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THE EFFECTS OF COMPUTER ASSISTED PRONUNCIATION TEACHING ON THE LISTENING COMPREHENSION OF INTERMEDIATE LEARNERS

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ÖZET

Bu çalışmanın amacı Bilgisayar Destekli Telaffuz Öğretiminin (BDTÖ) Selçuk Üniversitesi Yabancı Diller Yüksek Okulunda orta öncesi düzeydeki İngilizce hazırlık öğrencilerinin dinlediklerini anlamaları üzerindeki etkisini araştırmaktır. Telaffuz öğretiminde farklı öğeler üzerinde yoğunlaşmanın dinleme üzerinde etkisini ortaya çıkarmak için, her biri on üç öğrenciden oluşan üç grubu parçalar (sesler), parçalar (sesler) üstü öğeler ve kontrol grupları olarak ele aldık.

Eğitim süresinden önce ön-test sonrasında ise son-test üç gruba da uygulandı. 6 ardışık hafta, 4'er saat süreyle *Tell Me More* ve *Ellis Master Pronunciation* programlarını kullanarak BDTÖ uygulandıktan sonra Kruskal-Wallis H ve Wilcoxon sonuçları sesler üstü ve ses grubu lehineydi. Deney gruplarının ön-test ve son-test sonuçları arasında istatiksel olarak fark varken kontrol grubunun ön-test ve son-test sonuçları arasında anlamlı bir fark bulunamadı. Fakat üç grubun son test sonuçları arasında eğitim süresinin kısa olması, öğrenci sayısının azlığı ve laboratuarın fiziksel ve teknik yetersizlikleri gibi kısıtlıklara bağlı olabilecek nedenlerden anlamlı bir fark bulunamadı.

ABSTRACT

This study attempts to investigate the effects of Computer Assisted Pronunciation Teaching on the improvement of listening comprehension of pre-intermediate preparatory class students at Selçuk University. To determine the relation between pronunciation training focus and the improvement of listening comprehension, we had three groups of pre-intermediate students as segmental, suprasegmantal and control groups, which are each composed of 13 students.

At first, a pre-test was administered to all the three groups. After 6 consecutive weeks of CAPT, the results of post-test were in favor of supra-segmental group and segmental group, respectively. The differences between the experimental groups' pre-tests and post-tests results were statistically significant for the suprasegmantal and segmental groups, but not significant for the control group. However, the differences between the post-tests results of the all the three groups were not significantly high because of such limitations as the period of the study, the number of the students, and the lab's technological and physical inadequacy.

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LIST of ABBREVIATIONS

AI ……..……Artificial Intellegence

ASR……Automatic Speech Recognition

CAI…….……...Computer Assited Instruction

CALL……Computer Assited Languae Learning

CAP …….……Computer Assited Pronunciation

CAPT ……..Computer Assisted Prounuciaiton Training-Teaching

EFL…….English as a Foreign Language

ICAI……..Intellegent Computer Assisted Instruction

ICAL....…….Intellegent Computer Assited Language Learning

ITS ……..Intellegent Tutoring System

TELL……....Technology Enhanced Language Learning

CHAPTER 1
INTRODUCTION

1.1. Introduction

The role of pronunciation in the foreign language classroom hasn't been long appreciated. Actually, the aim of foreign language instruction was to become literate in the target language so as to be able to read the literature of the target language or the religious masterpieces in the language. Sometimes, foreign language was a part of religious education. There was very limited need to speak the target language. That is why speaking the language was not so necessary for the foreign language learner, neither was the pronunciation. Later on with the increasing demand to use the language in real communication contexts, the importance of speaking and thus pronunciation instruction has increased. In audio-lingual method this was achieved with repetition drills and memorization of the dialogues of the language with their pronunciation features. With the emergence of communicative approach to foreign language instruction, the concepts of communicative and social competence came into being and pronunciation instruction started to receive its long-deserved attention in the language classrooms.

With the introduction of communicative approach to foreign language teaching (FTL), listening and speaking skills began to have their long-deserved places in the realm of FLT. We as language teachers, and researchers, as well, seek to find out better ways to teach them, and presumably basing our assumptions on Krashen's input hypothesis, we duly started to better realize that listening and speaking are closely related, but mistakenly developed the idea that improvement of listening is simply a matter of exposure. Listening and speaking which continually shift places in the flow of a communication both basically require the production and perception of the segmentals and suprasegmentals of the language, which, especially in a foreign language, necessitates a systematic and integrated training. Hence the importance of an intelligible pronunciation for a sound communication to take place. The results of recent empirical studies on the correlation between the shift of focus in foreign language pronunciation training and comprehensibility suggest the emphasis be put on suprasegmantal features of pronunciation rather than segmental.

Researches have put forward various approaches and techniques to teach pronunciation. The focus of instruction was firstly on the segmental features and repetition drills, minimal pairs, discrimination exercises were largely adopted in language classes. Later on, with the increasing number of empirical studies the focus shifted from segmental to suprasegmantal.

Although it may appear that we compared 2 methods of pronunciation instruction, in the present study, actually we compared 3 conceptions of pronunciation pedagogy. In the first one, the focus was on instruction at the level of the segmental units. In the second, the focus was on the supra-segmental features. Later on, this shift of emphasis on these two different aspects of pronunciation was compared with a third, no pronunciation-specific instruction. The students who had no-specific pronunciation instruction served as a control group. Rather than comparing methods, then, we compared a difference in the scope of content in pronunciation classes; indeed, in this study the pedagogical conception behind the CAPT (Computer Assisted Pronunciation Training) program was the same, both for the segmental and suprasegmantal group. For example, both conceptions required recognition and repetition. However, the segment-based approach involved the elicitation of individual sounds and syllables; the suprasegmantal approach focused on larger units incorporating stress, intonation, and rhythm.

1.2. The background to the Study

The introduction of technology especially to the pronunciation instruction in foreign language teaching context has a lot to offer for the non-native language teachers. The emergence of this promising field can better be realized in regard to its forefather Computer Assisted Language Learning (CALL). The advantages that CALL offer for language teacher are nowadays better realized among language teachers. As for CAPT, it is of great help particularly for non-native English teachers as it offers native performances of language to the use of both the language teacher and the learners. It provides private stress free environment in which students can study at their own paces and receive individualized feedback with the help of Automatic speech Recognition (ASR) Technologies integrated to the system.

This study is an attempt to point out the efficiency and potential that Computer Assisted Pronunciation Training offers in English as a foreign language contexts. For many non-native teachers of English, it is very challenging to deal with the teaching of segmental and suprasegmantal features of English pronunciation, as they themselves may also lack a good command on these features. Even tough the mastery and teaching of segmental features can be achieved to a certain extend; the teaching of suprasegmantal requires a native like competence together with a sound knowledge on the nature of pronunciation instruction. Unfortunately, many non-native EFL teachers don't even receive a kind of training program with a special emphasis on the teaching of pronunciation-which is an essential element for communicative competence-, let alone the methodology to teach the pronunciation. Therefore, CAPT is a promising alternative with great potential in the teaching of pronunciation in English as a foreign language context.

1.3 The Purpose of the Study

In second or foreign language acquisition research, it has been observed that compared to receptive skills, productive skills are acquired later and through a more difficult process. Especially in speaking skills and pronunciation, learners almost never reach native-like mastery. In English as Foreign Language (EFL) situations, this problem is experienced even more severely as learners usually do not have natural exposure to the target language outside the classroom.

Computer-aided pronunciation (CAP) offers a medium for increasing users' access to their own and others' pronunciation performance and underlying phonological systems, for focusing their attention on phonology, and for acquiring new pronunciation patterns. In so doing, it offers considerable promise for language pedagogy, as a medium for improving adolescent and adult language learners' productive and receptive competence in pronunciation of a target language or variety (dialect). This study is an attempt to reveal the effects of conceptions of the pronunciation teaching on the listening comprehension level of the students.

1.4. Scope and the Limitations of the Study

This study seeks to indicate the potential solutions CAPT can offer to the context of English as a foreign language. This is an empirical study to find out the effects of the computer assisted pronunciation training on the listening comprehension level of intermediate learners of English at Selçuk University, School of Foreign Languages.

First of all, the results of the study can be limited with the specific language teaching context of the SOFL, Selçuk University. Furthermore, this study is of course limited with the pedagogical and technological features of the computer software we use, namely; Ellis Academic, Master Pronunciation. Another limitation is to do with the capacity of the only computer assisted language lab, which had 18 computers in a small room. This made the teacher's assistance further difficult.

Furthermore, although the differences between the pre-test results of the three groups were not significant the control group had a little higher mean(the control group mean was 61; the segmental group mean was 55 and suprasegmental groups mean was 54) , if the groups could have made more homogenous by putting the students in appropriate groups just after the pre-test, the results of the post-test could have been statically significant.

Another limitation is the time limit of 6 weeks training with four hours every week. The training program can be lengthened up further with at least 30 students in each group, which will most probably yield more reliable and significant results.

CHAPTER 2
REVIEW of LITERATURE

2.1. Introduction

The sound and intonational patterns of one's native language can be achieved perfectly without specific training and effort. However after 'critical period' in child-hood development— in which phonological as well as general motor, psychological, social and cultural development—, it becomes difficult to change a person's pronunciation patterns very much. Most of the adolescent and adult language learners usually turn out to have 'fossilized' pronunciation at an inter-mediate stage of learning a new language. After this critical period, in spite of specific pronunciation training, most adult learners can hardly improve their productive and receptive competence of a new sound system to a native-like level. Furthermore, most of foreign language learners apply their mother tongue's segmental and suprasegmental features to the target language, which highly spoils comprehensibility and comprehension. The fossilization of pronunciation and mother tongue interference cause a lot of breakdowns in communication. Therefore, the teaching of segmental and suprasegmental features of pronunciation is essential in two fold of spoken communication, that is production (speaking) and perception (listening comprehension) of the target language. In this chapter of the study, the pedagogy for pronunciation teaching and the advantages Computer Assisted Pronunciation Training offer to us will be handled with reference to previous points of views and empirical studies in the filed.

2.2. The Importance of Pronunciation Teaching

Although pronunciation teaching has gained more prominence in the SLA research in the last decades, pronunciation teaching is still being regarded as a side issue in ELF classes. This is due to the fact that generally application lags behind theoretical findings. It has been observed that much research today does not address pedagogical issues but stays on a very theoretical level (Ellis, 1997).

Furthermore, the teaching of phonetics, articulation, acoustic features and acoustic transmission and phonology, the study of how different languages organize sounds to convey meaning, are inherently difficult. Learning pronunciation not only requires the knowledge of the sounds but also acoustic and psycho-motor abilities of the learners are to be improved so that they can perceive and produce target language sounds. In sum, although pronunciation teaching is essential in foreign language learning, the gap between theoretical findings and pedagogical implications hasn't been bridged yet to achieve a better realization of pronunciation in EFL classes.

Kenworthy (1987, pp.4-8) states six main factors that affect pronunciation teaching. First of all, the mother tongue interference is generally the most apparent in sound articulation and in rhythm and intonation. In this case, the teacher can attribute some pronunciation difficulties to mother tongue or even predict them with the help of a contrastive analysis. Second, the learner age; this is really an important factor in the learner ability to pick up the segmental and suprasegmental features of the language. The critical age hypothesis for phonological acquisition is generally stated to be 12. In other words, for leaner who start to learn the foreign language after 12, it will be very difficult to improve an accent-free foreign language pronunciation. Third factor is the time and intensity to target language exposure. Learners who are exposed to better-models and explanation of sound system improve better pronunciation. Fourth factor is related with the learner himself/ herself. Some learners who have greater ability and aptitude for imitating the new sounds and sound patterns can achieve a better pronunciation. Fifth factor is the learner self identity and attitude towards the target language and target language community. Sixth is the learner's motivation and concern for good pronunciation (cited in Celce-Murcia and Goodwin, 1991, p. 137).

In a study (Neufeld, 1987) on the potential of the adult learners to achieve a native like pronunciation, it was found out that after pronunciation training university students can utter Chinese and Japanese sentences so well that they were judged as native by native speakers (cited in Chela-Flores, 2006, p.89). Therefore, it can be concluded that the organs of speech do not become atrophied with age, and then the poor achievements of adult foreign language learners in pronunciation might be partly due to insufficient and perhaps inadequate training of the muscles of the tongue and mouth region. The

link between the brain and muscles of the organs of speech sets pronunciation apart from all other aspects of language. Therefore, specific attention should be given to it by the teacher in the classroom and by the student on his own to internalize pronunciation features. That is the psycholinguistic difficulties of the learners are to be considered when designing activities to teach pronunciation. Over emphasis on the segmental or suprasegmantal in the classroom can cause much pressure on the learners. Therefore, the stress free and individualized pace of computer assisted pronunciation teaching can be pointed out as an advantage.

The teaching pronunciation is not only related to the above mentioned factors, the time available and the focus of the course also determine the pronunciation teaching. As Celce-Mercia and Goodwin (1991, p.136) states "The attention paid to structured learning of pronunciation rules depends on both on the level of the student and on the amount of the time available for pronunciation in the course." Besides, pronunciation lends itself to integration with almost any type of activity.

Tough the integration of pronunciation to other skills of language is essential for a successful pronunciation instruction; in pedagogy it isn't widely-adopted. In Audio-lingual method, pronunciation was an important skill and seen as a prerequisite to improve speaking skill. In audio-lingual method pronunciation teaching composed primarily of the teaching of segmentals of the target language. The teacher in audio-lingual class used minimal-pair exercises to teach sound discrimination and pronunciation. The suprasegmental features were given in dialogue repetition. With the introduction of more communicative approaches to language teaching, the importance of pronunciation has been better recognized in language classrooms. However, there still seems to be problems about the methods and focus of pronunciation teaching, more than the other parts of language teaching.

The adoption of communicative approaches lead to the better understanding of the place of pronunciation. Accordingly, the aim of foreign language teaching was communication, which can only be achieved with the attainment of a certain level of accuracy in pronunciation.

Together with the change of approaches to pronunciation teaching the ultimate aim of pronunciation changed and the need to speak English has changed, as well. Non-

native speakers of English now outnumber the native speakers of English. This has some implications for ELT pedagogy and raises the need to develop phonological norms and classroom application models for international English (Jenkins, 2002, p. 83). From this point of view, it would be appropriate to say that the ultimate aim of pronunciation teaching is not achieving a native-like accent but comprehensibility.

Many researches indicated that it is impossible for foreign language learners to fully master the target language, pronunciation being the biggest obstacle (Han 2003, Selinker 1972). The generally hold view that a native-accent is not a reachable target has led to the pronunciation to be regarded as a side issue in the language classroom. It is now a generally accepted idea that L2 speakers can never acquire an accent free pronunciation unless s/he is simultaneously exposed to two languages. Although there seems to be few people who can achieve a native-like accent and judged as native speaker by native speakers, it is an extraordinary case (Schimdt, 2006, p. 3).

The importance of pronunciation lies in the fact that it plays role not only the production and but also in the perception of the language, which are both strongly related to two prominent skills of language, speaking and listening. Moreover, Schmidt (2006) states that explicit pronunciation teaching may influence foreign language learning beyond speaking and comprehending and helps learners in decoding and spelling as well (iii).

2.3. Pronunciation Teaching Pedagogy

The sound system of English is studied under two parts, segmental phonology and suprasegmental phonology. Segmental of the sound system are composed of individual vowels and consonants, and the suprasegmental aspect includes word, phrase, and sentence stress, pitch contour or intonation, and rhythm. Stress can be seen in polysyllabic words, which themselves are related to word grammar (as in “responsible” and “responsibility,” for example).

Recently, there have been several empirical studies on the teaching of pronunciation. These empirical studies focus on the different aspect of pronunciation; namely, segmental and suprasegmantal (Derwing et al., 1998). The results of the recent studies indicate that the suprasegmantal features of pronunciation are to be emphasized

over the segmental features for the students to attain a better comprehensibility level in English as a foreign language. This finding suggests that native speakers of English rely highly on the intonation patterns of the language to figure out the meaning. Nowadays, the pedagogy of pronunciation teaching in foreign language pronunciation emphasizes the suprasegmentals over the segmental features of pronunciation and aims to achieve a certain degree of comprehensibility. Moreover, the communicative approach required the integration of pronunciation teaching with the speaking and listening activities. Furthermore, this approach emphasized the teaching of pronunciation gradually and in meaningful chunks

As Harmer (1993, p. 22) states, "Our aim should be to make sure that students can always be understood to say what they want to say. They will need good pronunciation for this, though they may not need to have perfect accents."

2.3.1. Teaching Segmental Features of Pronunciation

The essential features of English sound system are composed of individual sounds, or in other words segmental features of pronunciation, vowels and consonants and suprasegmental features such as stress, rhythm and intonation. The segmental features composed of vowels and consonants yield phonemic distinctions, for example between the English words bit and bet, or shop and chop, or meat and neat. (In contrast to allophonic distinctions in which there is no difference to meaning, however the pronunciation of an individual sound varies with regard to phonetic context.). Diphthongs: vowels in combination, as in near or boy. Consonant clusters, as in school /sk/, train, or empty.

Traditionally, teaching foreign language pronunciation was based on practicing segmental phonology by focusing particularly on sounds which do not exist in the learner's native tongue and using patterns of minimal pairs (Bronstein, 1960). In this audio-lingual method, learners were expected to practice the foreign language sounds in isolation by imitating the model provided by the teacher or a cassette to reach the desired accuracy. Furthermore, the learners are taught the suprasegmantal features with the sentences presented in the dialogs (Seferoğlu, 2005, p. 305).

The audio-lingual method and structuralist view of language led to contrastive analysis between the native and the target language with an aim to presuppose possible difficulties for learners. The features of segmental phonology, which caused a change in meaning, as in the case of phonemic distinction, were generally thought with minimal pair exercises and sound discrimination activities with a special emphasis to inherently difficult sounds that are pointed out to be particularly difficult for a native language group.

