacher wants to present only a few words or sentences on each page, it would be wasteful and expensive to do this on paper, but computer screens are an economical way of doing so. Computers do not get tired and can repeat the same process several times.

The effect of a CALL activity depends on how it is exploited by the instructor and how the consequence relates to the rest of the learning environment .What may be called the classroom management of CALL may ultimately determine how a given program relates to the model of language learning espoused by the instructor.

Although multimedia is possible because of computer technology, its development has been a long time in the making. The idea of integrating multimedia in foreign language studies began in the 1950s when small language schools began to use the phonograph, movies and the tape recorder as tools for teaching English language. In the '70s and '80s, language audio and video courses were improved through the added use of video projectors and slide shows. By the late '80s and early '90s, language labs were part of many of the more expensive language schools throughout the world. However, by the mid '90s, many multimedia language programs became available to teachers on the Internet. These programs makes use of a personal computer and were sold at a much more affordable price to even the smallest English language schools, allowing teachers to bring more interactivity and fun into the language learning process.

Even though there are several multimedia programs available in all price ranges, and some integration exercises are even free of charge, multimedia in the classroom is not used as supposed to be used. This may be because teachers lack information on multimedia, have not been trained or cannot find the appropriate materials.

In the 20th century, many English language teaching methods were developed based on the psychological studies of learning methods. Language courses began to integrate approaches that focused on visual, auditory and sensory learning, because it became known that students have different learning capacities and they often make use of one of their senses to acquire information. Teachers began to understand that language acquisition was not a passive process, but is dependent on the learner's interest, habits,

background and attitude. However, it was difficult for traditional English grammar teaching methods to address these concepts until multimedia was integrated (Kasper,1997).

Multimedia has become an important classroom teaching tool because it can integrate all of the sensory learning methods and addresses an individual student's needs by requiring total student interaction and response. Therefore, because multimedia language programs interest students with visual effects, audio effects and interesting real-life situations, students become enthusiastic and wish to participate more in the language learning process (Kasper, 1997).

Current multimedia packages address specific learning objectives and are oriented towards the learner's cultural background, thereby effectively addressing most students' sensory and cultural learning needs.

Applying multimedia as a teaching tool in all fields is so important. However, it is necessary in applying it in the field of English phonetic and phonology. Datlon & Seidlhofer (1994, P.4) pointed out that "we can define pronunciation in general terms as the production of significant sound in two senses. First, sound is significant because it is used as part of a code of a particular language; and so, we can talk about the distinctive sounds in English, French Thai and other languages. In this sense, we can talk about pronunciation as the production and perception of sounds of speech. Second, sound is significant because it is used to achieve meaning in contexts of use. Here, the code combines with other factors in ensuring that communication becomes possible. In this sense, we can talk about pronunciation with reference to acts of speaking".

Regarding stress and tone, there is a growing interest in this field for its importance. For this reason, this field to study was chosen. In comparing past and present perspectives on stress and tone , we will discover that although traditional stress and tone teaching procedures appear to have focused primarily on linguistic competence, today's instructional frameworks are moving toward an expanded concern for the traditional areas of communicative competence (discourse competence).

There are many studies on Computer Application in SLA which were conducted in many countries, mainly in the West. One of the earlier studies was conducted by Fletcher and Atkinson (1972) whereby children of the experimental group received eight to ten minutes of computer assisted instruction per day for five months; and the remainder of the day was the same for all children. Results of post-test gain scores showed that the most received CAI performed better than those who did not.

Arroyo (1992) conducted a study to examine the effect of extended use of computers on reading achievement. The subjects consisted of seventy-five seventh grade students. Fifteen students were subjected to an intensive

computer- assisted instruction program, while fifteen others, randomly selected from the remaining group received no computer training and served as the control group. The results of this study indicate a statistically significant increase in reading the achievements of the students who used computers. Also, this study points out that the use of the computer increases the students' motivation to learn.

Avent (1994) conducted a study aimed to develop computer-assisted language learning software and to gather empirical evidence concerning the value of computer-assisted language instruction. In achieving this aim, Avent (1994) studied language learning achievement differences between students using the traditional language laboratory and students using computer-assisted language learning courseware. The results showed that the mean scores were significantly higher for computer taught items than for non-computer taught ones.

