Abstract
This paper examines how effective ICT could be in the teaching of English pronunciation to English as a Second Language Learners (ESL). Teaching the pronunciation of a second language to learners that have already acquired a mother-tongue or first Language (L1) is encumbered with various problems. With an existing deficiency of learning from a fellow second language teacher literate in the language, the paper seeks to know how ICT could bridge the absence of Native teachers: A review of works and researches that ICT has been employed to teach pronunciation is done. The findings reveal that ICT is very effective in the teaching of pronunciation to ICT learners though challenged by inadequate equipment and lack of awareness on the part of some teachers on the use of ICT. It concludes by advocating for the use of ICT in teaching pronunciation irrespective of the challenges.

The teaching of the pronunciation of English among English as a Second Language (ESL) learners has been a very cumbersome exercise. This is sequel to a lot of factors such as the teachers not being native speakers of the English language, learning the language as a second language after the acquisition of a first language (L1) or mother-tongue, inadequate pronunciation guides/models and equipment, unavailability of schools of phonetics studies etc. These factors stated here affect the pronunciation in no small measure.

Besides, the English language has a notoriously confusing nature of spelling. It is in view of this discrepancy in English spelling that Roach (2000) considered it particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of the alphabet. He gave an instance of the word ‘enough’ /ɪnʌf/ which begins with the same vowel phoneme at the beginning of the word inept /ɪnɛpt/ and ends with the same consonant as stuff /stʌf/. There are several instances where some letters in words spelt are totally silent yet they accompanied the word. For instance, in words like gnat /ɡnet/, knife /naɪf/, psycho/saɪkəu/, their initial consonants ‘g’, ‘k’ and ‘p’ are silent and in words like comb /kʌmb/, autumn /ɔːtəm/; lamb /læm/, depot /dɛpət/, the final consonants are silent. There are equally instances where some consonants in the middle of a word are silent for example listen /ˈlɪsən/, whistle /ˈhwɪsl/ and some pronunciations are totally different from the spelling. For example quay /ˈkweɪ/, yacht /jɔɪt/ and so on. That is why Jones (2006) reminded us that “the pronunciation of English words is not governed by a strict set of rules... There are variations in pronunciation which makes it difficult to teach and learn.”

Furthermore, second language (L2) learning is not the same thing as first language (L1) acquisition. Second language is usually done at adult age (immediately after childhood) while language acquisition is right from birth. It now takes the learners (adults) a difficult time to pick up in the second language (L2). It will cost the adult conscious attention, intense study and memorization to be proficient in L2 except for some extra-ordinary or gifted persons. It is in view of this that Fromkin, Rodman & Hyams
(2011) wrote that "with the exception of some remarkable individuals, adult second language learners (L2ers) do not often achieve native-like grammatical competence in the L2, especially with respect to pronunciation". This is generally no fault of theirs because their initial exposure to the first language gives them an accent and a likelihood of making syntactic or morphological errors unlike children acquiring English as a first language. In this perspective, Fromkin, Rodman & Hyams (2011) further observed that, “L2ers generally speak with an accent because they may transfer the phones, phonological rules, or syllable structure of their first language to their second language”. This is the case with Tiv speakers in Benue State, Nigeria, where there is no phonemic distinction between r/l. It is common place to hear words like rice /rais/ and light /lait/ being articulated as /lais/ and /rait/. The French speakers are noted to saying “ze” for “the” because of the absence of /θ/ in French.

The Significance of ICT in English Pronunciation

Literacy in information and communication Technology (ICT) is fundamental to life in our alarming technological advancing society. For our students to be integrated into the system as global citizens in this 21st Century, ICT must be used as a tool in their teaching/learning process. ICT provides opportunities to students to communicate more effectively and to develop literacy skills. It is a valuable tool for researching, composing and responding, and viewing and representing in English.

This is because ICT has a broad range of activities, programmes, tools, applications and information that can be accessed through computers. Uduk (2007) saw ICT as comprising “various forms of information delivery systems such as television, radio, newspapers, books, computers, internet etc. in one integrated environment.