These activities can only assure that learner should be able to perceive and articulate the segments under controlled situations. S/he might as well be using this knowledge when in conscious situations, which is matter of the amount of training and concentration at that particular moment. This raises the question whether this explicit ability will eventually become implicit or automatic with more of the same kind of practice or will there be need for other methods.

Although our perceptual systems have a high degree of plasticity, they can be unyielding when learning second languages (Sebastian-Galles 2005). The challenge can be attributed to interference phenomena for the L1 built-in phonological representations (Fledge 1995). Repetitious practice alone is neither sufficient for bridging gaps in pronunciation nor for improving listening comprehension (Eskenazi 1999).

The learnability problem is extensively mentioned in the literature and in the language classrooms, suggesting that as the way the learners are taught does not correspond to the way learners acquire them learners are often unable to learn the structural properties. When dealing with pronunciation, however, an issue of primary concern is whether the adult learner can reach a stage of development in which he is able to internalize the phonological features of the second language.

Previous focus on teaching of the segmental features of pronunciation give way to the misunderstanding that the foreign language learners need to pronounce the sounds of the target language at native speaker perfection. However, later on researches came to have the understanding that the ultimate aim of pronunciation is not perfection to the native speaker level, which cannot be achieved through segmental teaching and they

have changed the ultimate aim to comprehensibility, which is mostly achieved through the teaching of suprasegmentals.

In sum, current pedagogy of pronunciation suggests the teaching of the sounds with minimal pair exercises, listen and repeat and discrimination exercises, which is generally adopted in CAPT as well. The problematic case with the internalization of segmentals is psycholinguistic and a matter of psycho-motor skill development, which can possibly be dealt within the stress-free, individualized context of a CAPT system with a sound pedagogy.

2.3.2. Teaching Suprasegmental Features of Pronunciation

As it has been earlier mentioned in the study, the suprasegmental features of pronunciation play the greatest role in the achievement of comprehensibility and perception in EFL. However, the most challenging aspect of pronunciation teaching has always been the suprasegmentals.

With the introduction of the teaching of lexicogrammar patterns of language holistically, researchers in the pronunciation teaching field began to wonder whether this chunk or holistic view of language can as well be valid for pronunciation training. Widdowson (1990:96):

> Studies in first and second language acquisition suggest that the way learners proceed is to begin with these units as lexical *[phonological]* complexes associated with certain contexts and picks them apart analytically as the need arises. Some are dismantled entirely into separate for generative reassembly in reference to grammatical [phonological] rule, others are partially dismantled but are left as adaptable formulaic frameworks to be adjusted to circumstances; some again remain holistically fixed, essentially large scale lexical *[phonological]* items." (Cited in Seidlehofer and Dalton-Puffer, 1995, p. 141) [Emphasis isn't original]

This view of language, however not immediately, led to some shift of focus from atomistic features of pronunciation to the teaching of holistic features. Seidlehofer and Dalton-Puffer further indicated that

> …..findings demonstrating a correlation between lexicogarmmatical and suprasegmental chunking could validate the current convention held by teacher that the priorities in pronunciation teaching should lie in the suprasegmental area and offer a viable design of actual suprasegmental rather than segmental syllabus for such teaching. (1995, p.141)

This finding implies that the process of the spoken language, that is the integration of the sounds and meaning in the brain is performed by the integration of lexicogarmmatical chunks with the suprasegmental chunks. That is to say, focusing on the suprasegmental features of the pronunciation can yield better impacts on the comprehension level of the students.

Over the past decades there has been a growing awareness among EFL teachers that teaching the segmental features of the language doesn't satisfactorily meet the ultimate goal of pronunciation teaching, comprehensibility. As Gilbert (1993, p. 18) pus it "it is uphill work to learn the L2 sounds in the L1 rhythm" (cited in Seidhofer and Dalton-Puffer, 1995, p. 135.)

Seidlehofer and Dalton-Puffer (1995, p. 141) state that for the communicative aim of language to be realized the low-level elements (segmental) should go hand in hand with higher level elements. Another contribution to this view is made by Vihman (1982) who observed the second language acquisition of an Estonian girl learning. She found out that little girl pronounced the English lexical items like Estonian words, however the whole chunks she produced were not affected by her first language phonology. She (1982, p. 277) states that these strings "quite successfully rendered the superficial acoustic expression of English, even if segments might be misplaced or mispronounced" (Cited in Seidlehofer and Dalton-Puffer, 1995, 142).

As stressed in the study, voice quality and other features of speech which span more than one segment, so-called suprasegmental features are essential to natural-sounding speech in a second and foreign language.

2.3.2.1. The Teaching of Stress

Stress can be defined as putting a higher pitch and uttering the sounds with more muscular activity and more lung compression on a syllable than unstressed one. Native speakers of English can easily recognize the stressed and unstressed syllables unless stress is placed. Therefore, putting stress on the right place is an essential key to be comprehensible. Because of that non-native learners of English need to learn the place

of stress in English both for robust perception and intelligible production of language. Kenworthy (1987, p. 18) states that:

> ….the stress pattern of a word is an important part of its identity for the native speaker. There is great deal evidence that native speakers rely much on the stress pattern of words when they are listening, In fact, experiments have demonstrated that often when a native speaker mishears a word, it is because the foreigner has put the stress in the wrong place, not because he or she mispronounced the sounds of the word. (Quoted in Çelik, 1999, p. 33)

On the other hand, tonic stress which can as well be called 'prominent stress' or ' sentence stress' is very important as well. Çelik (1999, p. 44) states that " The lexical item containing the tonic syllable (tonic word) is the centre of attention in the message. In other words, the tonic word is that word which has the highest information content in the utterance." Therefore, the learner should study word stress and sentence stress together with contrastive stress and new information stress so that they raise their consciousness in the production and perception of language and thus achieve a better performance in English.

In the comprehensibility of speech, unstressed syllables play as much important role as the stressed ones. Adams and Munro (1978) carried out a study to indicate the differences between native and non-native speakers of English; they found out that there are little differences in the duration of stressed syllables; however, the non-native speakers lengthened the duration of unstressed syllables. Furthermore, it is interesting to note that in another study (Anderson 1993) on inter-stress and intelligibility it was found out that native speakers had the shortest average time between stressed syllables and had the fewest number of stressed syllables, and the next group with shortest average of inter-stress interval was identified to be the second most intelligible group after native speakers. The results of theses studies imply that in a pronunciation teaching program with intelligibility as its ultimate aim, we should focus on unstressed syllables as mush as stressed ones. This further indicates that the length between stressed and unstressed syllables seems to play more significant role for an intelligible speech than pitch.

Chela-Flores (2001, p.85) states that the learner should be gradually immersed into pronunciation. According to her this can be achieved by (a) setting aural-oral

intelligibility and (b) starting training at beginner-level. She emphasizes that "instruction is suggested in meaningful units or tone groups other than with isolated segments or words, even for beginner levels.

In an intonation unit, which consists of stressed and unstressed syllables, there are various types of parts of speech. One of the systematic ways stress is placed in English is to do with the content and function words. While some words carry content, a concept, a meaning or designation on its own, the other words indicate a relation, attitude and function when they are used in the context of other words having a concept or content. In other words, the two kinds of words are content words, which include verbs, nouns, adjectives and adverbs, and function words, which are composed of modal auxiliaries, articles, conjunctions, prepositions. This division is also reflected in the placement of stress in speech. While content words are stressed, function words are not stressed because function words don't carry an independent meaning, and they are predictable in the course of discourse and furthermore they are referring expressions (as in the case of pronouns) (Çelik, 1999, pp. 24-25).

The learners can be made aware of this division of words in sentences and its effects on the placement of stress. Furthermore, the weak forms, which is the reflection of this division, and contractions and linking of sounds in the flow of speech are to be taught to students so that they can better perceive and pronounce English. The use of 'schwa' as a weak form is very common in function words such as "and, at, your, can, than, from"....etc. Besides, the contraction of function words such as " I'm, He'd, She'll" are important elements to teach in pronunciation. As it has been mentioned, earlier in the study the teaching of unstressed syllables are as important as the stressed ones since in the flow speech many native speakers make use of them frequently. The function and content word stress and weak forms should as well be taught in context. The learners can listen to native speakers and the teacher can dwell upon the stressed and unstressed syllables. The teacher can also ask them to guess the place of stressed and unstressed syllables and then the students can listen and check their guesses.

The placement of tonic stress seems to be still unsolved problem. However, this unsolved mystery is solved to some extend. There are some systematic ways stress is placed in the flow of speech. The context of the language and the communicative intent

is very determining in the placement of stress. One of the ways, stress and the context of the language interact is the placement of stress on the new information. That is to say speaker generally tend to stress the syllables or words that carry a kind of information which cannot be covered from the previous context of the language. Ladefoged (1982, p. 10) states:

> In general, new information is more likely to receive a tonic accent than material that has already been mentioned. The topic of a sentence is stress likely to receive the tonic accent than the comment that is made on the topic.

Çelik suggest that the term 'accent' in Ladefoged's terminology correspond to ' stress'(1999, p. 16). Therefore, stressed lexical items in a flow of speech are the ones that carry the information about communicative intent and purpose. Furthermore, Bolinger (1968, p. 603) points out that speakers "…depends on stress to highlight the most important and informative *idea* in the sentence.' That is to say new information in discourse is generally stressed. New information stress is very evident in wh- questions and answers. For instance, "Q :When will we meet ? A: We'll meet at THREE o'clock." The fact that new information is stressed can be taught to students by drawing their attention to new information stress in dialogues or monologues. Besides, students can be asked to determine the stress new information patterns upon listening native speakers' speech. In this way learners' ability to perceive and product stress can be improved.

When stress is placed wrongly in a word, the intelligibility of the word is harmed. Furthermore, stress shift in many words in English cause a change in the syntactic function of the words. In other words, in many cases when the place of stress is changed, the parts of speech of the word changes, too. For instance, the word " reCORD" is a verb, whereas the same word with shift of stress ," REcord" , turns out to be a noun. In addition, the placement of stress affects comprehensibility more than the sound of the language. Therefore, in pronunciation teaching, this function of stress is to be focused on. The syntactic originated shift of stress can be taught by providing students many different contexts where these words are stressed differently. Besides, the shift of focus can be indicated with the use of discrimination activities as in the teaching of segmentals.

Yet another way stress is systematically employed to convey the intention and the function of language in discourse is the case of emphatic stress. The language can express the feelings of excitement, attitude, attachment of importance of the speakers for a certain concept or idea in his/her speech. The emphatic stress can be placed on a content word such as a verb, a noun adjective. Besides it can as well be placed on group of function words, namely the modal auxiliaries. In emphatic stress the place of stress shifts from its usual place. For example, / It was very easy/ non-emphatic vs. / It was very easy/ emphatic. Emphatic stress can be used to convey various feelings together with the meaning of the language. The same utterance with emphatic and non-emphatic stress can have different functions. Therefore, students are to be taught the function of emphatic stress within meaningful and authentic language contexts. They can create their own dialogues and act out them to color the language with their own feelings.

The context of the language seems to be one of the most determining factors in the placement of stress in English. Brazil et al. (1980, p. 29) point out that "…a social construct, a closed class of items created by the participants as part of common ground and available and intelligible to them at the time and place of utterance.". In contrastive contexts, any word (syllable), whether it is content of function word, can receive the tonic stress. Contrastive stress depends on the choice of the interlocutors in speech in connection with the time and place of speech. Usually the contrastive stress is performed in connection with contrastive stimulus and the addressee should be able to cover the contrastive meaning from the context. In other words, contrastive stress is created within the context of language with the common sense of the addresser and addressee. For instance; / Q : Are you going to post office?/ , / No. I'll pass by the post office./, here , 'pass by' is contrasted with 'going to'. In the second utterance, the speaker indicates that post office isn't his destination and that he is going somewhere else and most probably rejecting a forthcoming request. Çelik (1999,p. 61) states that " Contrastive stress is an important device since English possesses relatively few syntactic devices to show contrast among consecutive utterances". Other syntactical paradigms such as clefting and fronting can as well be used for contrastive stress." It was her bright make up that made me afraid under the dim light of the bus" and " Her sincerity I appreciate, not her excuses." Contrastive stress as in the other types of stress

can be taught by making use of contextual and authentic dialogues and asking students identify contrastive stress, act out ready-made and their own dialogues.

2.3.2.2. Teaching Intonation

Intonation can be defined as the change in pitch. Brazil et al (1980, p. 128) stated that intonation "as a function of discourse, with implications for context and for moment by moment assessment of the communicative value of each part of each utterance." The function of intonation in conveying the meaning and changing the functional use of language in different contexts make it more prominent for communicative competence. Therefore, the teaching of intonation is essential for the acquisition of communicative skills.

Çelik (1999, p. 1) defines intonation unit as " …a unit of speech or a part of stretched speech which is delaminated, bounded by pauses; the pauses are taken to indicate the boundaries, the start and finish, for a particular intonation unit." One of the most striking characteristic of intonation units is that they coincide with clauses and phrases (Halliday, 1967, p. 201). Therefore, the teaching of intonational units can be correlated and integrated with the teaching of clauses and phrases. The boundaries of each intonation unit are marked with pauses and they all include a tonic, emphatic or contrastive stress. Besides pauses, tone is one of the primary determinants of an intonation unit. Roach (1983, p. 113) defines tones as a unit of speech bounded by pauses has a certain pattern of voice movement, of music and rhythm, associated with the pitch of voice. In English, five types of tone are determined rise, fall, rise-fall, fall-rise, and level tone.

Tones are associated with certain intentions, attitudes of the speaker. Tones are functional in language, speakers signal whether to refer, proclaim, agree, disagree, question or hesitate, or indicate completion and continuation of turn-taking, speech. A major distinction is between fall and rise tones. While a fall tone is associated with concepts of completeness, finality, definiteness, and so on, a rise tone indicates incompleteness, indefiniteness, continuity, invitation for the addressee to speak. While stress applies to syllables, tones apply to utterances that usually have clauses in it. The use of tones is an indispensable feature of speech, which is an important discourse strategy to communicate effectively. Therefore, for non-native learners of English

having proficiency is a requirement to achieve a better communication and sound natural. Just as the other suprasegmental elements, the tones are to be taught in context.

As Levis and Pickering state (2004, pp. 506) "The intricate modulations of voice, with its ranges and movement of pitch, its subtle nuances of voice quality and its expressiveness of staccato or lengthened syllables have often seemed to hold the key to language meaning." It is now generally accepted that essentials of intonational meaning can be understood with reference to discourse (e.g. Brazil et. al., 1980, Chun 2002). The teaching of intonation was generally based on the recognition of tonic syllable which stands out the other stressed syllables. It has been recently recognized that there are some consistent, systematic differences between the way intonation functions in discourse and how it functions in sentence and in isolated phrases. This means that traditional sentence level pronunciation teaching may not be able to meet the needs of the learners who need to develop awareness of explicit connections between intonational choices and the meaning conveyed by them. Çelik (1999) proposes the teaching of intonation in intonation units and indicates the function of pauses in connected speech. He further suggests the correlation between grammatical paradigms such as relative clauses, "that" clauses and coordinating sentences. In his book, he designs exercises teaching intonation boundaries which require students to mark intonation in monologues and dialogues. These exercises are effective in the sense that they raise the function of intonation in discourse.

However, it has been demonstrated that even trained phoneticians cannot point out the tonic syllable in a sentence consistently. This case suggests that tonics are the stressed syllables in lexical items. Chela de Rodiriguez (1979) in a study to identify the recognition of suprasegmental found out that tonic units cannot be identified correctly even by the native speakers in a context and when it indicated contrast. Therefore, the teaching of intonation should be done in contextual language and can as well be associated with some visual aid (cited in Chela-Flores, 2001, p. 89).

One of the various reasons why the teaching of intonational features of English spoken discourse went unheeded in the language materials and classes would be that what is to be taught is not as salient as, say grammar. Underhill (1994, p. 75) states:

> The teaching of intonation seems to have been characterised by an even grater uncertainty and lack of confidence than the other areas of practical phonology. I think this is because *we are not in control of a practical, workable and trustworthy system through which we can make intonation comprehensible*. (Quoted in Çelik, 1999, p.1) [Emphasis mine]

As it can be understood form the words of Underhill, the most problematic case with the teaching of suprasegmentals is the lack a sound instruction system and intonation cannot be made comprehensible to students. Today many speech-visualizing technologies offer a promising way to solve this problem. With the wide-spread computer availability, learners can now both hear and see intonation. Currently, pedagogical oriented programs such as VisiPitch (Kay Elemetrics Corporation, 2004) are commercially available and programs such as WASP (Huckvale, 2003) and PRAAT (Boersma and Weenink, 2004) are freely downloadable.

2.3.2.3. Teaching Rhythm

As it has been mentioned in the pervious sections in this chapter, stress has some tendency or rule-like behavior to occur on some certain patterns, which can, according to Roach,1983, p.103), be called as rhythm. In English, the stressed syllables occur in certain intervals of time. In other words, in an utterance they are placed in such a way that the time spent between each stressed syllables is equal or nearly equal. The rhythm unit covering a stressed syllable and the syllables up to the next stressed syllable is called 'rhythmic unit'. That is why English is called a 'stress-timed' language.

Rhythm as another feature of suprasegmentals of English seems to be as much important as intonation for an intelligible pronunciation to be achieved. The basic features of rhythm can be defined as syllable length, pause, stressed syllables, full and stressed vowels, pause, linking and blending sound between words, and how words are made prominent by accenting syllables and simultaneously lengthening syllables.

Rhythm is perhaps the most difficult aspect of pronunciation teaching as it is hard to perceive and concentrate on rhythmic patterns as chunks. As rhythm is superimposed on the pattern as a whole, it is not easy to represent rhythmic patterns with near equivalents in the language (as in the case of minimal pairs). This is even possible with the pitch variations (as in the case of Peter bought a new car vs. Peter bought a new

car.) However the case is different for rhythmic patterns which vary along different lexical structures. This makes it difficult to direct student's attention to rhythmic patterns. Besides, rhythm is notoriously difficult for all EFL learners regardless of their native language. Therefore, it would be more logical to starting point for the teaching of pronunciation (cited in Chela-Flore, 2001, p. 93).