Adler –Kassner and Reynolds (1996) implemented computer use in basic composition classes at the University of Minnesota's General College. The computer was used as a reading tool in order to help students become more aware of their reading processes. In addition, real –time conferencing was used so that students could engage in real discussions about texts and various questions they had about their readings. Students also had opportunities to enter into dialogic readings with one another or with an instructor through electronic mail. However, the researchers found that students tended to disclose more about their interaction with readings over email than they did in the classroom. Also the feedback students received in terms of email responses strengthened their confidence on their encounters with unfamiliar academic texts.

Lyman and Davis (1996) examined vocabulary acquisition and student glossing choices for intermediate level learners of French. They concluded that students who worked with multimedia programs based on an excerpt from the story, Une Vie de Boy, were well-able to retain vocabulary words than students who worked with non- computerized text.

Pigg (1996) studied the effectiveness of the CAI program Paragraph Builder on fifth grade students' topic sentence identification. Pigg used a pre-posttest control group design. Therefore, the posttest results indicated that the program produced a statistically significance rise in the mean score on the posttest. The results revealed that students working with the computer enjoyed learning about topic sentences using the program Paragraph Builder.

Machado (1997) studied the effects of computer- based technology on the language acquisition rates of ESL students. Pre-and posttests were carried out in the areas of writing and oral language. The results of this study concluded that ESL students need the support of computer- assisted learning

to attain second language proficiency as the experimental group showed a faster rate of second language acquisition and significant gain scores.

Campion (1999) studied the effectiveness of CALL in the learning and transfer of vocabulary. The learning and transfer of passive vocabulary into active vocabulary is seen as one of the communicative competence in foreign languages learning. The results showed that students working with CALL improved their results in both types especially in active vocabulary. Therefore, this result shows that CALL could be an effective instrument for learning vocabulary.

Yasin (2002) conducted a study to investigate the effect of computer-assisted instruction on second grade pupils' learning of English in Bani Kinaneh District. The sample of the study consisted of fifty female second-grade pupils. They were divided into two groups (namely, experimental and control groups). Data were collected via a pre-posttest. Therefore, the findings of this study indicate that using a computer-assisted English language instruction alongside the traditional method has a positive effect on the experimental group pupils' achievement.

Ojaili (2002) conducted a study entitled "the impact of using the internet (as compared to using the traditional method) on teaching idioms to EFL students at Yarmouk University". The subjects of this study consisted of 30 students divided into two groups (the control group and the experimental group).The control group was taught in a traditional classroom, while the experimental group was taught at an internet laboratory. The results of this study showed that there is a significance difference between the two groups. The difference was in favor of the experimental group and was attributed to the use of the internet in teaching idioms in question.

Odeh (2004) examined the effect of a training program based on modern technology (the internet) on the learning styles of Jordanian secondary school students. The sample of this study consisted of (40) female students divided equally into basically two groups; an experimental group and a control one. The researcher carried out a pre-posttest on both groups, and the results of this study showed that the experimental group performed better than the control group.

Obaidat (2006) studied the impact of computer chatting on the achievement of the tenth grade student's reading and writing skills in English. To achieve this purpose, the researcher employed a chatting software (Vypress Chat) to examine the effect of using chatting as a new methodology of developing reading and writing skills. The population of this study consisted of (303) tenth grade students at all-male public schools in Dhiban Directorate of Education which was purposefully selected from the study's population. It was divided equally into two groups (experimental and control). The findings of the study revealed that there were statistically

significant differences between the achievement of the experimental and the control group in both reading and writing skills in favor of the experimental group which was taught via the computer chatting.

A study conducted by Kasper (1997, 309-20) illustrated that teaching English to students using multimedia such as print, film, video and Internet encourage them to write a critical analysis on assignments. Overall, the students' achievement increased significantly. 92 % of the students passed on departmental reading and writing examinations. In addition, their feedback on discussions was very positive. They express confidence in their ability to use English. Also, they attributed this improvement to the multimedia model as the texts teach them English and provide helpful information in other courses, and the film and Internet helps them in making materials easier to understand because they see, hear, and read about the topic. Furthermore, the Film can be used in providing a visual material and the students can read a print text and watch the film later. According to Kasper and Singer (1997:5-17), the film can clarify comprehension, consolidate concepts and reinforce learning. Therefore, it is expected that the students fully understand both visual and verbal comprehension. By watching the complete film, the students are expected to understand various areas of academic discourse such as psychology, environmental science and other areas to broaden their verbal and written perspective (Kasper and Singer,   1997:5-17).

