# Improving Pronunciation of Secondary School Teachers through Computer Assisted Learning: An Experience

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*Abstract:*

This paper concerned with an experience of using computer assisted learning for improving pronunciation of secondary school teachers with a focus on English language and linguistics oriented training. The 50 subjects select randomly and one month training was given. Before conducting training, a group discussion was managed, and a Pretest of pronunciation (individual sounds, word stress and intonation) was administered. The pretest results showed that subjects were unable to pronounce individual sounds, stress words correctly, and intonate properly, but after training through computer assisted learning the results of the post test showed significant improvement in pronunciation of teachers' individual sounds; long and short vowel sounds, diphthongs, word stress and intonation in connected speech.

*Key Words:* *Learning, training, pronunciation, teachers*

## INTRODUCTION

English language learners face many problems due to different reasons, while learning English from primary to tertiary levels and pronunciation problem is one the biggest which remains with the students through out their academic career and haunts them when they are in practical life. But if this is the constant problem of teachers Although teacher try their utmost to teach English pronunciation through printed pronunciation material which is either available in the course outlines or self made by the teacher educator. But there are less teacher educators available whose own pronunciation is above board and the perspective teachers are surely left on the mercy of circumstances.

Pakistan, despite being a third world country, is the biggest user of Internet and Universities have tried to equip their campuses with Internet facilities by establishing Internet Labs, Smart rooms etc., which provide sufficient opportunities to teacher as well as perspective teachers to use computer aided/assisted programmes for multifarious purposes. This study is one the endeavors conducted on secondary school teachers, who were to undertake four weeks training. They were given training, by keeping in view the below stated study question, through CALL for improving English pronunciation and were exposed to pre and post test before going to classroom. Different Internet sources, CDs, DVDs, etc., were utilized to provide sufficient drills and practice for improving pronunciation to the subjects after the pre-test.

During the recent times there has been a growing demand to use technology for educational purposes as well as to learn English with special focus on pronunciation. Various types of computer hardware have been introduced and a survey of the literature shows an emerging interest among language teachers and researchers in the benefits of computer-assisted pronunciation

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instruction (Albertson 1982, Molholt 1988, Molholt, Lane, Tanner, & Fischer 1988, Pennington 1988, Chun 1989, Perdreau and Hessney 1990, Johnson and Rekart 1991).

## REVIEW OF RELATED LITERATURE

On the other hand many educators are hesitant to embrace a technology that still seeks acceptance by the language teaching community as a whole (Kenning & Kenning, 1990). But in this context many reasons have been assigned to this reluctance by keeping in view the restricted availability of computer assisted instructions. Among them are the lack of a unified theoretical framework for designing and evaluating CALL systems (Chapelle, 1997; Hubbard, 1988; Ng & Olivier, 1987).

Experimental studies conducted in last years have focused on the effects of various types of pronunciation instruction on learners' overall levels of intelligibility and comprehensibility. Intelligibility is "the extent to which a listener actually understands an utterance" (Derwing & Munro, 2005, p. 385) and is often evaluated through transcription or listening comprehension tasks performed by a listener. Comprehensibility is "a listener's perception of how difficult it is to understand an utterance" (Derwing & Munro, 2005, p. 385).

Developments in technology have allowed automatic speech processing to be incorporated into pronunciation teaching (Hua, 2006). A number of researchers (e.g. Molholt, 1988; 1990; Harless, Zier & Duncan, 1999; Eskenazi, 1999a, 1999b; Neri, Strik & Boves 2002; Butler-Pascoe & Wiburg, 2003; Kim, 2006) have investigated the advantages of computer assisted pronunciation training (CAPT) software for enhancing English learners' pronunciation. On the other hand Internet has done marvels and has also appeared a pedagogical strategy. Today, the Internet is regarded as a pedagogical device to develop language teaching and the learning process (Lee, 2000).