In a study Neufeld (1987) found that the discrimination and production articulatory and prosodic features of language, including rhythm could be achieved better if they were taught without explicit reference to meaning, pronunciation and grammar (cited in Chela-Flore,2001, p. 93). However, within a full context of second language curriculum, it was found out that the phonetic instruction can improve discrimination of segments and intonation, but not rhythm, which is because of the inherent challenge of discrimination of rhythm.

Within the context of foreign language learning, phonetic instruction proved to be effective in the improvement of discrimination of segment and intonation, however not in the discrimination of rhythm (Champain-Muzar, Shenierderman and Bourdages, 1993). This failure was attributed to the "extremely difficult nature of rhythm discrimination" (cited in Chela-Flore,2001, p. 93).

Rhythm discrimination task is even difficult for native speakers of English. To deal with this difficulty material developers used body movement or kinesthesia to indicate the difference between the length of stressed and unstressed syllables.

Chela-Flore proposes a model to teach pronunciation in which the shortening and lengthening of stressed syllables in meaningful units or chunks are taught first .Once the learner achieved a certain level of control over rhythm patterns it will be easier to focus on other elements of rhythm such as blending, linking, weakening of unstressed syllables. It has been even proved that once learner gains a certain level of control over rhythm, they will easily learn segmentals and intonation (2001, p. 91).

This can be better achieved through visualization of the length of the stressed and unstressed syllables with help of dots and dashes. However, in the foreign language contexts where we generally lack native speakers it is generally hard to discriminate

rhythm and intonation let alone the visualization. That is why computers are especially of curial assistance in the teaching of pronunciation. Computers can store virtually unlimited amount of examples of pronunciation patterns and visualize them to a certain extend. This is an issue which will be mentioned in the next section of this chapter.

2.4. The Integration of Pronunciation

The integration of the pronunciation program to listening-speaking activities of a communicative course is also important. It has been highly recommended that pronunciation be taught as an integral part of the language course. Generally students deal with the sound system of the new language on their own. Formal pronunciation teaching is given at intermediate or advanced level with short-term objectives.

Other than teaching pronunciation separately and as a remedial solution for bad and/or fossilized, teaching pronunciation at the beginning and integrated level would yield better results on the part of the learner. Chela-Flores (2001, p. 85) indicates that the integration of pronunciation teaching can be achieved by reversing teaching approach, that is rather than first choosing a phonological feature and then finding multiple occurrences to practice them, it is better to focus on immediate pronunciation needs in the aural-oral context of the language course.

The integration of pronunciation to listening-speaking activities at the beginning level would not interfere with the vocabulary and grammar learning as they include similar vocabulary and structural items. Furthermore, focusing on the communicative value of pronunciation will make pronunciation teaching more meaningful.

One of the most important advantages of the integration of pronunciation to other skills is that various aspect of pronunciation can be recycled throughout the whole program. This will most probably lower the anxiety and time consuming efforts for perfection. Communicative courses in English try to integrate pronunciation into the course; however this is sometimes done after all activities are covered in each unit. As Brown (1991, p. 3) states, it “is thrown in at the deep end”. The learner attempts to say whatever the speaker says on a word basis without its real language context. This is of

course pointless to make students repeat without any specific pronunciation training (Chela-Flores, 2001, p. 89).

The effective integration of pronunciation can be achieved by giving priority to factors which contribute to the intelligible communication. That is, the factors that cover the utterance as a whole, the division of stretch of speech into meaningful chunks are to be focused on so that the learner can process them as units. The suprasegmental features which help to organize language into units of information are to be emphasized, as well.

In order to integrate pronunciation gradually with other communicative skills in meaningful skills, as Brown states (1977, p. 87) "coherent syntactic structures which the listener must process as units" can be seen as a connection point with pronunciation and other areas of language (cited in Chela-Flores, 2001, p. 87). Teaching meaningful units seem to be more appropriate at all levels of proficiency as it is has more immediate impact on comprehensibility. Anderson-Hsieh et al. (1992) have provided empirical evidence in favor of suprasegmentals for comprehensibility level. Furthermore, in their study Munro and Derwing (1995) indicated that intonation seems to be very important for the native speakers' judgment of comprehensibility and accentedness (Chela-Flores, 2001, p. 91).

If our ultimate aim of pronunciation teaching is the achievement of comprehensibility together with accuracy and fluency, then we should attach the greatest importance to the teaching of the pronunciation features that affect comprehensibility most. As we have mentioned elsewhere in the study, suprasegmental features play the biggest role in the native speaker's judgment of comprehensibility. As Gilbert (1993, p. 43) points out "…..time spent helping students to concentrate on the *rhythm and the major intonational road signs* is more important than any other efforts to improve their pronunciation." (italics in original, cited in Chela-Flores, 2001, p. 89).

2.5. A Brief History of CALL and CAPT

In spite of the fact that computer technology has been used for language learning and teaching since the 1960s, the use of computers for language teaching and learning has gained more importance only in the last decade or so. Gamper and Knapp (2002, p.329)

defines CALL as "Computer-assisted language learning is a research field which explores the use of computational methods and techniques as well as new data media for language learning and teaching." CALL has started to be regarded to be a field of study on its own in the last one or two decades. Warschauer and Healey state that:

> A decade ago, the use of computers in the language classroom was of concern only to a small number of specialists. However, with the advent of multimedia computing and the Internet, the role of computers in language instruction has now become an important issue confronting large numbers of language teachers throughout the world. (1998, p. 57)

The use of multimedia and the internet made CALL more attractive and interactive. Especially, the use of the internet has revolutionized CALL, just as it has the other walks of life. Today, there are commercially available on-line programs which allow learners to interact with native speaker in virtual on-line classes (e.g. Global English, available at: www.globalenglish.com). When we look at the developments in Computer Assisted Language Learning (CALL), we see that there have been changes in the various aspects of CALL since the 1970s including not only how language is viewed and the English teaching paradigm followed, but also the type of technology used, the type of activities provided, and the main objectives of teaching and learning. The following table represents the stages CALL has gone through years.

Table 1. The three stages of Computer Assisted Language Learning (CALL)

Stage	1970s-1980s Structural CALL	1980s-1990s Communicative CALL	21st Century Integrative CALL
Technology	Mainframe	PCs	Multimedia and Internet
English Teaching paradigm	Grammar-translation and audio-lingual	Communicative [sic] language teaching	Content Based, ESP/EAP
View of Language	Structural (a formal structural system)	Cognitive(mentally constructed system)	Socio-cognitive (developed in social interaction)
Principle use of Computers	Drill and practice	Communicative exercises	Authentic Discourse
Principle objective	Accuracy	[Accuracy] and fluency	[Accuracy] and Agency

Note: ESP=English for Specific Purposes; EAP= English for Academic Purposes. From Warschauer, 2000. (cited in Seferoğlu, 2005, p. 305).

With the advancement of computer technology and the use of computers in the foreign language classrooms has increased. This has brought about many questions as to what the role of computers in EFL classes. The role of computer as a tool is based on behaviorism and programmed instruction. The publication of Skinner's article (1954) is said to have triggered the programmed instruction movement. Early CAIs (Computer Assisted Instruction) regarded computer as an instructor and typical computer activities were drill and practice exercises. The role of computer as a tool or as a tutor has been discussed widely. Tutoring systems have developed under such headings as ICAI (Intelligent Computer Assisted Instruction) and IT'S (Intelligent Tutoring Systems). In the last decade or so the term ICALL (Intelligent Computer Assisted Language Learning) has appeared with Artificial Intelligence (AI) expanded to include language learning system. While the first systems mainly focus on expert systems and Natural Language Progress (NLP) systems, today many CALL systems make use of Intelligent Tutoring Systems (ITS), Automatic Speech Recognizers (ASR). (Gamper and Knapp, 2002, p. 331).

The intelligent tutors are temporary substitutes for teachers and this is outside the classroom. On the other hand, the tool role for CALL is non-directive and neutral. The tools are directed by the teacher or the learner has the self expertise to direct themselves. In the role of tutor, the methodology of language teaching can be predominantly expressed in the design of CALL. With this advancement of both the technology and the methodology, CALL has emerged as a field of study on its own, with its own pedagogy, materials, curriculum, evaluation and implementation. We are moving into an entirely new phase, the most distinctive feature of which is the Intelligent Tutoring System or ITS for language learning, Intelligent CALL. Today's CALL systems are based on computer-human interaction and make use of artificial intelligent systems by building models for what the learners know at a particular phase and provide instruction accordingly. Furthermore, multimedia facilities of computers made it possible to bring real-life situations into use of learners and made foreign language learning more

enjoyable and thus successful. Beyond all, the internet has revolutionized CALL, just as the other facets of life, and has made it possible to connect to a virtual classroom.

Rapidly evolving technology offered great promises for the development of more efficient CALL by combining research in educational technology, artificial intelligence, computational linguistics and speech recognition technologies.

With these insights brought into CALL, a number of large CALL projects came into being. The highest profile of these in the late 1980s was the industry-funded Athena project in Massachusetts Institute of Technology in the U.S. It was a combination of video and natural language processing technology. This project officially ended in 1994 because NLP is hard to develop. Later on, university of Delaware received funds and created video-based CALL materials for several foreign languages. In the UK, Technology Enhanced Language Learning (TELL) Consortium developed multimedia language learning materials and a number of small projects were also carried in Canada.

In 1988 the Computers and Teaching Initiative Centre for Modern Languages was established in the UK at the University of Hull and shortly after its journal ReCALL appeared. In the mid 1980s, *On-CALL* appeared in Australia. Later on, a conference in Europe at the University of Exeter gave birth to a journal based there, *Computer Assisted Language Learning: An International Journal*, in 1990. Books on CALL first made introduction to CALL for teachers and applied linguists. After that, these books evolved from computer issues to more pedagogical issues, philosophies and theories of CALL. The studies further led to the development of Computer Assisted Testing and Computer Assisted Pronunciation Teaching. However, the application of technological advancements into the language classroom still necessitates a sound pedagogical framework together with technological expertise. This applies to the other sub-branches of CALL one of the most prominent is Computer Assisted Pronunciation Teaching or Training (CAPT).

2.6. CAPT and Pronunciation Teaching Pedagogy

Together with these advancements of Computer Technology, Computer Assisted Pronunciation Teaching (CAPT) has a special promise for foreign language instruction. First of all, CAPT is fast and provides immediate and individualized feedback.

Furthermore, learners' performances can be stored and referred back to see the development. The analysis can be better because the performance of the learners is repeatable and the analysis is precise and reliable as it is the same every time. Furthermore, the learner can attempt to utter the target language as many times as s/he wishes.

Furthermore, the CAPT provides a more authoritative and salient feedback in the sense that it comes from the machine. The salience of the feedback lies in the fact that CAPT employs visual and auditory mediums as well. Moreover, the computer can individualize the pronunciation instruction by basing it on the analysis of individual student problems and past trials and performance. Besides, computer can make a much wider variety of presentations than a human trainer. Especially, when the teacher is non-native speaker of English, for non-native teacher it is difficult to individualize pronunciation teaching.

Within the stress-free and individualized learning environment of CAPT, the learner can increase the automoticity of speech and perception. Furthermore, CAPT can provide a great variety of target model language pronunciation allowing for dialects, varieties of language. Students can hear from a wide range of native speakers and adopt their pronunciation accordingly. Besides, the learner can develop a certain level of confidence by developing skills individually.

Table 2. Properties, Potentials and Limitations of Computer-Aided Pronunciation (CAP)

Pros	CAP is	Cons
Motivating	Quick	Restricted to some features
Stimulates effort	repeatable	Limited for whole-class use
Raises awareness	Precise	Analysis must be adjusted for
Increases understanding	Reliable	different voices
Enhances learnability	authoritative	No baseline for acceptable
Increases automoticity	highly salient	Performance
Fosters precision	multi-modal	Weak curriculum
Builds confidence	individual	Focus on decontextualized
Develops skills	Variable	articulatory mechanics

Adopted from Pennington (1999, p. 4)

Despite of these criticisms, computer technology can be usefully and successfully integrated into a communicative curriculum. Technology provides the learners with a language learning context where they can take risks and follow their own path without the scrutiny of the teacher. Furthermore, it also allows the native speaker model readily available in proper contexts at any time.

Employing computer-based pronunciation programs can benefit students and teachers in that such programs make it possible to address individual problems, allow students to work at their own tempo, and may lead to reduction in classroom anxiety (Neri 2002). Overall, CAPT allows for increased practice time to "more closely approach the advantages of total immersion learning" (Eskenazi 1999). Success in the language lab, or any self-study environment, requires appropriate feedback. Early forms of computer-based instruction featured aid such as head diagrams and visual models – aids that have questionable educational benefit (Chun, 1998).

Later forms of CAPT included automatic speech recognition (ASR) features such as spectrograms or oscillograms that look impressive but may be uninterruptible to learners (Eskenazi, 1999; Hirata, 2004; Neri, 2002) and may be better suited to practice than learning (Hincks, 2005). The next generation of CAPT features technology that allows learners to hear their own voices, in real time, modulated into the frequency of the target language. Rather than relying on visual models or graphical representations, students learn to listen and speak in a second language by following the sound of their own voices. Technologies such as SpeedLingua close the gap between listening and speaking, removing the barriers to intelligibility and comprehension. "Face to face" dialogues are possible in the system called Conversim (Harless et al.,1999). The system provides three possible questions the learner shall ask and a video instructor helps with the pronunciation of the selected question.

2.6.1. Speech Visualizing and Speech Recognition Technology

The use of speech-visualizing technology in second language intonation teaching dates as early as the 1960s. Leon and Martin (1972, p. 143) state that " The visual presentation of intonation has permitted us to transpose a specific auditory gesture

common to a closed linguistic community into a visual capture capable of being decoded by a universal semiotic community"

In spite of these substantial positive attributes, CAP remains more a set of exciting potentials for instruction than an exciting reality. Although there have been some interesting developments in instructional applications of CAP, especially in the last decade, this medium—to a greater extent than other computer applications for language pedagogy—has been slow to attract the attention of top-notch instructional developers. When compared with the innovative software developed in the last twenty years for teaching science and mathematics or the creative advances in computer arcade software during the same period, CAP is clearly lagging behind mainstream instructional and entertainment applications of computer technology. Thus, it could be said that CAP has yet to achieve a state-of-the-art status in language instruction.

With the increasing speed and memory of available software, ASR technology has become mature to deliver relatively reliable results and with its ever decreasing price it has become more affordable, thus many CAPT systems have adopted them. First of all speech recognition is immediate and individualized.

In their article Gamper and Knaap (2002) distinguish between two types of speech recognition namely; discrete and continuous. Discrete one allows analyzing single patterns which are pre-determined in the system. This kind ASR can be used to train pronunciation in non-interactive contexts. On the other hand, continuous speech recognition attempts to analyze free and fluently spoken speech. However, identification of free speech is beyond current technology, the system can analyze free speech to some extent if it can expect certain kind of speech.

As already mentioned in the study, researches into discourse have demonstrated that intonation is to be studied at discourse level. Levis and Pickering (2004) carried out a study to indicate the use of intonation at discourse level. In their study, they made use of speech-visualizing technology in order to show how discourse-level intonation patterns can be cooperated by the use of sentence level texts. They made four readers read lists of sentences and the same sentences forming a coherent context. However, their results show that the sentence level stress-patterns get into the way of discourse level

intonation patterns. Besides, their study implicates the efficiency of speech visualizing technology and discourse level intonation instruction.

An automatic system may be used as a complement to the human teacher in pronunciation training. In pronunciation teaching the teacher must provide a positive learning atmosphere, explain the differences between the segmental and suprasegmental features of L1 and L2 while the computer takes over those aspects of pronunciation practice. However, there are some limitations with automatic speech recognition which will be dealt with under the heading of the issue of feedback.

Intonation, long thought to be a key to effectiveness in spoken language, is more and more commonly addressed in English language teaching through the use of speech visualization technology. While the use of visualization technology is a crucial advance in the teaching of intonation, such teaching can be further enhanced by connecting technology to an understanding of how intonation functions in discourse.

2.6.2. The Issue of Feedback in CAPT

The lack of consensus on the definition of corrective, implicit, explicit or metalinguistic feedback makes the issue of feedback particularly remain a controversial matter in CALL. Recent studies indicate that recast – repetition with change seems to be the most common type of feedback. Recast in pronunciation feedback is efficient because of the fact that it doesn't interrupt the flow of communication; it is immediate and allows for the learner's comparing and noticing the difference. A study by Lyster (1998) on recast as feedback indicated that it has the highest level of uptake for phonological errors, while achieved lowest level of uptake for grammatical and vocabulary errors (cited in Neri et al., 2002, pp. 447-448).

Furthermore, Lyster's study indicates that simply reformulating the mispronounced utterance can yield very positive results on the learners' self-correction of their pronunciation mistakes. Providing feedback to students' mistakes doesn't simply require making a judgment between correct or wrong. Students should know the reason behind. Besides, the teacher should not and cannot pinpoint all the mistakes of the students because of the embarrassment and discouragement it will bring on the student and the time limit.

For pronunciation the selection of errors to be corrected should be based on the ultimate aim of pronunciation training, that is comprehensibility. The specific L1 and L2 of the foreign language learning context, the degree the errors hinder comprehension and the persistence of the errors should be the basic criteria for us. As for the segmental and suprasegmantal errors, the researches indicate that they both influence comprehensibility so they should both be indicated as pronunciation errors. For ideal pronunciation teaching and learning, there should be a stress free environment and students should be provided meaningful input and receive immediate feedback.

CAPT can offer a lot of advantages over classroom instruction. First of all, it provides stress free environment in which the learner can deal with individual problems repeatedly. Second, CAPT allows for individual pace of the learner. Third, the stress free and individualized environment reduces the foreign language learning anxiety. Furthermore, the performance of students can be stored to the computer which can later be examined by the teacher. Finally, the students receive feedback from the computer in the immediate time of the learning.