A study case from Florida International University (1994), has examined a multimedia classroom whereby the students are watching the video novels of Tom Jones (the new six part A & E version) and The Scarlet Pimpernel (Anthony Andrews and Jane Seymour). After viewing it, the class asked questions about the movie and assigned essay topics. Thus, to help them, the teacher asked the students to brainstorm.

The present study is similar to the reviewed studies in the general aim of detecting whether the application of multimedia has an effect on language learning. However, it deals with the effect of using such programs in improving the process of teaching English stress and tone. However, all the studies concluded that multimedia may have a positive effect on language learning which is in line with the assumptions of this research.

Methodology and Design
The present study aims in finding the effect multimedia has on improving the process of teaching English stress and tone. Here, the researcher presents the methodology and design of the current study.

Population

The population of this study (183) consisted of all students who are learning English as a foreign language at the University of Jordan/Aqaba during the academic year 2012/2013.

The Sample of the Study

The sample of the study consisted of 40 female students who are studying English as a foreign language. They were randomly selected for participation in the study. They were divided into two groups with twenty students in each one. Group one was the experimental group, while group two was the control group. Students in the two selected groups were subjected to a pre-test to assess their general language proficiency in the light of their abilities to apply stress and tone correctly.

The experimental group was to learn stress and tone of selected words, sentences and paragraphs through the use of multimedia in the computer laboratory. Whereas, the control group was to learn the same words, sentences and paragraphs through the application of the traditional method (using recorder) in the classroom.

Instruments of the Study

The instruments of the study consisted of a pretest and a post test, and both of them included two main levels: level (1) involves the application of stress and tone upon individual words, while level (2) entails the application of stress and tone upon sentences. While the pretest included the stress and tone of selected words and sentences which were taken from the listening content of the demanded textbook "Better English Pronunciation" (O'Connor,1980), the post-test included words and sentences which the two groups (the control and the experimental) listened to by following the two different teaching methods (the traditional method vs. using multimedia). Therefore, the use of special software enables students to learn more. In level (1), there were two types of words, which are: words which students listened to and repeat, and words which were connected with pictures, sound, and animation. However, students were asked to listen carefully and accurately to these words. In levels (2) and (3), there was a very interesting learning environment. Computers asked students to listen to the assigned words and sentences. Then students were asked to do many tasks (e.g. to identify the placement of stress). If a student clicked on the right place, the computer shows "**Well done**". If not, the computer shows "**Try again**".

In these tests, the researcher focused on students' ability in identifying the placement of stress as well as the tone that has been applied.

Research Design and Statistical Analysis

The context for the research was experimental for students who are studying English as a foreign language at the University of Jordan/Aqaba. The study included an independent variable (the teaching method), which consists of two levels:

   a. Teaching stress and tone with the help of the multimedia programs in the computer laboratory.

   b. Teaching stress and tone through the traditional method in the classroom.

Also, the study included one dependent variable which is students' achievement in stress and tone (scores on the posttest).

To answer the research question, a preliminary t-test was conducted to test the quality of the two groups (the control and the experimental group). Also, another t-test was carried out to measure the gain scores of both groups on the post test.

Depending on the results of the t-test, the Analysis of Covariance (ANCOVA) was used to test the significance of the difference between the two groups (i.e the control and the experimental groups) to eliminate any possible difference between them.

Procedures

The experiment lasted four weeks in the second semester of the academic year 2012/2013. A pre-test was given to the pupils in order to see their level before the treatment. Throughout the four weeks, the experimental group practiced the stress and tone of certain words and sentences using multimedia in the computer laboratory.

The control group, however, was taught the same words and sentences following the traditional method. By the end of the four weeks, all students were tested again at the end of the experiment and means of the post-test were calculated.

The control group

The control group was taught in the classroom using the traditional method which entails the following:

   1. The teacher presents the lesson by identifying its main ideas.

   2. The teacher reads out such questions, telling the students to listen to look for the answers while playing the recorder (listening for specific information). Students have the chance to listen three times maximum.