Computer Assisted Pronunciation Training (CAPT) systems, as an example, are designed to provide learners with private, stress-free practice with individualized and instantaneous feedback on pronunciation. The introduction of CAPT applications has initiated a debate on the relationship between pedagogy and technology, and the role of the language teacher in the classroom (Neri, Cucchiarini, Strik and Boves 2002).

## METHODOLOGY

The study is participatory cum empirical effort and the subjects (50 secondary school teachers) were exposed to a pre-test (appendices A, B & C) and their proficiency was observed by using a checklist and then the results of the pre and post-test were compared to check their improvement in the mentioned areas, i.e., individual sounds (20), word stress (32 two syllabic) and intonation (1 sentence with at least 7 possible ways to pronounce) after the semester.

## FINDINGS & CONCLUSION

It was found that a majority of subjects were able to pronounce individual sounds so far as consonants were concerned and were capable of pronouncing most of the vowel sounds of English except long and short vowel sounds like / i: / , /aː/ , / ɔ: / , or /u:/. Similarly a majority of subjects were not able to pronounce diphthongs and mixed up one with the other without gliding the tongue while pronouncing them.

It is possible that lack of practice in pronouncing English vowels sounds, separate words and intonation has hardened their vocal cords as well as less practice of speaking English language in daily life, academic and social, might have doubled the problem but the results of post test reflect that their vocal cords have still the capacity to adapt new habits which has been given to them through drill through CALL. We also see that intonation understanding was hardly

found in the beginning as most of the subjects read the sentence in a monotone but regular use of CALL with the help and guidance of teacher educator they were capable of stressing words to get the required meaning in the sentence.

Further, we find that teachers developed liking for CALL programmes and consistently utilized computer facilities as well as the available CALL programmes in the Lab and on Internet. But it is very important to consider that without the help of teacher educator, who himself/herself, pronounces English words with appropriate pronunciation the task for overcoming such difficulties will remain the same because it is the teacher educator who is to steer the boat of the pronunciation of perspective teachers in right direction in the beginning as Dhaif (1989) claims computers can never replace the 'live' teacher, especially in language teaching where the emphasis is on mutual communication between people. We find that there is big improvement in the understanding and performance of the subjects as the results of the post test manifest .

The subjects improved their word stress by pronouncing the individual sounds correctly with consciousness of intonation pattern to pronounce word in the sentence with stress to make the meanings clear. It was also found out that subjects were in the position to make distinction between long and short vowel sounds, learnt the word stress in accordance with the requirement, i.e., either verb or a noun or adjective, etc. Similarly in the connected speech the subjects demonstrated positive improvement as they came to know what sort of meaning they have to communicate with the stress on one particular word.

Hence, the study seems to answer that the perspective teachers, who are taught English pronunciation through CALL by the teacher educators, can better their articulation so far as individual sounds, word stress and basic intonation are concerned in light of the results of both pre and post tests because after a semester's training through CALL they were capable of improving their individual sound articulation, word stress, especially two syllabic words, and intonation in the connected speech and demonstrated in a better way.

## RECOMMENDATIONS

Technological advancements should be considered as blessing in disguise for the learning of refined pronunciation. Language teachers, teaching English at tertiary level to perspective teachers, should equip themselves with computer skills to use Internet in a befitting manner. Universities should promote language teaching through computers so that every teacher may consider it mandatory for the improvement of his/her as well as students' pronunciation. Universities/Colleges (having teacher education programmes) must allocate funds for better and Internet equipped computer labs so that after training from the teacher educators, perspective teachers may become independent learners so for as good pronunciation/articulation is concerned. Government/policy designers should take CALL as a call of the day required for posterity.