Some CAPT software provides immediate feedback in the form of graphic displays and waveforms and compares it with the previously stored of a model. This visualization can help adopt their pronunciation features to match the model and thus attain a better level of pronunciation.

However, there are some problems with the visualization of the features of pronunciation. First, as the system analyzes the incoming speech signal without recognizing it, there is no guarantee that the student uttered the intended sentence. Besides, as the system shows the waveforms of corresponding to the model utterance it wrongly suggests that the ultimate aim of pronunciation is to match waveforms. However, the waveforms of the good pronunciation of the same sentence can have different waveforms or spectrograms.

Neri et al. (2002) state that

> …., even students who have received some specific training are likely to have a hard time deciphering these displays and extracting, from these raw data, the information needed to improve pronunciation: correcting articulatory behavior on the basis of spectrograms and waveforms is

particularly difficult because there is no simple correspondence between the articulatory gesture and acoustic structure in the properties displayed. (p.453)

Because of the limitations of current ASR technology in CAPT, the error detection can be performed with a limited degree of detail. Reliability and consistency in error detection are of crucial prominence as a system reacting to same mistakes differently. Currently, some CAPT software provides a very limited ASR or some completely abandoned as it can be confusing for students. Thus, future CAPT systems should focus on employing a better Automatic Speech Recognition (ASR) System that can robustly detect the errors.

2.7. Principles of CAPT

Some of the capabilities of CAPT are unique to the electronic medium in a simple or in a combined way. However, the integration of a sound CAPT system or even traditional pronunciation teaching lacks appropriate background. Technology aspect of CAPT has been a rather controversial issue in the field of EFL. Some researches criticize CAPT for weak pedagogical theory behind. According to many researches, the greatest problem with CALL is the lack of pedagogical guidelines to better employ technology to language teaching context.
In his article, Pennington (1999) suggests the following principles for CAPT.

(1) Start from a theoretical position
(2) Establish a baseline for pronunciation
(3) Set an overall goal for performance
(4) Build in specific targets for performance
(5) Build skills in stages
(6) Link pronunciation to other learning and communicative goals
(7) Design on a principled curriculum
(8) Design based on creative use of properties of computer medium
(9) Raise awareness of contrast with L1 and range of targets for L2
(10) Provide for exploration of database

The first principle Pennington suggests is that CAP should start from a well-articulated theoretical position. He notes that most CAP appears to have been developed

without a sound theory. Current CAPT systems generally adopt a segmental or low level performance phenomenon.

An alternative to this segmental view of pronunciation teaching is a theory focused on suprasegmentals. Accordingly, the teaching of suprasegmentals- intonation, rhythm, rules of linking words will be more beneficial than the teaching of individual sounds. Besides, pronunciation is a key element of one's self-image and the image one reflect to others. Therefore, pronunciation is much a social phenomenon than a purely mechanical one. Besides, it is an essential element of pragmatic competence, and pronunciation errors affect communication. CAPT systems should, therefore, integrate pronunciation teaching into a communicative context of language and should focus on suprasegmental features of language.

The second point in an ideal CAP is to have a wide-scale pronunciation basis with reference to one or more accents. In accordance with the language learning and purposes of the learners s/he might want to choose to practice a specific accent in parallel with his/her target foreign language community needs. Therefore, an ideal CAP should provide a wide range of choices for the teachers, learners or language curriculum goals.

The third principle is that the developer of a CAPT system should set a goal for performance should set an overall goal for performance. The goal is to be in accordance with the learner characteristic such as proficiency and needs. Besides, it can be determined as a global goal or else focused on particular grammatical structures, conversational routines, or other

This goal should be determined by the learner's characteristics, such as language proficiency and needs. The pronunciation goal may be global or else focused on particular lexis, grammatical structures, conversational routines or patterns; or on developing a certain type or types of skills, such as asking different types of questions, disambiguating information by pronunciation, etc. A different set of goals can be identified in terms of task completion such as making phone calls, making formal job interviews and so on.

Furthermore, setting a goal for pronunciation in CAPT is to deciding whether to focus on intelligibility, accuracy or fluency. Almost all CAP systems focus on accuracy, which has no specific theoretical basis or communicative goal beyond. Furthermore, in spite of the fact that focusing on individual phonemes usually disrupts fluency, the accuracy focus is most of the time on segmental features. Besides, if the learner concentrates on phonemes at the expense of excluding suprasegmental features such as intonation, rhythm and the stress, s/he will be not be able to communicative effectively.

Learners achieving a certain level of fluency but not intelligibility accuracy can be reasonable goal, assuming the problem with intelligibility is related with the articulation of individual sounds. However, it must be born in mind that intelligibility is a priority over accuracy and that it requires a shift of focus from segmental features to suprasegmental ones. Therefore, intelligibility and fluency rather than accuracy are to be the goals for pronunciation training.

The fourth principle is to set certain criteria for performance achievement at each level. In other words, what performance will count as having achieved or made progress towards a defined level is to be determined beforehand. Therefore, it must be determined how far can the leaner diverge from a visual target and stay within an acceptable range of intelligibility and within parameters of a specific variety or dialect of target language. In addition, the developer should also consider items, structures, skills or tasks as indicators of the learner's progress.

Fifth point is to build skills, targets and tasks within each stage. For instance, in each step considering the psycholinguistic difficulty of developing a foreign language pronunciation skill, the developer should move from easier to more challenging tasks or activities. Current CAPT systems rarely have a basic pedagogical design and almost none envisages of pronunciation training as including pre-production, in-production and post-production phases. Actually, most of them are decontextualized articulation exercises without providing any smooth and related passages between learning stages.

Thorough pre-production or pre-communication learners get familiar with schemas and set models of utterances in their mind. This kind of advance training can include video and listening activities or even some repetition to build neurotic links in the mind, which can be activated fluently in further fluency activities. In in-production phase, the

learner is provided with immediate feedback the during production so that s/he can achieve automaticity and fluency.

In-production training is particularly important in that it provides an immediate and personal feedback which cannot be achieved in traditional language classrooms. Furthermore, it makes personal progress tracts possible for each leaner.

To achieve this, CAPT systems can simply indicate appropriate groupings of words in flow of speech highlighting the places of possible linking and pausing on the screen. Furthermore, as an additional feature text can be added to the screen with possible timing between clusters and pause-points. The learner can be required to match his utterances with the text as it appears on the screen. Rhythm and pitch contours can also be visualized on the display.

In-production is essential as it provides feedback to learners. The feedback can be in the form of comments based on a componential analysis of fluency such as 'Too Slow,' 'No Linking,' 'Too Many Pauses,' 'Insufficient Variation in Pitch,' etc.

For in-production as well as pre- and post-production instruction, exercises should be developed on databases of real speech in different contexts; e.g., as described by Jones (1996).

The sixth point is to integrate pronunciation to other learning and communicative goals such as vocabulary, grammar, discourse and pragmatics. For non-electronic context there are many books teaching phonology with examples of such a linkage. Therefore, it wouldn't take a great creativity to adopt these ideas to computer medium.

The seventh principle of CAPT pedagogy necessitates that the design be based on a curriculum linked to creative use of the possibilities computer technology offers. However, CAP designers adopts a curriculum-as-technology or 'minimal technology' approach, whereby the technological application is matched to pre-existing curriculum and teaching ideas (thus underutilizing technology) or a technology –as-curriculum or teaching approach, in which the technology is seen as providing its own curriculum or teaching approach.

Another essential principle requires that CAPT system should be based on a principled language learning curriculum such as a task-based or communicative syllabus. Furthermore, an ideal CAP should raise an awareness of the contrast between the target variety and native language. Besides, it should indicate a range of acceptable targets and their social targets. Learners can be provided with a specific set of challenging sounds or patterns of pronunciation, which are particularly difficult for a group with a certain native language.

Finally, an ideal system should be exploratory, especially for exploration of authentic video or audio database. Such an exploratory feature of CAP can lead to more individualized training and promoting learner independence and control.

2.8. CAPT and Listening

This study attempts to find the teaching of pronunciation on the perception of learners that is the listening comprehension of the learners. The effects of pronunciation on foreign language listening, as far as researched, have not studied before. By training the ear to the frequencies and other key qualities of the target language, the stage is quickly set for accelerated production. In order to best apprehend the fundamental differences between languages, “it would be helpful for a student to hear his/her own speech with correct prosody” (Sundström, 2005, p. 50). With new technologies, such as SpeedLingua, it is now possible for students to hear their own speech in the correct prosody in real time.

Therefore, one can question the link between the teaching of productive skill pronunciation and the perception skill listening. This will be handled under the following headings.

2.8.1. Language Processing

The process of the language input in the mind has always been a concern for language pedagogues who seek to find a more sound and consistent framework of language. For a foreign language, understanding the basic tenets of the language processing in the brain has a lot of implications for the methodology. The encoding and decoding of the message in the mind of the people requires a competence of both

semantic and phonological features of the language in question. Listening requires the interpretation of the context of the language together with the association of the sounds with their semantic equivalents. When people hear a sentence, for example "The government seeks to find ways to curb inflation", they believe they hear a sentence composed of phrases, words, sounds or in other words, they believe they hear discrete units. However, this is simply not the case with process of the language. Why don't they hear "ment-seek" or " curbin –flation" ? That is to say, the meaningless bits of acoustic information are transformed into meaningful units.

The perplexing structure of how brain does this is not fully understood yet. However, as Hulstijn (2003) states " becoming a good listener is , in essence, a matter of building a huge network of brain cells capable of computing probabilities of possible 'language like solutions' " (p.414). For example, figuring out " government seeks" but not " mentseek" or " curbin-falation" and many other possibilities.

It is obvious that both local acoustic information and sentence context influence our ultimate interpretation of sentences. A recent study (Borsky et al., 2000) on the unfolding of message in the phonological context indicated that phonological processing is initially context-independent but is followed by rapid context integration. They investigated the interaction of local acoustic information and sentence context during spoken language comprehension. The target stimuli consisted of speech segments that could be categorized as either "goat" or "coat" embedded in auditory sentences biased toward one or the other interpretation, for example:

(1) Goat-biased: The busy dairyman forgot to milk the (goat/coat) in the drafty barn.
(2) Coat-biased: The careful tailor hurried to press the (goat/coat) in the cluttered attic.

The result of this study indicates that the context o language doesn't play role in the initial phonological understanding of the language. Therefore, the teaching of both segmental and suprasegmental features of language enables the perception of the incoming speech more robustly and thus better and faster integration of it with semantic and contextual information available. This will further improve learners' ability to

comprehend the incoming speech as they will be simultaneously processing the language and leaving enough time for the upcoming speech to be processed.

2.8.2. Language Perception and Production

As we have already mentioned in the study, the teaching of pronunciation is both important for the reception and production of the speech. Listening as a receptive skill can be acquired earlier than speaking, which is productive skill. That is why, in these studies the effects of pronunciation teaching on speech perception, in other words listening comprehension, and is examined. Çelik (1999a, p.1) points out that " Listening skills in English require an ability to identify stressed syllables, tonic stress in an utterance, and tones." Listening comprehension is two fold in the sense that it requires the integration of the perception of the incoming speech and the interpretation of the meaning using the semantic and contextual information available. Current methodologies on the listening comprehension emphasize the bottom-up and top-down process and schemata activation in the brain. These approaches to listening, however, cover only one part of the listening comprehension: making use of semantic and contextual information. We as language teachers generally hear our student complaining "I missed the rest of the speech as I was trying to understand the first part". This because they haven't yet become fast enough to process the foreign language as it flows.

As Pennington and Esling (1996, p. 154) states that "Communicative competence, or what is generally referred to as 'communicative competence", comprises many different aspects of linguistic performance, taken broadly to include both comprehension and production of speech." Communicative competence has two folds speaking and listening and two aspects "mechanical" and "meaningful". The mechanical aspect of communication requires learner to discriminate and produce the sounds of language and to tie them together prosodically in fluent strings of sounds comprising syllables, words, phrases, and longer utterances.

The mechanical aspect of communication requires the decoding of sounds and comprehension of fluent stretches of speech. Therefore, the ability to discriminate target language sounds and knowledge of the ways sounds are linked in speech and of the suprasegmental properties such as tone, pitch, rhythm and stress, can lead to the

achievement of pronunciation goals. In sum, teaching pronunciation seems to contribute to listening comprehension of the learners and that is why this study attempts to find out its effect on intermediate learners listening comprehension. Furthermore, as this study employs computer in the teaching of pronunciation, between the type of input in CAPT and the listening comprehension exams are similar in that they generally both use native speaker's production of the target language.

CHAPTER 3
METHODOLOGY

3.1. Introduction

This study aimed at determining if pronunciation is effective in terms of improving students' listening comprehension. Therefore, it examined the difference between there groups of students, two of which were taught segmental and supra-segmental features of pronunciation in Computer Assisted laboratory, respectively. In addition, a third group which had no specific pronunciation served as a control group. The purpose was to investigate the advantages of CAPT and the effect of shift of focus in pronunciation teaching. Consequently, this chapter describes the research design, subjects, materials, and the data collection procedure.

3.2. Research Design

In order to test the hypotheses of the study, two experimental and a control groups were formed. Each groups consisted of fifteen students at early pre-intermediate level. Prior to this experiment, a pre-test was administered to both the experimental and the control group in order to determine their level of listening comprehension. The pre-test was taken from London Test of English listening tasks level two and included 20 items, each equally scored 5 points out of a hundred.

Treatment materials were implemented in four sessions (one hour=40 minutes a day) on the same day for six consecutive weeks. In each session, the experimental groups studied *Tell me more* and *Ellis Academic Master Pronunciation*. In contrast, control group continued their traditional listening activities in the flow of curriculum at SOFL, at Seljuk University. They received no specific pronunciation teaching.

After the teaching process, both groups were given a post-test that is at the same level with the pre-test. (London test of English, level 2). The analysis of the post-test results was used to verify the first hypothesis of this quasi-experimental study.

Table 3. Experimental Design

	Pre-test	Sessions	Post-test
Segmental Group	London test of English 20 questions Level 2 (sample1	Dialog-Sounds-Word Pronunciation-Video (Tell me more) Sounds (Ellis)	London test of English 20 questions Level 2 (sample2)
Suprasegmental Group	London test of English 20 questions Level 2 (sample1)	Dialog-Sentence Pronunciation-Video (Tell me more) Beyond sounds (Ellis)	London test of English 20 questions Level 2 (sample2)
Control Group	London test of English 20 questions Level 2 (sample1)	Communicative listening activities without specific pronunciation training (Opportunities Intermediate, Longman)	London test of English 20 questions Level 2 (sample2)

According to this research design, the same level of listening test was used as the pre-test, post-test. This design model is based on pre-test and post test design however, the research hypothesis is original in the sense that there is no other study* in the literature investigated the same case. (* as far as researched)

3.3. Subjects

This study was carried out with forty-five students who attend intensive Preparatory School Program at Seljuk University, School of Foreign Languages (SOFL). This school is in charge of teaching general English to freshmen for one year before they continue their departments. At the beginning of the term, students take a proficiency exam as a result of which some of the students are exempt from intensive English preparatory program. The result of the exemption exam is used for placement purposes as well and the students are placed, according to their level of success into two levels in the preparatory class program, Beginner (b) or Elementary (a).

The researcher conducted the study himself as the regular course teacher on prep-classes 13 (each of the experimental groups) and the control group was taught by a fellow teacher. The ages of the students in all the three groups ranged between 18 and 19, with similar social and educational backgrounds.

3.4. Materials

As seen in Table 3 research design, the materials used in this study were a pre-test, post-test, *Tell me more* (Aurolog) and Ellis Academic Master Pronunciation program which had two section sounds and beyond the sounds part. As the control group study *Opportunities Intermediate Student Book,* which mainly uses British native speakers in its listening activities , the researcher taught it would be appropriate to give listening comprehension pre-test and post-test in British English. Meanwhile, the experimental groups studied *Tell me more*! sounds, words and sentence stress in British English. In *Tell me more!,* the teacher can also see how much of the section a student has covered. Furthermore, the students in experimental groups skipped the listening tasks in their classes, instead they listened to and participated in the dialogs in a semi-interactive way (they could just reply choosing one of the three alternatives given on the screen) and watched and listened to the videos, which are very efficient in that learners can hear the words and sentences they study in the flow of speech and in meaningful contexts. As mentioned in Table 3., the segmental group studied the sounds and word stress section of *Tell me more*, while the suprasegmental group studied sentence pronunciation section. Both of the experimental groups studied the dialog and video section in the program. However, *Tell me more!* lacked the essentials of suprasegmental features; therefore, as the teacher couldn't find such a detailed CAPT software in British English, *Ellis Academic Master Pronunciation*, though it dwells upon American English, was covered to give students the notion of the contrastive stress, new information, intonation, reduction and linking in English.