   3. There are some exercises which demanded the teacher to play the recorder, and pausing for the students to repeat each sentence (three times maximum).

The experimental group

This group was taught in the computer laboratory where each student had access to one computer and was unlikely to be within earshot of any of her partners. They listened to the assigned words gradually. They had the chance to listen again and again to these words. In addition, they got a copy of the CD (which contains these words) to hear them again at home. The same procedure was followed regarding the remaining two levels. At the end of each of these levels, the students were asked to pronounce what they heard by applying stress and tone accurately.

Validity of the Study

Both tests were shown to university professors, English language supervisors working in Public Education and English language teachers who teach phonetics to evaluate these tests and suggest any improvements. They were asked to validate the content of the test concerning its instructions and suitability based on the objectives of the research. The jury comments and suggestions were studied carefully, and the necessary modifications were done accordingly.

Reliability of the Study

The test reliability was obtained through the split-half method on a group of 40 female students, who were randomly chosen from the population of the study. The reliability coefficients of the tests were calculated (0.95) using Cronbach-Alpha for both the pretest and the posttest.

Findings of the Study

The aim of this study is to investigate the effect of using multimedia in improving the process of teaching stress and tone for students who are learning English as a foreign language.

This study emphasizes that pupils who were taught using multimedia show better achievement than those taught using the traditional method. The data were collected through a pretest –treatment- posttest design for equivalent groups. The study was tested at the level of significance where $\alpha=0.05$. Therefore, table (1) presents the descriptive statistics of the experimental and control groups.

Table (1) Means and standard deviation of the achievement of the two groups on the pretest and the posttest

Group		pretest	posttest
Control Group	Mean	73.00	75.15
	Std. Divisions	16.55	15.78
	N		20
Experimental Group	Mean	78.30	88.05
	Std. Divisions	15.74	11.78
	N	20	20

To see whether there is a statistically significant difference between the achievements of the two groups on the pretest, an independent samples t test was carried out. Table (2) shows the results of this test.

Table (2) Results of the t test of the means of the achievement of the two groups in the pretest

Group		N	Means	Std. Deviation	T	df	Sig.
Pretest	Control						
	Group	20	73.00	16.55	-	38	0.308
	Experimental Group	20	78.30	15.74	1.04		

Table (2) shows that there are no statistically significant difference at (α=0.05) between the achievement of both groups on the pretest. Another independent samples t test was carried out to determine if there is a statistically significant difference between the two groups' achievement on the post test. Table (3) shows the results.

Table (3) Results of the t test of the means of the achievement of the two groups in the posttest

Group		N	Means	Std. Deviation	T	df	Sig.
Posttest	Control						
	Group	20	75.15	15.78	-	38	0.006
	Experimental Group	20	88.05	11.78	2.93		

This table shows that there is a statistically significant difference at (α=0.05) between both groups' achievement, in favor of the experimental group. This difference proves the hypothesis that using multimedia in teaching English stress and tone has a more positive effect than following the traditional method.

In order to eliminate any initial differences between the two groups on the pretest, ANCOVA test was carried out. Table (4) shows the results of this analysis.

Table (4) Results of ANCOVA test of the means Between Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Pretest	6447.149	1			
Group	723.660	1	6447.149	167.037	.000
Error	898.351	37	723.660	29.805	.000
Total	275352.00	40	24.280		
Corrected Total	9009.600	39			

Table (4) shows that there is a statistically significant difference between the two groups on the posttest. The achievement of the experimental group was significantly better than that of the control group.

In the pretest, the researcher found that students' achievement was so bad in using stress, tone and intonation. After that, the experimental group was given a great amount of information and practice regarding the use of stress, tone and intonation by the aid of multimedia.

In the posttest, most students in the experimental group realized the importance and the effectiveness of using stress in communication. They practiced the use of stress in the given words, sentences and paragraphs, and their achievement was so better than that of the control group. For example, 52% of the experimental group put the stress on its right position in words such as : prepare, prestige, preparation, and recommended it as follows: / prɪˈpeər / , /preˈstɪʒ/ ,/prəpəˈreɪʃn / ,and / rəkəˈmend / compared to 3% of the control group who put the stress on its right position in the same given words .