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*Appendix A*
**Pre & Post Test No. 1 (Individual sounds)**

**Consonants:**                    **Vowels:**

| Consonants | Vowels |
|---|---|
| f | iː |
| v | ɪ |
| θ | e |
| ð | æ |
| s | ʌ |
| z | ɑː |
| ʃ | ɒ |
| ʒ | ɔː |
| h | ɜː |
| p | ə |
| b | ʊ |
| t | uː |
| d | **Diphthongs** |
| k | eɪ |
| g | aɪ |
| tʃ | ɔɪ |
| dʒ | əʊ |
| m | aʊ |
| n | ɪə |
| ŋ | eə |
| l | ʊə |
| r | |
| j | |
| w | |

*Appendix B*
**Pre & Post Test No. 2 (word stress)**

| Sr. No | Ordinary Script | Phonetic Script | Sr. No | Ordinary Script | Phonetic Script |
|---|---|---|---|---|---|
| 1 | Abstract | æbstrækt (n) | 17 | Convert | konvɜ:t(n) |
| 2 | Abstract | əbstrækt (v) | 18 | Convert | kənvɜ:t(v) |
| 3 | Accent | æksent (n) | 19 | Excess | ekses(n) |
| 4 | Accent | əksent (v) | 20 | Excess | ikses(v) |
| 5 | Access | ækses(n) | 21 | Excuse | iksju:s(n) |
| 6 | Access | əkses(v) | 22 | Excuse | iksju:z(v) |
| 7 | Concept | konsept(n) | 23 | Present | prezənt(n) |
| 8 | Concept | kənsept(v) | 24 | Present | prizənt(v) |
| 9 | Conduct | kondAkt(n) | 25 | Produce | prodju:s(n) |
| 10 | Conduct | kəndAkt(v) | 26 | Produce | prədju:s(v) |
| 11 | Conflict | Konflikt(n) | 27 | Project | prodʒekt(n) |
| 12 | Conflict | kənflikt(v) | 28 | Project | prədʒekt(v) |
| 13 | Contest | kontest(n) | 29 | Subject | sAbdʒikt(n) |
| 14 | Contest | kəntest(v) | 30 | Subject | səbdʒekt(v) |
| 15 | Contrast | kontra:st(n) | 31 | Reject | ri:dʒekt(n) |
| 16 | Contrast | ka:ntra:st(v) | 32 | Reject | ridʒekt(v) |

*Appendix C*
**Pre & Post Test No. 3 (Intonation)**

| Sr. No | Sentence | Intended meaning |
|---|---|---|
| 1 | **I** said she might consider a new haircut. | Not just a haircut. |
| 2 | I **said** she might consider a new haircut. | It's a possibility. |
| 3 | I said **she** might consider a new haircut. | It was my idea. |
| 4 | I said she **might** consider a new haircut. | Not something else. |
| 5 | I said she might **consider** a new haircut. | Don't you understand me? |
| 6 | I said she might consider a **new** haircut. | Not another person. |
| 7 | I said she might consider a new **haircut**. | She should think about it. It's a good idea. |
| | | **Answers to the questions** |
| | | 1. **I** said she might consider a new haircut. *It was my idea.* <br> 2. I **said** she might consider a new haircut. *Don't you understand me?* <br> 3. I said **she** might consider a new haircut. *Not another person.* <br> 4. I said she **might** consider a new haircut. *It's a possibility.* <br> 5. I said she might **consider** a new haircut. *She should think about it. It's a good idea.* <br> 6. I said she might consider a **new** haircut. *Not just a haircut.* <br> 7. I said she might consider a new **haircut**. *Not something else.* |

**Courtesy:** http://esl.about.com/cs/pronunciation/a/a_wordstress.htm

*Appendix D*

**Pre test results**

| Able to pronounce consonants sounds | Able to pronounce vowel sounds other than long & shorts vowel sounds | Able to pronounce all long & short vowel sounds | Able to pronounce all diphthongs sounds | Able to stress two syllabic words | Able to stress words in sentence |
|---|---|---|---|---|---|
| 38 | 38 | 4 | 3 | 5 | 5 |

**Post-test results**

| Able to pronounce consonants sounds | Able to pronounce vowel sounds other than long & shorts vowel sounds | Able to pronounce all long & short vowel sounds | Able to pronounce all diphthongs sounds | Able to stress two syllabic words | Able to stress words in sentence |
|---|---|---|---|---|---|
| 43 | 41 | 41 | 38 | 42 | 41 |