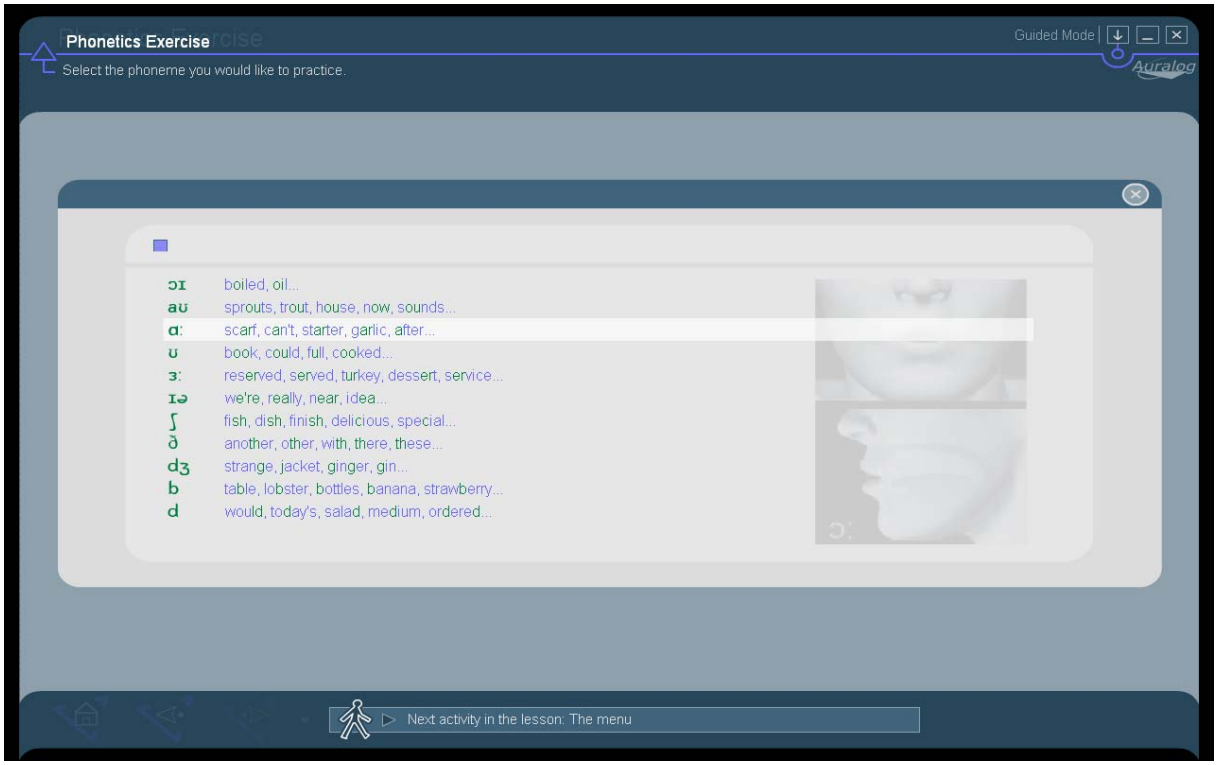

Figure 1. Phonetics Exercise, Tell Me More.

In the teaching of sounds the phonetic symbols and 3D representations of the articulation are given. This is a very effective and widely-adopted way of presenting the sounds of the language. The visualization of articulation, articulatory organs and voice quality of the target sound is the advantage of CAPT in *Tell me more*. However, *Tell me more* lacks phonetic exercises such as minimal pairs to develop students sound discrimination skills.

Figure 2. Word pronunciation, Tell Me More.

As it can be seen in Figure 1., students listen to the words from a native speaker and see their waveforms and try to match their own recording waveforms with the model. The individualized and immediate feedback is very positive for motivation and even shy students attempt several times. However, the ASR technology has some pedagogical problems in terms of the robustness and detail of feedback, which is dealt with in the related section above. The score section on the right turns green as the student attempts come closer to the model.

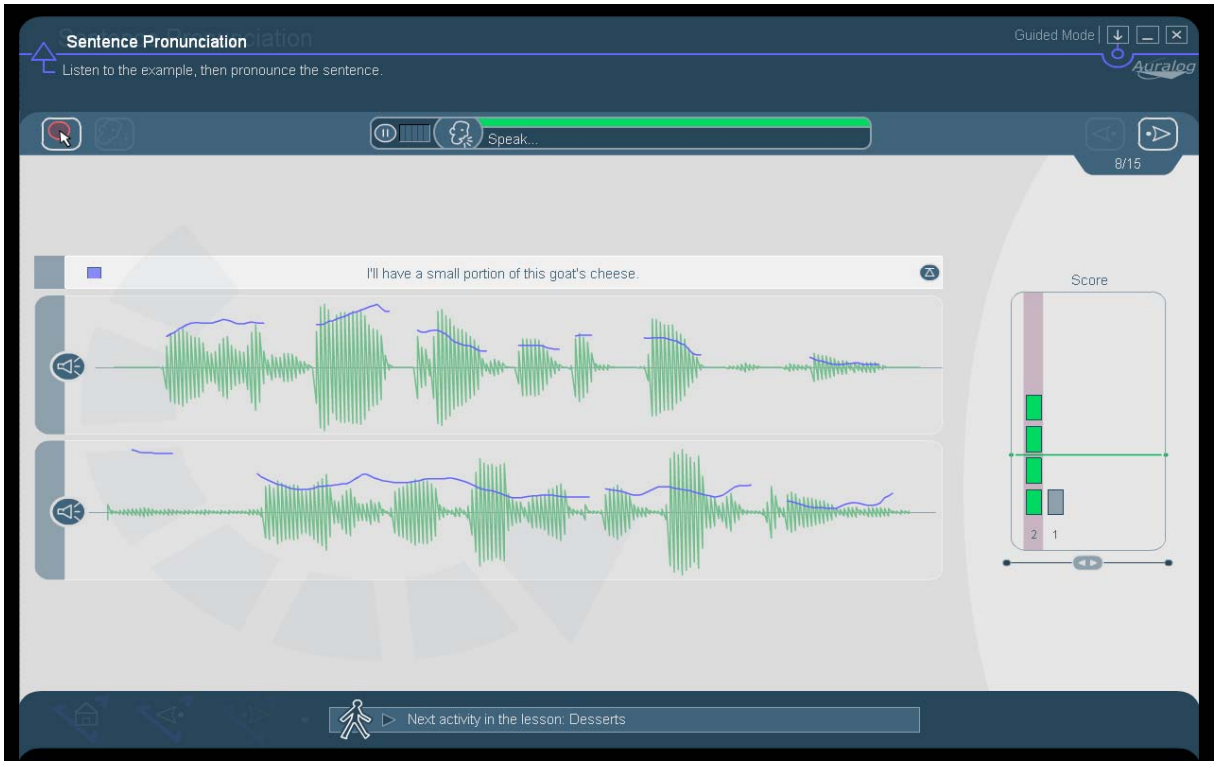

Figure.3 Sentence Pronunciation, Tell Me More.

In Sentence Pronunciation section of the program, the learners utter the sentences attempting to match their waveforms with the model. The sentences are taken from the dialogues they study, which is good as it in a sense achieves a kind of contextualization and integration of pronunciation in real-life language experiences. However, the program cannot fully contextualize and integrate pronunciation with other skills because of unpredictable nature of speech, which is not yet possible with the current ASR technology. This technological inadequacy of CAPT and all CALL programs in general seems to be the biggest obstacle on the way to more communicative, integrative and thus efficient CAPT and CALL software.

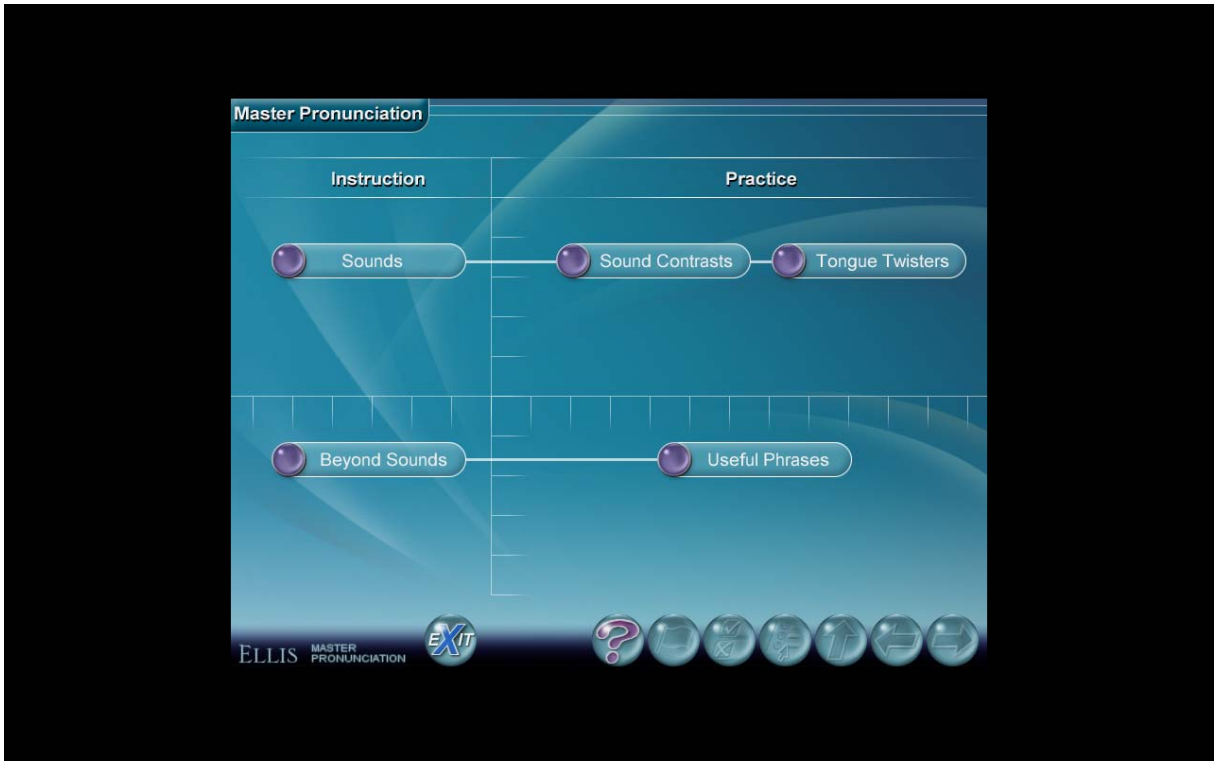

Figure 4. Main Page of Master Pronunciation Ellis Academic.

The materials used with **the experimental groups** during the teaching process was the Ellis Master Pronunciation with segmental and suprasegmantal sections. While the segmental group studied the sounds section of the Master pronunciation software, the suprasegmantal group studied beyond sounds section of the program. While segmental group found chance to practice their gaining from *Tell me more* with abundant minimal pair, discrimination exercises and with optional selection of the sounds they found the most challenging, the suprasegmental group only went over the Beyond Sounds section to see contrastive stress, new information and intonation.

Figure 5. The Main Page of Sounds in Master Pronunciation

The students in the segmental group studied the consonants and the vowels section of the sounds part of the program.

3.5. Data Collection Procedure

The experiment was carried out at Seljuk University, SOFL in the second term of the 2006-2007 academic year. Prior to the experiment, to ensure the test's reliability, the researcher used London Test of English (available at: www.pearsonlanguageassessments.com).

The pre-test was applied by the researcher to the both groups in regular class hours on the 19th of March. The duration of the pre-test was thirty minutes. The subjects took the test in the computer lab and some used pencil and paper and some used the computer to mark their answer sheets. The aim of the pre-test was to determine the subjects' level of listening comprehension. As already mentioned, the pre-test was level 2 (sample 1) of London Test of English and students were required to complete two tasks. Task one was a multiple-choice test and task two was required the

students two give short answers or fill in the missing part. Each task was composed of 10 questions and each correct answer scored 5 points out of a hundred.

As it shown in Table 3, the teaching process had four sessions each week for both the experimental groups. Each session carried out on the same two days along the six consecutive weeks; the first session was carried out on the fourth, the rest of the sessions carried out on the consequent five weeks. The duration of each session was 40 minutes. The post-test was administered one day after the conclusion of the teaching process on the 26th of April. The post-test level was the same as the level of pre-test. This time London Test of English, level 2 (sample 2) was used. The post-test was composed of two tasks and included 20 questions, as well.

3.5.1. The Experimental Groups

As aforementioned, the experimental groups (segmental and suprasegmantal groups) had 24 sessions throughout the teaching process. In each session, the researcher, as the regular class teacher took them to Computer lab and supervised their study and helped them when necessary.

In the first session, the teacher presented the features of the program and how to use the program. Each student was given a password to use the program. The first experimental group, that is the segmental group, was told how to study the sounds of the English on the computer. Besides, the segmental group was also told to study only the sounds part of the program not the other section programs.

The researcher had explained the importance of the sounds of the language for the pronunciation and listening skills of the language. The learners started with the consonant of the language. The students choose from a list of vowels and can hear the sound for a native speaker. Also they can see an X-ray visualization the articulatory organs and their movements and positions. In this way, students can hear, see and repeat the sound to match the model. Furthermore, they can also compare the sound they select with the other sounds provided in the screen. (The sounds that are thought to be hard to distinguish are given as comparable sounds). Students can as well listen to the sounds in the example words. In the word initial, word middle and word end positions as it can be seen in the Figure 3. Students can further record their sound and compare this with the model.

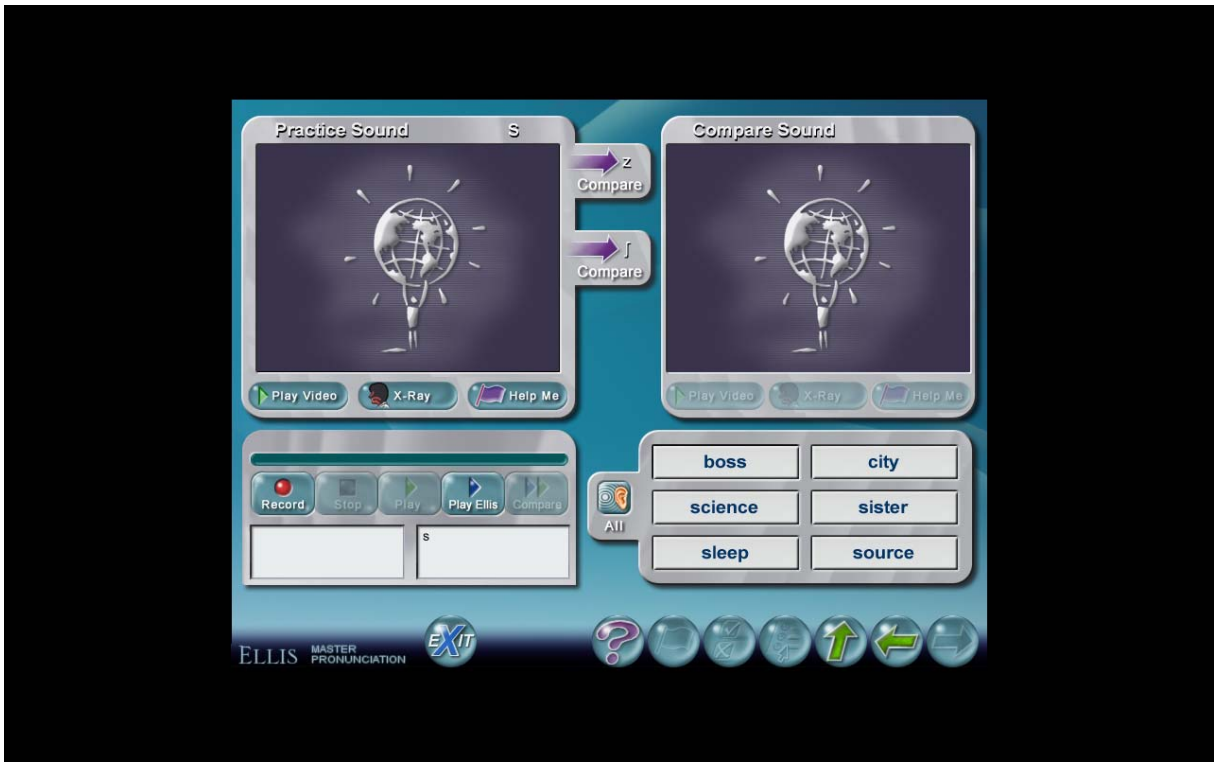

Figure 6. The Screen of Teaching the Sound /s/ in Comparison with Two Other Sounds.

On the other hand, the suprasegmantal group studied the *Beyond the sounds* part of the program. In the first session, the teacher told the students the nature and importance of suprasegmentals for listening comprehension. Later on , the teacher told how to use the program. The students are taught the meaning of suprasegmentals and the aim of learning the suprasegmentals in English.

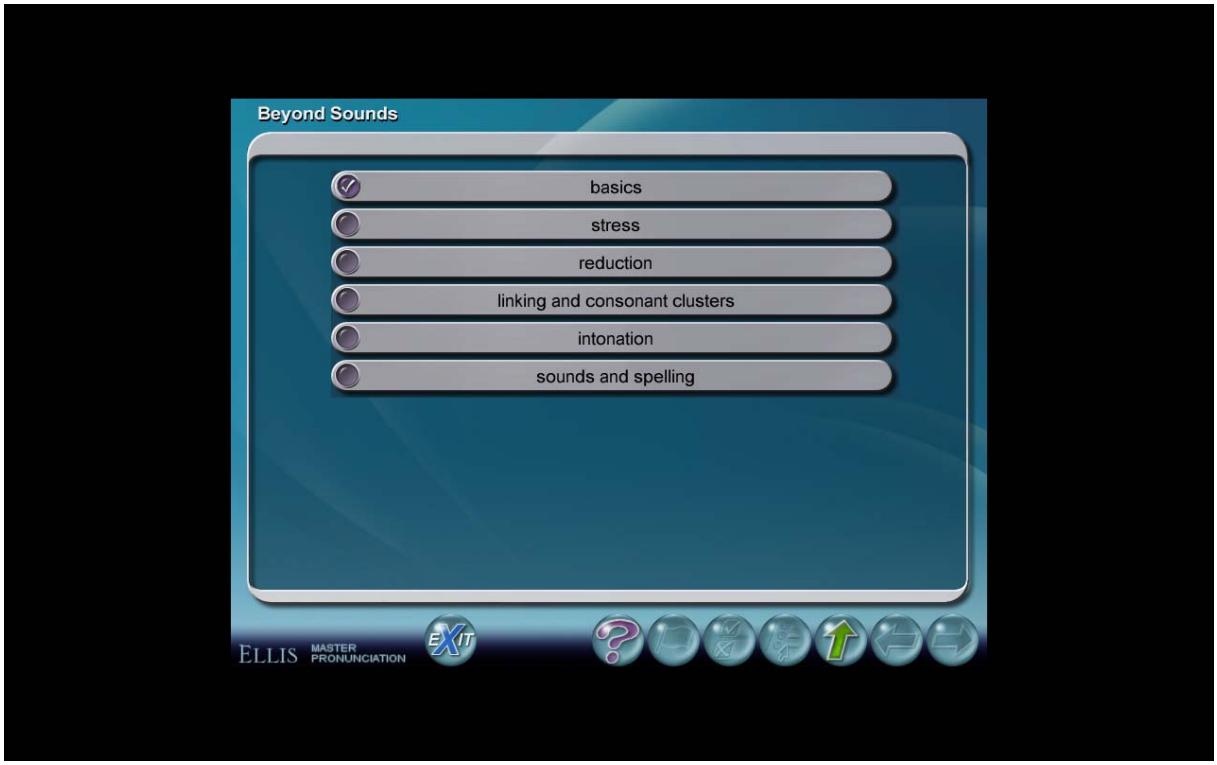

Figure 7. The Main Page of Beyond sound Section of Master Pronunciation

Beyond the sounds section is composed of six parts, namely; basics, stress, reduction, linking and consonant clusters, intonation, sound and spelling. In the basics section, the students study the syllables and the schwa sound through many examples. They hear words and try to identify the number of syllables. Furthermore, they study the schwa sound in the words and flow of speech. In the stress section, students study types of the stress, word stress, basic sentence stress, new information stress, contrastive sentence stress.