Tone and intonation belongs not to the word but to the word group. The use of tone and intonation affect the meaning of the whole word group. Therefore, students should practice the use of tone and intonation to realize how important they are in speech.

According to O'Conner (1980), there are many types of tones in English. The first rising tone (the Glide-up) is like the glide down except that it ends with a rise in the voice instead of a fall. It is used in many situations such as in smoothing or encouraging statements, in statements which are intended as a question, in wh-questions to show as much interest in the other person as in the subject, for greetings and for saying goodbye, and also for exclamations which refers to something not very exciting or unexpected .

The second rising tone (the Take-off) ends with a rise in the voice, but any words and syllable before the rise is low. It is used in cases such as if the statement is a grumble, in repetition questions, for tag-questions after commands, asking for information and if the exclamation is questioning.

The falling-rising tone (the Dive) consists of a fall from rather high to low and then a rise to about the middle of the voice. It has many functions such as if the statement is not complete, for statements which show

reservations, if the statement is a correction or a warning, and in commands sounding pleading.

Students need to know and practice those general uses of each of these tones in order to express the intended meaning. Majority of our students do not realize the importance of using the suitable tone. Therefore, most of them read wh-questions, yes/no questions, commands, and exclamations as complete statements (using the glide-down). Of course, this changes the intended meaning as well as creates confusion to the listener.

In the pretest, it was noticed that majority of students (about 93%) in both groups used only one tone which is the glide down. Those students read the whole assigned sentences and paragraphs using one tone (the glide-down). For instance, they read the following sentences: "Turn the TV down", and "Can you say that again?" as: // Turn the TV down // ,and // Can you say that again ?//, instead of : // `Turn the TV down //(This command sounds as pleading, so the Dive should be used), and // Can you say that again ?// (The Glide-up should be used in repetition questions).

This problem could be traced back to many reasons. Many English language instructors treat the assigned reading passages as a task for learning new vocabulary, finding pronouns references, and looking for specific information. Even in exams, most instructors focus on those aspects ignoring the importance of pronunciation, stress and intonation. As a result of that, our students think that pronunciation, stress and intonation are not important, and they do not listen carefully and accurately to the record while playing. Students should have special pronunciation classes for listening and imitating only (not to look for new vocabularies or to answer questions). Moreover, the available educational environment is not suitable for learning pronunciation, stress and intonation.

In this study, the researcher tried to increase the students' awareness regarding the importance of stress and tone, as well as provide them with a suitable educational environment. Each student in the experimental group had access to one computer and was unlikely to be within earshot of any of her partners. In this way, those students began to feel that they are the controller of the learning process. This encouraged them a lot and also enhanced the idea of individualization. Multimedia is a great motivator, and is excellent for drill and practice than teachers. In addition to that, the assigned sentences were provided with multimedia (pictures, animation, sounds and colors) which has consequently affected the performance positively.

In the posttest, there was a significant difference between students' achievement in both groups regarding the use of tone and intonation. About 55% of the students in the experimental group used the suitable tone for the assigned sentences compared to 7% of the control group's students. For

instance, most students in the experimental group read the following sentences correctly with the suitable tones: //Turn to page thirteen in your `book // (The Glide-down tone is being used for strong command ), and //◌ ◌What's that ?ˇSorry !` Speak◌ ◌loudly // (The Take-off is used to ask other person to repeat some information, and the dive is used to express pleading).

Multimedia provides a fascinating learning environment which attracts students to learn. Multimedia can in fact (depending on this study) challenge the traditional educational methods and values, which are not adequate for learning stress and tone. Therefore, we have to change the educational process to a technological one.

Conclusion

The results of the t test show that there is no statistically significant difference between the achievement of the experimental group and the control groups on the pretest. This indicates that the two groups are equivalent in this respect. However, on the posttest, the results of the t test show that there is a significant difference in favor of the experimental group. Furthermore, the results of ANCOVA indicate that there is a statistically significant difference between the means for both groups in favor of the experimental group. This shows that the achievement in English stress and tone is much higher for those who received instruction by using multimedia in a computer laboratory than those who received instruction by following the traditional method in the classroom. This means that the use of multimedia produces higher achievement than the use of traditional instruction. Generally speaking, integrating multimedia in the process of teaching and learning tend to cue the deficits in these processes.

The differences between the two groups in this study may be attributed to many reasons. One possible explanation of the results obtained in this study could be due to students' attitude. The students of the experimental group had a positive attitude towards using multimedia for developing their usage of stress and tone, because it was the first time ever they have used multimedia as an instructional tool. However, this tool (multimedia) motivated them to be more involved in such an experience which has consequently affected their performance positively.

The results of this study indicated that multimedia enhances the idea of individualization by taking into account the level and pace of the individual learner. In this way, the learner will feel that she/he is the controller of the learning process. Moreover, computers have the ability to repeat any piece of information or drill as necessary. While using multimedia, the pupil becomes less shy of making mistakes, and it is good for different groups of people, especially the weak and the shy.

This study shows that the attractive environment also promotes the effectiveness of using multimedia as an instructional tool. There are many other possible explanations which include the facts that multimedia are infinitely patient, never get tired, never get frustrated or angry, allow students to work privately, never forget to correct or praise, are fun and entertaining, does not embarrass students who make mistakes, give immediate feedback, are more objective than teachers, are great motivators and are excellent for drills and practices.

Using multimedia gives opportunity to concentrate teaching on the student. It also offers a new way of having real linguistic experiences, especially for the teacher whose concerns is to make the class to be learner-centered. Consequently, the current study embodies an invitation to use multimedia for better language teaching/learning process.

Based on the findings of the study, the researcher suggests the following recommendations:

1. Multimedia should be introduced as a major tool for teaching stress and tone.
3. Further experimentation under different conditions for longer time duration is recommended.

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Appendix (1)
Pretest and Posttest

Pretest
Question one: **(40 points)**
Read the following words:
-Like
-Told
-Come
-Soon
-Choose
-Obtain
-Permit (v)
-Progress (n)
-Decide
-Invent
-Definitely
-Wonderful
-Splendid
-Twentieth
-Sunday
-Examination
-Contradiction
-Indicate
-Auspicious
-Photography

Question Two: **(60 points)**
Read the following sentences:
-It is quite good. (Complete and definite statement)
-I shan't be long. (Soothing and encouraging)
-Forty six. (The statement is a correction of what sb else has said)
-You'll be late. (Warning)

-Come over here, will you? (Tag-question)
-Can you say that again? (Repetition question)
-Shut the window. (leading)
-Don't be stupid idiot. (Strong command)
-Good Heavens! (Strong exclamation)
-Good morning. (Greeting)

Posttest
Question One: (**40 points**)
Read the following words:
-Cold
-Laugh
-Lamb
-Sun
-Finished
-Object
-Prestige
-Perfect (adj)
-Vibrate
-Prepare
-Qualification
-Excellent
-Ridiculous
-Tomorrow
-Recommend
-Tuesday
-Combination
-Disbelieve
-Utility
-Preparation

Question Two: (**60 points**)
Read the following sentences:
- I liked it very much. (Complete and definite statement)
-John 'll be here soon. (Soothing and encouraging)
-You used to like him. (The statement is a correction of what sb else has said)
-I shan't tell you again. (Warning)
-Hold this for me, would you? (Tag-question)
-What's that? Speak loudly. (Repetition question)
-Turn the TV down. Sorry. (Pleading)
-Turn to page thirteen in your book. (Strong command)
-Nonsense. (Strong exclamation)
-Good night. (Greeting)

Appendix (II)
Pupils Scores on the pretest and the posttest

The Control Group			The Experimental Group		
Number of pupils	Scores of pretest	Scores of posttest	Number of pupils	Scores of pretest	Scores of posttest
1	93	95	1	90	97
2	90	88	2	90	95
3	90	86	3	89	95
4	73	70	4	62	79
5	72	86	5	73	88
6	90	93	6	60	79
7	89	93	7	91	96
8	36	48	8	81	95
9	47	42	9	77	90
10	59	62	10	91	96
11	51	53	11	95	99
12	69	80	12	87	99
13	75	69	13	73	81
14	62	71	14	58	73
15	82	79	15	94	99
16	94	95	16	37	55
17	68	79	17	86	93
18	75	69	18	95	98
19	84	83	19	75	89
20	61	62	20	62	70