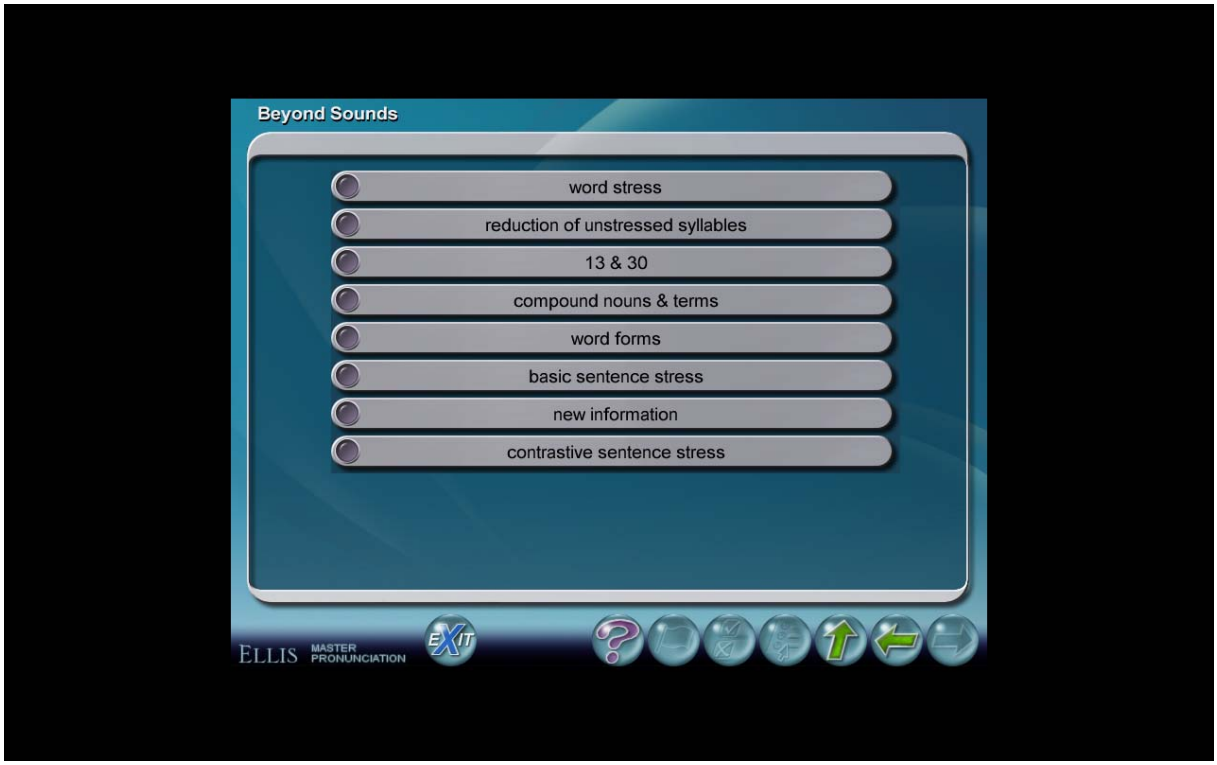

Figure 8. Stress Section of the Beyond Sounds Part.

In the reduction of unstressed syllables, students learn various words that are reduced. Furthermore, they studied the unstressed syllable schwa.

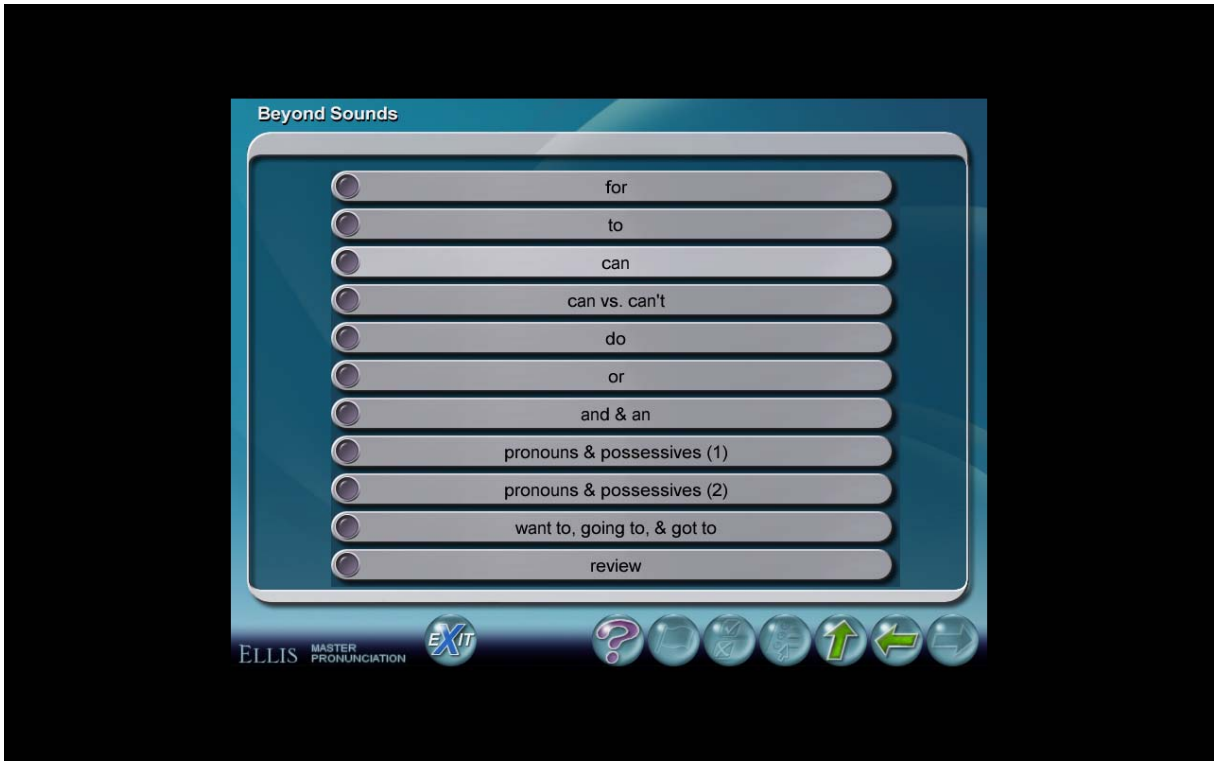

Figure 9. The reduction of unstressed syllables section of Beyond Sounds.

In the linking section of stress study, students can learn the linking of vowels and consonants in the flow of speech.

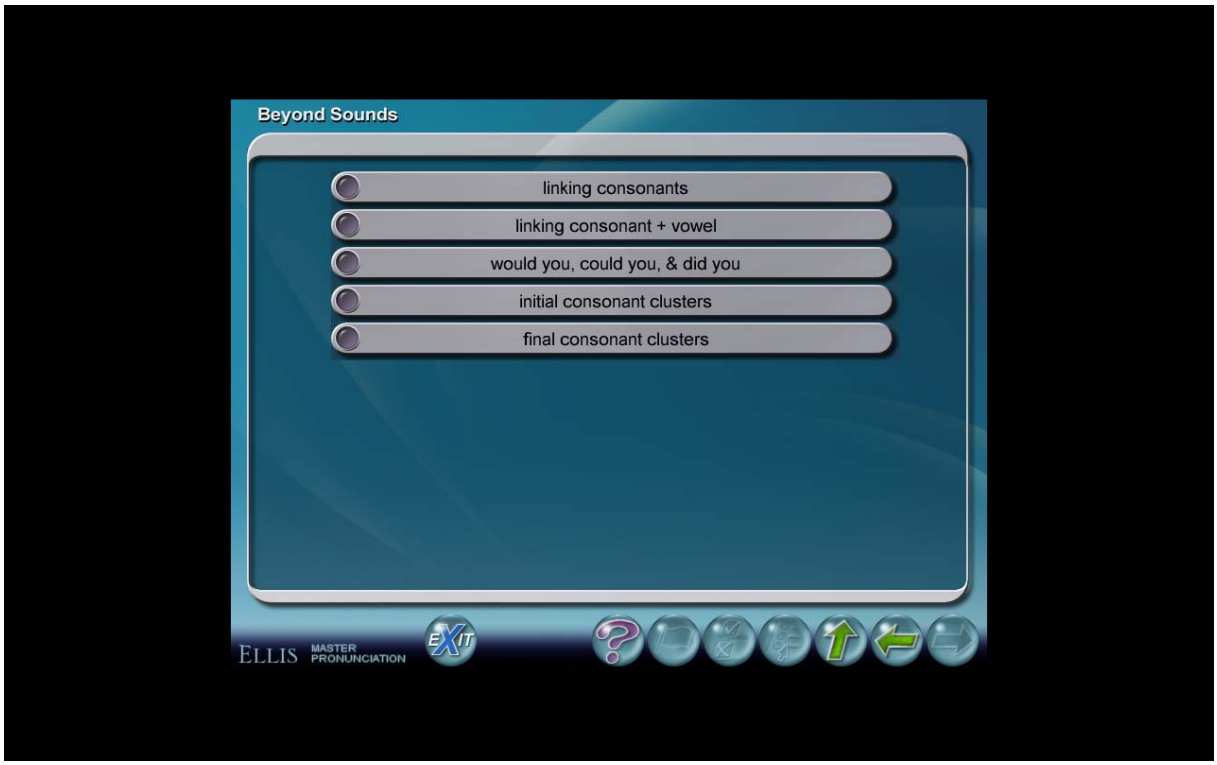

Figure 10. Linking and Consonant Clusters Section of Beyond Sounds

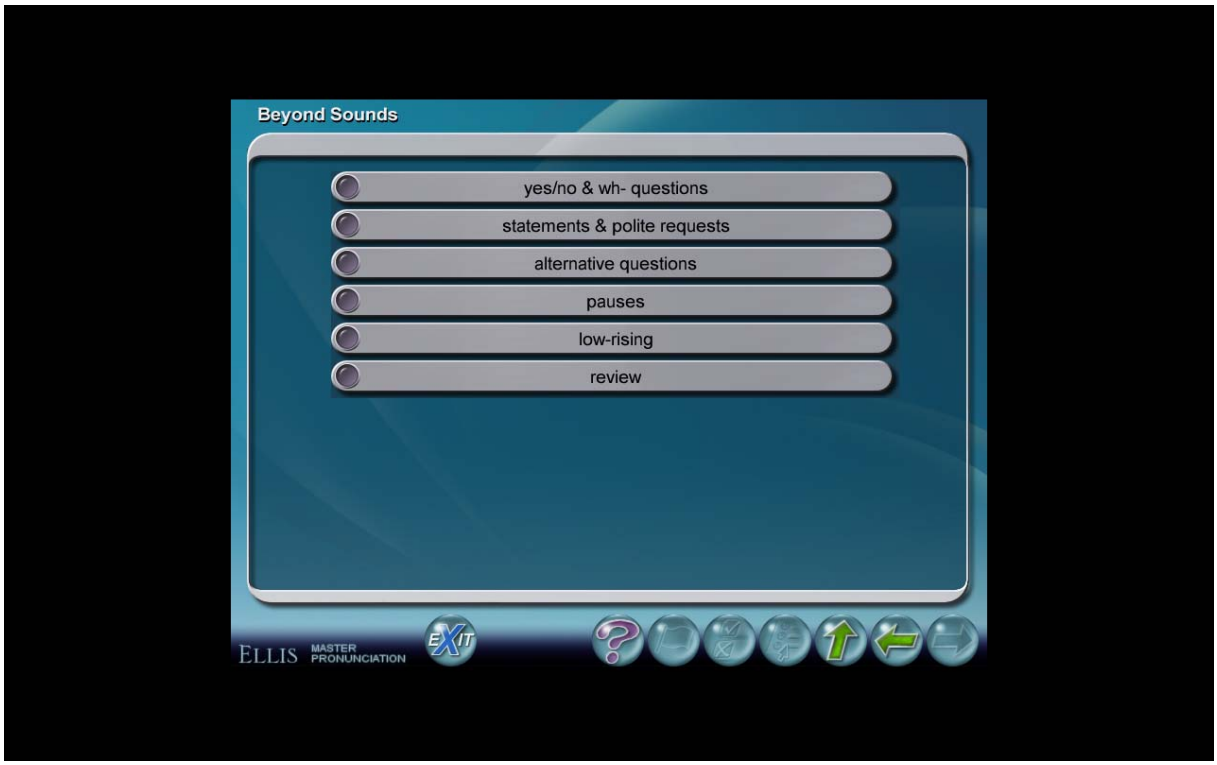

Figure. 11. The Intonation Section of Beyond Sounds .

Student can learn the intonation in many ways. In the first section, they learn yes/no and wh-questions in many examples and answer some multiple questions and at the end they study the form the rule for the wh- and yes/no questions intonation. Later on, they study statements and polite requests. The students study alternative questions, the two types of intonation in alternative questions and their meaning changing functions are practiced.

In the pauses section, students study the use of pauses in sentences to indicate thought groups. The program emphasizes the function of pauses to make sentences more understandable and how to place the pauses in the sentence. Furthermore, they can listen to thought groups and record and compare their performance with the model.

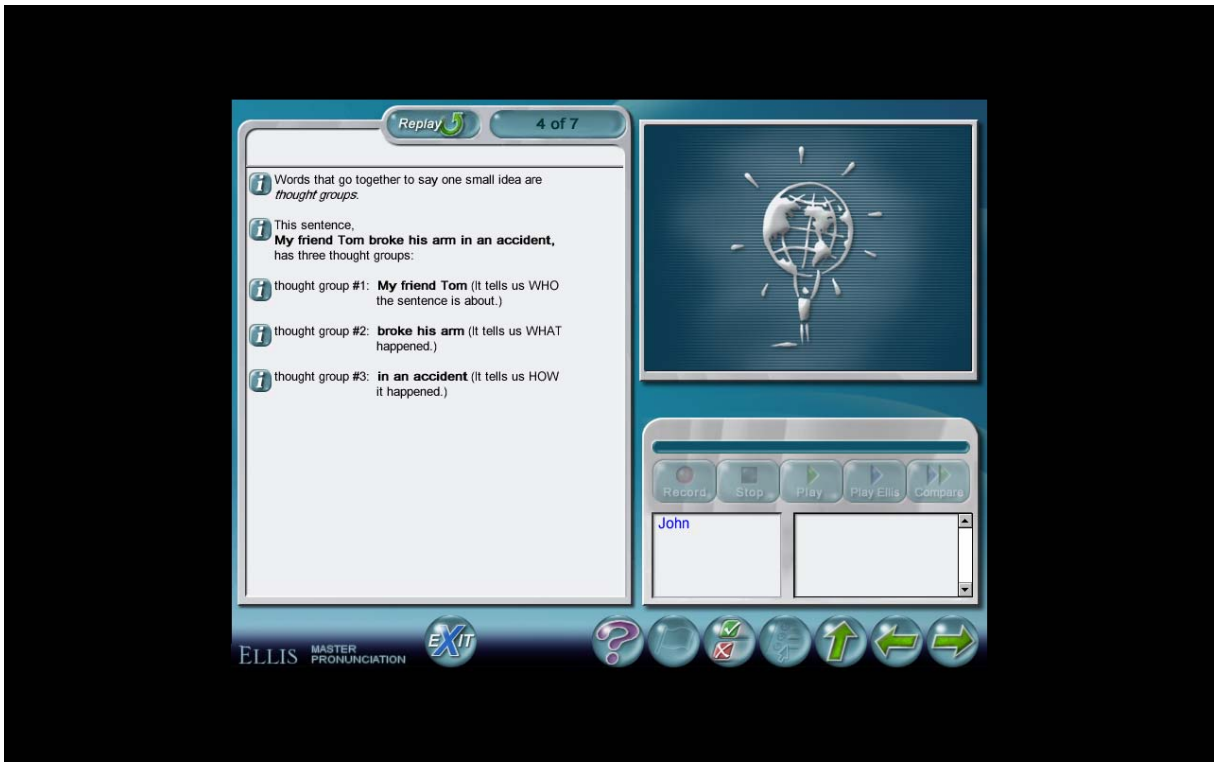

Figure 12. The Example Sentence to Indicate the Function of Pause in English.

3.5.2. The Control Group

The control group followed the traditional curriculum in the SOFL. They studied Longman Opportunities series intermediate level. The book follows a communicative curriculum which has a variety of listening activities. There are some pronunciation activities at the end of the each unit, however they just include the segmental features of the pronunciation. Besides, most of these pronunciation activities are ignored or skipped by the teacher because of the time limit or because of not giving importance to

pronunciation. However, the variety of listening activities provided the control group with a lot of exposure to listening comprehension questions and fill in the blank activities.

The communicative approach followed trough out the *Opportunities* student book of Longman is generally based on topic based curriculum. However, the listening tasks are multi-speaker or presentation type listening tracks. Students listen to the audios on the CD player the teacher brings to the classroom. The disadvantage of this is, compared to CALL, students cannot see the speaker. According to a recent research seeing lips and facial mimics of the speaker facilitates the concentration of the listener and thus the listening comprehension. Furthermore, visualization is good for all kind of learner styles, especially for the visual learners. Therefore, learners in the control group are disadvantaged as they cannot see the speaker.

As it has already been mentioned *Opportunities* is based on a communicative approach. However, the learners are presented the pronunciation in the deep end of the each unit. That is the pronunciation activities at the end of the unit aren't given in a meaningful context and the learner are just expected to acquire the pronunciation features of English with just listen and repeat activities. Besides, these activities are skipped by most teacher as they are seen redundant and useless. Therefore, the control group received no explicit pronunciation teaching apart from the listen and repeat activities.

The book dwells upon British English with a standard international version, which we can as well call BBC English. The speakers are chosen from a wide range native speaker of British English. The listening activities generally follow the traditional way in communicative approach, namely; pre-listening, during listening and post-listening. The listening activities are generally follow a discussion or role play speaking activities. As they listen, the learners are expected to fill in the Function File section in the book, which are expression taken from daily language. In this way, learner conscious about the function of language in the flow speech and the use of some certain expressions and collocations are raised. This way of teaching listening is in accordance with the teaching of functions of the language and the role of teaching language in meaningful chunks. However, the book doesn't touch the issue of suprasegmental and segmentals apart from

some listen and repeat exercises. In sum the learners in the control group carried out traditional communicative listening activities in the classroom and had no explicit pronunciation teaching. Finally, the fact that the learners listen to British native speakers in their classes was the reason why the researcher used a CAPT material focusing on British English and administrated a British originated pre-and post-listening test, London Test of English.

CHAPTER 4
DATA ANALYSIS

4.1. Introduction

The purpose of this study was to examine the effects of computer assisted pronunciation teaching in terms of listening comprehension on early pre-intermediate preparatory class students at Seljuk University School of Foreign Languages. Therefore, the study was guided by the following two hypotheses:

Hypothesis 1: The students whose teachers use computer assisted pronunciation teaching score significantly higher on the post-test than the students whose teachers do not use.

In other words, it was hypothesized that students who were taught the pronunciation using computer assisted pronunciation software would be more successful in comprehending listening when contrasted with the students who are taught in traditional class.

Hypothesis 2: The students who studied the suprasegmantal parts of the pronunciation on the computer will improve their listening more than the segmental group.

In other words, it was hypothesized that students who were taught pronunciation will be better in their perception of the language that is in listening. The different effects of different types of pronunciation focus, that is segmental and suprasegmantal focus was also investigated.

In order to test these hypotheses, two experimental groups and a control group were formed. Forty-five students, fifteen in each of the experimental groups and fifteen in the control group, participated in the study. The students in the first experimental group, that is the segmental group were taught the sounds of the language on the computers (=segmental group) and the other experimental group were taught the suprasegmantal features of pronunciation on the computer (=suprasegmantal group) while the control group followed traditional listening activities and received no specific pronunciation education.

A pre-test and an immediate post-test were administered to the experimental group and to the control group in order to measure the performance of both groups on the multiple-choice listening test. The purpose of the pre-test was to investigate the difference in proficiency level between the two groups. After the teaching process, a post-test at the same level with the pre-test was given in order to verify the hypotheses of the study.

This chapter presents the analysis of the scores obtained from the tests mentioned above. It includes the data analysis procedure and the statistical analysis of the results.

4.2. Data Analysis Procedure

The first step in data analysis was calculating the number of the correct answers for the pre-test. Since the vocabulary pre-test involved twenty questions, each correct answer was given '5' point. Therefore, the maximum score on the pre-test was 100 points. The post-test was also graded in the same way since they included the same level listening comprehension test.

After getting raw scores, the means and standard deviations for both groups on the pre-test, post-test were calculated. Next, the mean scores of the groups were compared by the application of two non-parametric statistics, Cruscal Wallis and Wilcoxon Tests. Wilcoxon test was applied in order to compare the differences within each group. On the other hand, Cruscal Wallis test was used in order to explore the differences between three groups. All the results were compared at the '0, 05' level of significance. It should be noted that the software used for the data analysis was SPSS (Statistical Package for Social Sciences), version 13.00. Consequently, the statistical analyses of this study were carried out in two stages; pre-test and post-test.

4.3. Results of the Study

4.3.1. Pre-test

Since the study aimed at testing the students' listening comprehension ability, it was necessary to include a pre-test to determine their listening comprehension level whether the experimental groups and the control groups were equal at the beginning of the experiment.

The second purpose of the pre-test was to obtain baselines which would be used to compare and evaluate the results of the post-test.

The pre-test, which consisted of a multiple choice listening comprehension was administered to the both groups on the same day. The raw pre-test scores of the experimental and the control group were used to calculate the means and the standard deviations of the groups. Table 4 displays the results of this statistical analysis.

Table4. Kruskal-Wallis H Analysis for Pre-test Scores

Group	N	Mean Rank	Sd	$\chi 2$	p	Sig.
Control	13	20,38				
Suprasegmental	13	18,88	2	0.196	0,907	-
Segmental	13	20,73				

(-) indicates there is no significant difference at 0.05 level

As it can be seen from the Table 4, there is no significant difference between groups pre-test results ($\chi 2$=0.196; p>0.05). The results of the pre-test analysis indicates that this three groups level of listening comprehension level are similar and that possible differences that could come out at the post-test results be attributed to the teaching period.

4.3.2. Post-test

The aim of the post-test, which was administered to the same groups after the pronunciation teaching process, was to compare the groups' improvement in their listening comprehension. First of all, pre-test and post-test results were compared within all three groups using Wilcoxon Test. The statistical results are presented as follows:

Table5. Comparison of the Pre-test with Post-test within the Control Group

Test	N	Mean	Sum of Rank	Z	sd	P	Sig.
Negative	0	0,00	0,00				
Positive	11	6,00	66,00	1.174	2	0,240	-
Ties	2						
Total	13						

(-) indicates there is no significant difference at 0.05 level

According to Table 5, there is no significant differences between the control groups pre-test and post-test results (z=1.174; p>.05). This indicates that the control groups listening comprehension level didn't improve significantly in the traditional classroom.

Table 6. Comparison of the Pre-test with Post-test within the Segmental Group

Test	N	Mean Rank	Sum of Rank	Z	sd	P	Sig.
Negative	1	1,50	1,50				
Positive	10	6,45	64,50	2.812	2	0,005	*
Ties	2						
Total	13						

(*) indicates there is a significant difference

According to Table 6, there is a significant difference between the pre-test and post-test results of the segmental groups (z= 2.812; p<.05). This result indicates that the segmental group improved their comprehension level significantly and the teaching of the sounds of the language has a positive effect on the perception of language.

Table 7. Comparison of the Pre-test with Post-test within the Suprasegmental Group

Test	N	Mean Rank	Sum of Rank	Z	sd	p	Sig.
Negative	0	0,00	0,00				
Positive	11	6,00	66,00	2.944	2	0,003	*
Ties	2						
Total	13						

(*) indicates there is a significant difference

According to Table 7, there is a significant difference between the pre-test and post-test results of the suprasegmantal groups (z=2.944, p<.05). This result indicates that the supra-segmental group improved their comprehension level significantly and the teaching of the supra-segmental features of the language has a positive effect on the perception of language.

Table 8. Kruskal-Wallis H Comparison of the Post-test Results

Group	N	Mean Rank	sd	$\chi 2$	p	Sig.
Control	13	19,92				
Suprasegmental	13	19,92	0.004	0.004	0,998	-
Segmental	13	20,15				

(-) indicates there is no significant difference at 0.05 level

According to Table 8, there is no significant difference between the post-test results of the three groups ($\chi 2$=0.004, p<.05). The results of this study indicate that the differences between the three groups level at the end of the teaching procedure is not significant. The lack of significant difference can be attributed to two main reasons. First, the time period for the study was not long enough for a foreign language listening skill to be developed significantly. Second, both the segmental and suprasegmental groups' pre-test results were lower than the results of the control group. If the design of the study had let the researcher to exchange students between these groups to have more equal groups, the post-test results could have been more significant in favor of segmental and suprasegmental groups.

CHAPTER 5
CONCLUSION

5.1. Introduction

This study examined the effects of CAPT (Computer Assisted Pronunciation Teaching) on improving preparatory class young adult students' listening comprehension. In this chapter, the findings of the study are summarized and discussed in the light of the research hypotheses presented in earlier in the study this is followed by a brief description of the pedagogical implications and suggestions for further studies. Finally, concluding remarks on the findings of the study are presented.

5.2. Discussion

This study aimed at determining if CAPT is effective in terms of improving students' listening comprehension. Therefore, it examined the difference among two group of students taught pronunciation on the computer with different focus on segmental and suprasegmentals and another group taught in the traditional communicative classroom listening activities without any explicit pronunciation teaching. In addition, a second purpose was to investigate the effect of different focus in pronunciation teaching.

Accordingly, this research tested the following two hypotheses:

Hypothesis 1: The students who are taught pronunciation on the computer will score significantly higher on the post-test than the students whose teachers aren't taught any specific pronunciation.

Hypothesis 2: The students who study the suprasegmental aspects of pronunciation will score significantly higher on the post-test than the students who study the segmental features.

According to Table 2, an analysis of the participants' pre-test scores, which was conducted to compare the proficiency levels of both groups, revealed no significant

difference between the two groups. Thus, prior to the experiment, both groups were considered equivalent in their command of English vocabulary.

Quantitative results in this study indicate that all the three groups performed better after instruction. However, the experimental groups performed significantly better on the post-test. The experimental groups showed greater meaningful progress from pre-test to immediate post-test (see Table 6 and Table 7). However, the statistical comparisons among the three post-tests indicated no significant difference among groups. This can be attributed to the fact that the period of instruction was relatively short for a statically significant difference in a foreign language listening skill to come about. Besides, the number of the students for each group was rather small. Moreover, although there wasn't a significant difference, experimental groups started a little bit behind the control group.

To summarize, the difference between the pre-test and post-test performances of subjects in the experimental groups were significant, but not for the control group the same statistic comparison didn't bring about the same result. However, the differences among the post-test results of the groups were not significant, which can be attributed to the above mentioned limitations.

This result supports the ideas discussed in review of literature (see 2.8.) in that popular songs offer a great benefit in terms of vocabulary learning/teaching.

First of all, the post-test results clearly reveal that they are effective to expand passive (recognition) vocabulary knowledge. The role of passive vocabulary knowledge is significant in language learning. With reference to Krashen's *Input Hypothesis* (cited in Richards and Rodgers, 1986: 132), "the ability to speak fluently cannot be taught directly"; therefore, learners should be exposed to a great amount of comprehensible input before producing the target language.

One factor that contributed to the success of the experimental group is probably the interests and the motivation of the participants to work on the computers. Negative attitudes such as lack of motivation, self-confidence and anxiety act as filters preventing the acquirers from making use of input, and thus hindering success in language learning. Therefore, computer assisted pronunciation teaching can be said to have a positive effect on reducing the language anxiety and motivating the students. Therefore, the

positive effects of CAPT on students should be further explored in further empirical studies with longer period and larger number of subjects.

5.3. Pedagogical Implications

The findings of the study showed that the use of computers to teach pronunciation facilitated the listening comprehension of learners. Therefore, the successful performance of the experiment groups necessitates the wider application of the opportunities computers offer for pronunciation teaching. Besides, prospective and experienced EFL teachers, teacher trainers, and curriculum designers can make use of the practical pedagogical implications presented below:

a) First of all this study implies that pronunciation teaching in the language classroom should not be thrown deep into the end as it serves for the development of speaking and listening skills.

b) The teaching of segmental and especially the suprasegmental features of pronunciation seem to be really challenging for non-native language teacher. CAPT with several available software on the market can offer a great many alternatives to the teaching these aspects of language, therefore curriculum developers should also take this essential part of language instruction into consideration.

c) CAPT with its great amount of natural target language input offer great opportunities for pronunciation teaching in EFL context, where the students lack natural setting of the target language.

d) Teaching listening is not a mere result of exposure to langue but it also requires the explicit teaching of the segmental and the suprasegmental features of pronunciation for a better perception on the part of the listener to happen.

e) Furthermore, the teaching of the sounds of the language is helpful in the temporal unfolding of the local context of the language. In other words, listening especially in foreign language is two fold, one of which is the perception of acoustic context. This perception can take place faster and easier if the learner can discriminate the sounds, which thus improve the speed of perception and the

integration of the acoustic and pragmatic context of language. Therefore, teaching the segmental should not be fully abandoned at the expense of the suprasegmentals

f) In our study, the difference between the suprasegmental and segmental group progress during the teaching period. This difference, though not significant, was in favor of suprasegmental group, which may indicate that the teachers should attach more importance to suprasegmentals. This finding of the study is in parallel with the other studies in the literature.

g) This study has demonstrated that computer assisted pronunciation teaching is very motivating for young adult leaner, and most probably learners at any age. The EFL teachers can make use of this motivating aspect of computers.

5.4. Suggestions for Further Studies

This study was limited by several conditions; therefore, there are some suggestions for future researches according to these limitations mentioned earlier in the study. This study was conducted on the pre-intermediate level learners who were attending English Preparatory School Program at university level. Therefore, the effects of CAPT can as well be explored, with different proficiency and age level.

Further studies can as well make use of the limitations of this study and can keep the teaching period longer and the number of the subjects larger to achieve better and significant results. One of the limitations of this study was to do with the physical features of the lab; therefore further studies should take place in larger rooms which have enough space for the teacher to move around. Besides, a larger room will be better as there will be more fresh-air in such a room. Beyond these physical constraints, further studies should keep the period of the study longer as one cannot observe the all the possible effects of CAPT on the improvement of a foreign language listening skill.

Furthermore, CAPT developers should base their study on a sound methodology of pronunciation teaching. This can only be achieved with the cooperation of foreign language curriculum developers and computer experts. Besides, CAPT systems should set a valid criterion to discriminate among the various performances of students. This

criterion can be comprehensibility of the input by the learner and CAPT should not push the students for perfection. An ideal CAPT should have levels with the program and should set a certain level of completion and success to lead the student to an upper level or the next exercise. This level should also be determinable by the teacher. Moreover, the program design and interface should be motivating for students.

Current technology behind many CAPT programs can provide learners with a wide range of natural language production by various native speakers. However, as it has been already mentioned in the study there are some problems with the visual feedback CAPT systems provide. Therefore, further studies on CAPT systems should focus on the robustness and efficiency of feedback. Perhaps better ASR technology can provide more robust, detailed and easy-to-interpret feedback to learners, which is of a crucial prominence for the learning to take place.

5.5. Conclusion

As it has been demonstrated elsewhere in the study, CAPT as a sub-branch of CALL is perhaps the most promising application of computers in the language classrooms. Unfortunately, most language classes totally abandon pronunciation teaching or pay far little attention to it. Although some of the currently available commercial books on the market spare some parts of the book for pronunciation teaching they are not adequate for an efficient pronunciation teaching. Furthermore, the pronunciation exercises in some communicative books are thrown deep in the unit, in other words not integrated with the other skills of language. Besides, many language teachers tend to skip them for some reasons such as time and learnability problem.

CAPT is especially has a lot of advantages for EFL contexts, where learners have little or no chance to communicate with native speakers of English. Language teachers are not to neglect the opportunities CAPT systems offer them. However, it must be born in mind that CAPT is not a remedy for all problems. As it has been mentioned earlier in the study, the use of technology can have some drawbacks on language learning. Therefore, English language teachers should be aware of pedagogical requirements of an ideal CAPT and choose relevant CAPT systems with sound pedagogical background. Furthermore, the teachers should choose CAPT software which are in accordance with

the goals of their curriculum, the needs, age and proficiency level of their learners. Teachers with little technological background should not turn it a matter of generation gap and remember that they can have assistance from the software providers or from colleagues. Besides, the programs developed for language learning do not require much technological knowledge. In sum, all EFL teachers should make use of the opportunities computers offer for them and their learner. Computers are particularly suitable for pronunciation teaching, which is very challenging, time-consuming, and sometimes unyielding in traditional classrooms.

The teaching of segmental and suprasegmental elements of pronunciation is really challenging for especially non-native EFL teachers. Furthermore, when it comes to pronunciation even hardworking students feel anxious to utter the sound, words and the sentences. Besides, it is very difficult to make student become aware of the differences and the function of suprasegmentals in the language. Therefore, an ideal CAPT with its stress-free environment, immediate, individualized feedback, individualized pace, motivating design, large amount of authentic, language input, sound pedagogical background can be used to teach pronunciation and thus improve speaking and listening skills of our learners. In sum, I think, as our study suggests CAPT with ASR systems and interactive modules may possible be the most promising computer aid to language learning compared to other CALL systems.

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APPENDICES

APPENDIX A

Centre No.					
Candidate No.					

Surname SAMPLE PAPER	Initial(s)	
Signature		

Paper Reference(s)

Examiner's use only

Team Leader's use only

London Tests of English

Certificate of Attainment

Level 2

Time: 1 hour 35 minutes

Materials required for examination
Cassette Player
Cassette 1 per 10 Candidates

Items included with question papers
Nil

Question Number	Leave Blank
Task1	
Task2	
Task3	
Task4	
Task5	
Task6	
Total	

Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname and initials, and sign in the signature box.

Answer ALL questions in the spaces provided in this book.

Write answers in blue/black pen.

Information for Candidates

The total mark for this paper is 100. The marks for the various questions are shown in round brackets: e.g. **(15 Marks)**
This paper has SIX tasks.
All blank pages are indicated.

Advice to Candidates

Write your answers neatly.

SAMPLE PAPER

Leave blank

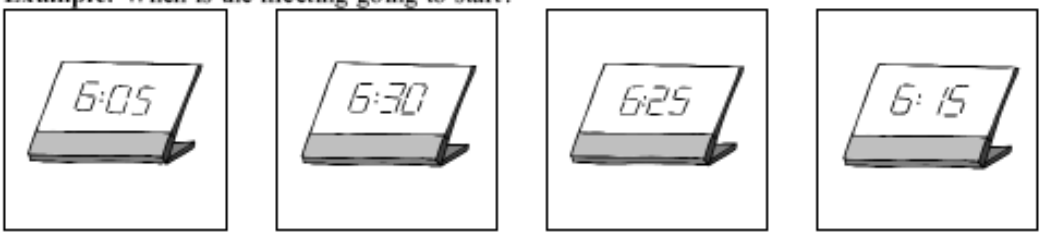
Hello everyone. Today's test is the London Tests of English Level Two. The theme of this test is Work Experience. This means getting experience of a job while you are still at school. This test lasts one hour and thirty five minutes, There are six tasks. Tasks 1 and 2 are listening. You must listen to the tape and write your answers in the booklet. Good Luck!

Task One: The meeting. (15 marks)

Katie Ward is a secondary school student in Year 10 of Parkway Secondary School in Preston. Katie and her father David have arrived for a meeting at Katie's school. Listen to the conversation and look at the questions. Put a cross in the box under the correct response. The first one is an example.

You will hear the conversation twice. Do as much as you can the first time and finish your work the second time.
You have one minute to look at the questions.

Example: When is the meeting going to start?



A ☐ B ☒ C ☐ D ☐

1. Why were David and Katie nearly late for the meeting?

A ☐ B ☐ C ☐ D ☐

Leave blank

2. How did David feel when they were nearly late?

A ☐

B ☐

C ☐

D ☐

3. Which one is Mrs Kelly?

A ☐

B ☐

C ☐

D ☐

4. When did Mrs Kelly start at Parkway School?

A ☐

B ☐

C ☐

D ☐

Leave blank

5. What is Katie's true opinion of Mrs Kelly?

A ☐

B ☐

C ☐

D ☐

6. What is the weather like?

A ☐

B ☐

C ☐

D ☐

7. What is the meeting about?

A ☐

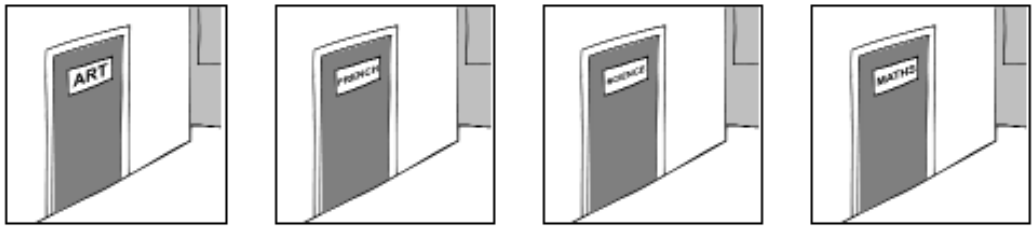
B ☐

C ☐

D ☐

Leave blank

8. What does Mrs Lal teach?



A ☐ B ☐ C ☐ D ☐

9. Who will explain what work experience is for?

A ☐ B ☐ C ☐ D ☐

10. Who will talk about how students apply for work experience?

A ☐ B ☐ C ☐ D ☐

Leave blank

Task Two: Katie's Application Form (15 marks)

The next morning Katie and David are discussing the application form for Katie's work experience. Katie has already started the form. Listen to the conversation and complete her application form.
You will hear the conversation twice. Do as much as you can the first time and finish your work the second time.
You have one minute to look at the application form.

	YEAR 10 Work Experience Application Form	
	SECTION A	***Personal Information***
	Name:	….. *Katie Ward* …….
	Date of birth:	…20.8.1990…… (example)
1	Address:	14 Helmdale Drive Preston Lancashire
	Postcode	……
2	Home telephone	…01772 693450
	Mobile number	……
3	Your interests/hobbies (Tick ✔ up to three boxes.)	
	Outdoor activities (e.g. walking, sailing, climbing)	☐
	Sports and exercise	☐
	Meeting friends and going out	☐
	Music and dancing	☐
	Visiting new places	☐
	TV and films	☐
	Other: (Please give details) ……	
	SECTION B	***Medical Information***
4	Have you got any medical problems? (Tick ✔ *Yes* or *No.*)	
	Yes ☐	No ☐
	If *Yes,* please give details: ……	

Leave blank

	SECTION C ***Work Experience Details***
5	Do you want the school to find your work experience placement? (Tick ✔ *Yes* or *No.*) Yes ☐ No ☐
6	When do you want your work experience? (Tick ✔ one box.) **April** Third week ☐ **May** First week ☐ Fourth week ☐ Second week ☐
7	Do you have any plans for a future career? (Tick ✔ *Yes* or *No.*) Yes ☑ No ☐ If *Yes,* please give details: ……
8	What kind of work experience are you interested in? (Tick ✔ up to three boxes.) Armed Forces ☐ Art and Design ☐ Building work ☐ Cooking and Catering ☐ Engineering ☐ Journalism and TV ☐ Shop Work ☐ Transport ☐ Transport ☐ Teaching and Education ☐ Other: (Please give details) ……
	Signature ..... Date: … March 14th 2004 …

APPENDIX B

SAMPLE 2

Centre No.					
Candidate No.					

Surname	Initial(s)	
Signature		

Paper Reference(s)

Examiner's use only

Team Leader's use only

London Tests of English
Certificate of Attainment
Level 2

Time: 1 hour 35 minutes

Question Number	Leave Blank
Task1	
Task2	
Task3	
Task4a	
Task4b	
Task5a	
Task5b	
Task6	
Total	

Materials required for examination
Cassette Player
Cassette 1 per 10 Candidates

Items included with question papers
Nil

Instructions to Candidates
In the boxes above, write your centre number, candidate number, your surname and initials, and sign in the signature box.

Answer ALL questions in the spaces provided in this book.

Write answers in blue/black pen.

Information for Candidates
The total mark for this paper is 100. The marks for the various questions are shown in round brackets: e.g. **(15 Marks)**
This paper has SIX tasks.
Pages 18, 19 and 20 are blank.

Advice to Candidates
Write your answers neatly.

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Turn over

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London Examinations
from Edexcel International

SAMPLE 2

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Hello everyone! Today's test is the London Tests of English Level Two. The theme of this test is Meeting with Old School Friends. This test lasts 1 hour and 35 minutes. There are six tasks. Tasks One and Two are listening. You must listen to the tape and write your answers in this booklet. Good luck!

Task One: Registering with *OldSchoolFriends.com* (15 marks)

Malik is using his computer one evening. He is excited because someone has told him about a website called ***OldSchoolFriends.com***, which helps people get in touch with old school friends. Asha, his mother, comes home from work. Malik tells Asha about ***OldSchoolFriends.com*** and they decide to register.

Listen to the conversation between Malik and Asha, and complete the information in the ***OldSchoolFriends.com*** registration form. The first one is an example. You will hear the conversation twice. Do as much as you can the first time and finish your work the second time.

You have one minute to look at the form and read again what you have to do.

SAMPLE 2

Leave blank

OLDSCHOOLFRIENDS.COM
Online Registration Form

Thank you for your interest in ***OldSchoolFriends.com***. To register, please complete this form and send your payment. We hope that you will enjoy meeting your old friends!

YOU:

Example: Your first name and other initials: Malik A

1. Your surname, or family name: _____

YOUR SCHOOLS:

2. Primary School Name: _____
3. Town/City: _____
4. The year you left: _____
5. Secondary School Name: _____
6. Town/City: _____
7. The year you left: _____

OTHER INFORMATION:

8. Current occupation (put a cross (**X**) in one box):
   - ☐ Student
   - ☐ Employed
   - ☐ Unemployed
9. Type of membership required (put a cross (**X**) in one box):
   - ☐ Individual membership for one year (£5)
   - ☐ Individual life membership (£50)
   - ☐ Family membership for one year (£9)
   - ☐ Family life membership (£90)
10. Payment method (put a cross (**X**) in one box):
   - ☐ £10 cheque
   - ☐ Visa card
   - ☐ £10 postal order

Leave blank

Task Two: Asha Finds her Old Friends (15 marks)

While Malik is at college the next day, his mother decides to visit the ***OldSchoolFriends.com*** website to look up some of her old school friends.

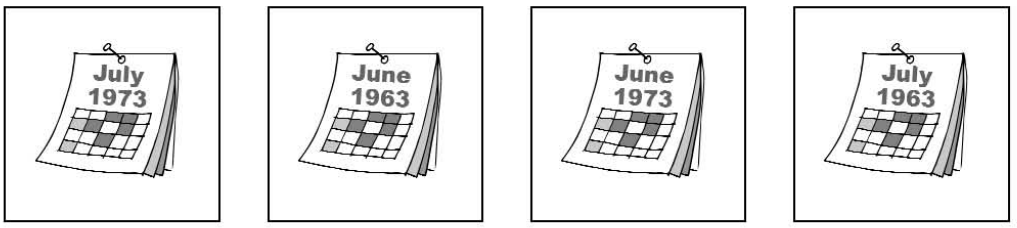
When Malik gets home that evening, she tells him what she has found out about some of her old classmates.

Listen to their conversation and look at the questions.

Put a cross (**X**) in the box under the correct answer. The first one is an example. You will hear the conversation twice. Do as much as you can the first time and finish your work the second time.

You have one minute to look at the questions and read again what you have to do.

Example: When did Asha leave school?



☐ ☐ ☒ ☐

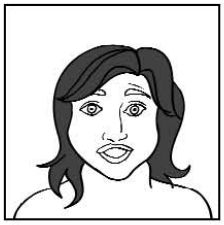
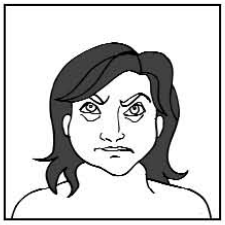
1. What job does Samira do now?

☐ ☐ ☐ ☐

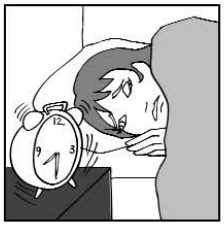
Leave blank

2. How does Asha feel about Samira's job?

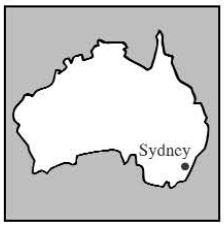


3. What was Emma like?


4. Where does Emma live now?



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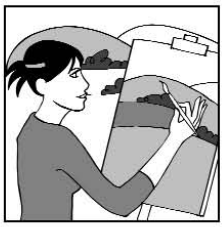
5. What did Priya like doing at weekends?




6. What is Priya's job now?



7. What job would she like to do in the future?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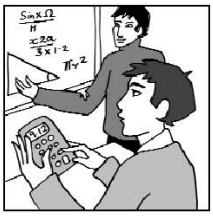
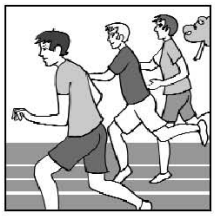
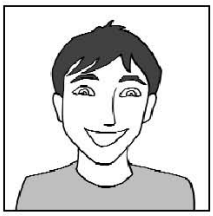
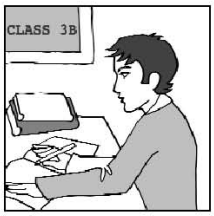
8. What was Joe's favourite subject at school?

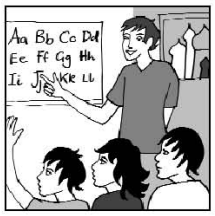
9. How did Joe feel about school?



10. What did he do straight after he left school?





That is the end of the listening tasks. The other tasks test your reading and writing of English. Now go on to Task Three.

APPENDIX C

LEVEL 2 SAMPLE PAPER (SET 1) TAPE SCRIPT

RUBRIC:
Hello everyone. Today's test is the London Tests of English Level Two. The theme of this test is work experience. This test lasts one hour and thirty-five minutes. This means getting experience of a job while you are still at school. There are six tasks. Tasks 1 and 2 are listening. You must listen to the tape and write your answers in this booklet. Good Luck!

RUBRIC: **Task One: The meeting**

Katie Ward is a secondary school student in Year 10 of Parkway Secondary School in Preston. Katie and her father David have arrived for a meeting at Katie's school. Listen to the conversation and look at the questions. Put a cross() in the box under the correct answer. The first one is an example.

You will hear the conversation twice. Do as much as you can the first time and finish your work the second time.

You have one minute to look at the questions and read what you have to do.
[ONE MINUTE PAUSE]
Listen carefully. The conversation starts now.
[TONE/BEEP]
[FIVE SECOND PAUSE]

Katie: (*First part of conversation could open with slight background noise of other people speaking which tails off when Katie and David speak*)
Sorry. Excuse me. *(As they go past people, there is a muffled response of 'That's OK).*
Hurry up, dad. The meeting's going to start at half past six.
It's six twenty five already.
David: (*a bit breathless*) It's not my fault we're nearly late. I know the traffic was bad and it was difficult to park in that small space.

But the real reason was because we stopped to get you some fish and chips. Katie: I'm sorry. I was tired and I was watching TV. I forgot to cook supper.
David: *(cross)* Forgot to cook supper! How can anyone forget to cook supper?
Katie: Calm down, dad. You don't have to get cross. *(pause)*
We're here in time. Smile. Be happy.
David: (*less snappy)* Ok, you're right. *(pause)*
Which one is Mrs Kelly?
Katie: She's the teacher with the short hair.
She's wearing a scarf and a dark jacket.
David: Yes, I can see her. *(pause)* She's quite new isn't, she?
Katie: Yes. *(Thinking)* It's March now. She wasn't here in December.
(unsure) Did she start at the end of January or the beginning of February?
(making up mind) I remember . It was the beginning of February.
David: What do you think of her?
Katie: Some of my friends think she's nice. Some of them think she gives too much homework and is very serious. But she's excellent. Much better than Mr Green, our old

teacher.
David: Good. *(clearing of throat and tapping on microphone and voice counting One. Two. Three. to test microphone)*
ShSh. Be quiet now. They're starting.
Mrs Kelly: Good evening, ladies and gentlemen. Thank you for coming when it's so wet and windy. It's typical, we've had nice weather all week, blue skies, frost and sunshine, but tonight it's pouring with rain. Anyway, I'd like to welcome you to this meeting for parents and students. It's to talk about work experience for students in Year 10. My name is Mrs Ann Kelly. I'm a new teacher at Parkway and I'm the head of the programme for work experience and that is the subject of today's meeting.
(short pause)
I have four other teachers to help with this programme. Mr Peter Carter teaches art. Mrs Rita Lal, the lady in blue, teaches maths. Miss Lorri Mathews is head of French and finally, Mr Roger Davies, the young man in the suit, teaches science and biology.
(short pause)
My job tonight is to introduce the meeting and speak to parents and students who have appointments. Miss Mathews will close the meeting and reply to questions. Mr Carter will talk about the purposes of work experience – why we have it and why it's important. Mr Davies will go through the application form for work experience and explain to students how to complete it. Mrs Lal will talk about the dates for work experience and how students should prepare for it.
(short pause)
Work experience first started in 1982 *(fade out)*
[FIVE SECOND PAUSE]
You will now hear the conversation again.
[TONE/BEEP]
[REPEAT CONVERSATION]
RUBRIC That is the end of Task One. Now go on to Task Two.
[FIVE SECOND PAUSE]

Task Two: Katie's application form

RUBRIC: The next morning Katie and her father are discussing the application form for Katie's work experience. Katie has already started the form. Listen to the conversation and complete the application form.

You will hear the conversation twice. Do as much as you can the first time and finish your work the second time. You have one minute to look at the application form.
Listen carefully. The conversation starts now.

Katie: *(Sounding flustered)* Dad, can you help?
David: Sure.
Katie This form is for tomorrow. I've done some of it. Can you help me finish I don't want to make any mistakes.
David: How much have you done?
Kate: I've done some. I've written my name and my date of birth.
David: Twentieth of August 1990. Right?
Katie Good, you remember. And I've done the address.
David: You've forgotten the post code.
Kate: Oh. (*talking to herself*)
P-R-eight (*pause*) –five a-j.

David: That's good.
Sometimes I write 'P-R-five –eight a-j.'
And you've done our home phone number
But you haven't written your mobile number.
Kate: No, I can never remember the number. Sorry.
David: 07890 828696.
Katie (*repeating*) 07890 828696. Thanks.
David: Number three: your interests or hobbies.
Kate: Well, I could tick everything.
David: Yes, but it says you should only tick three or fewer.
Katie OK. I like going swimming best, so I'll tick sports and exercise.
David: And you like travel too, so tick visiting places.
Kate: OK.
David: Now *(pause)* Medical information. 'Have you got any medical problems?' You should answer 'yes'.
Katie Yes! Why? (*accusing)* I'm fine.
David: But you always get a headache when it's time to wash up.
Kate: (*tetchy*) I'm not ticking yes. Don't be silly, dad.
David: Sorry. (*pause*) Section C next. Work experience details.
Kate: Question five. 'Do you want the school to find your work experience placement?'
David: I'm not sure. Your aunt Susan runs a company. You could do your work experience with her.
Katie But I've been to her offices lots of time. I think the school should find a work placement for me.
David: Fine. Next. When do you want to do your work experience?
Kate: The second week in May?
David: No, that's too near your exams.
How about the third week in April?
Katie Grandma's visiting then
Let's choose the first week of May
David: Yeah, OK. *(pause)*
You've already answered the next question.
'Do you have any plans or ideas for a future job or career?'
Kate: Yes *(pause).* I ticked 'yes' because I have an idea for a job.
I want to open a clothes shop.
David: Good, well write that where it says 'If *yes,* please give details.'
Kate: OK. *(slowly as if writing)* Open clothes shop.
David: Nearly finished. The last question, number eight.
'work experience you're interested in'.
Katie I can tick three kinds.
David: You're going to tick 'Shop Work', aren't you?
Kate: Of course.
David: Any others?
Katie Mrs Kelly wanted us to tick two or three kinds.
David: What's your second choice?
Kate: *(as if reading from the form)* Art and design, *(pause)* cooking and catering, *(pause)* engineering. I don't really like any of these.
David: Well, you can suggest your own idea in 'Other, please give details.'
What are you going to put?
Kate I've always been interested in working with the police, so I'll write police work.
David Fine. Now sign the form and *(fade out)*