Use of ICT in Teaching English Pronunciation

ICT is an invaluable tool in presenting and representing information in various ways. This can be in the form of text, pictures, tables and graphs or by enhancing visualization and hearing of sounds produced in a language. Visualization tools according to Jonassen (2000) “can help learners to picture scientific ideas or to develop a conceptual understanding”. With the introduction of ICT, it has been possible to display human speech in a graphic representation on a computer screen. Godwin-Jones (2009) wrote that, “programs such as visi-pitch, available since MS-DOS days, have been widely used to show a representation of a learner’s utterance alongside that of a native speaker”. Programs of this nature are very effective being that they provide useful feedback and assistance to the learners in correcting pronunciation problems.

It is worthy of note to be mentioned here that the past practice of subjecting students to work with individual sounds and sentences out of context is not sufficient in helping students pronunciation. This is because it does not only leave out the supra-segmental features of speech but takes the learners away from the communicative ability with natural speech. In using speech analysis, programs, students listen closely to model speech, with attention to aspects of the native speaker’s pronunciation and compare with the utterance they generate themselves. From here, they receive a feedback usually visual and auditory that helps them to improve their pronunciation.

There are several ways in which computer-based pronunciation training can be more effective than classroom based practice. It gives the learner privacy since interaction with computer is usually in private. The learner works
at his own pace and comfort using the available tools.

Besides, Godwin-Jones (2009) equally had it that:

Computer-based training can supply many more native speaker voices as models, a recognized benefit to learning pronunciation. A software program can also be programmed to adapt to individual learner’s progress by customizing practice to that student’s needs, testing for transference of skills to other contexts or speakers, and doing interval checks to see if knowledge has been retained.

This practice mentioned above can go a long way in intensifying the learning of pronunciation with ICT.

Editors of English dictionaries and pronunciation dictionaries have usually recognized the efficiency of integrating ICT into pronunciation training. Modern dictionaries no longer come with phonetics transcriptions and meanings only but are accompanied by CD-ROMS that model the correct pronunciation of given words. For example, the English pronunciation dictionary by Daniel Jones 17th edition, Longman Dictionary of Contemporary English, Webster Dictionary, English Phonetics and phonology 5th Edition by Peter Roach, A course in English phonetics by Peter Ladefoged, etc. are now all accompanied by CD-ROMS that can be used via a computer to get the correct pronunciation of words, and exercises for one to test one’s progress.

Furthermore, Chera and Wood (2003) observed that “multi-media presentation in the form of talking books has been shown to improve beginning readers’ phonological awareness...” A lot of CDs known as Teaching the Phonics of English to kindergarten are in circulation. These audio-visual CDs can be played on CD/DVD players for kids to watch and learn. From here, they start learning correct pronunciation and grow to be good speakers of the English Language if the process is continued.

In addition, Rose Medical’s pronunciation coach demonstrates how to pronounce English words and phrases. The learner is simply expected to type any word or phrase and create a pronunciation model. Each model provides an interactive view of the speech production process which is made up of audio, video, waveforms and phonetics symbols. The audio is for listening to the pronunciation the learner has recorded; the video is for viewing the tongue, vocal folds, velum and lips. The waveform is for viewing timing, pitch and speech intensity.

The phonetics symbols help one to identify the individual speech sounds. The device allows the learner to record his/her own pronunciation and compare it to the model while the integrated speech recognizer gives a measure of how well the learner pronounced the word or phrase. The recorder contains audio and video which can be captured with a webcam. After the recording, the learner is expected to check the speech recognition result to ascertain if his/her pronunciation was correctly recognized. It contains a confidence score that provides a measure of how well the word or phrase was pronounced.

There are still lot of ICT tools and speech technologies that are not covered in this research article, but appear in “A Survey of the Speech Tools and Technologies for Teaching English Language” by the same authors. Some of these tools are Hearsay CSLU, Wave surfer, Tell Me More, and so on.

These tools do a similar job, that is enabling the learner see pitch curve and waveform display of both the learner’s utterance and that of a model native speaker.

**Conclusion**

Although this study did not carry out an absolute comparison of the traditional classroom...
approach of teaching pronunciation and using computers or ICT to teach same, there is evidence that ICT is very effective in the teaching of pronunciation. This is derived from the numerous researches on the effective use of ICT in teaching in schools, which is related to the nature of this research. However, it is salient to know that there are some limitations in the use of ICT in teaching pronunciation. This ranges from the fact that the use of ICT is cost-effective, there are usually technical problems with the equipment, unavailability of network or internet service providers (ISP) to unavailability of power supply in most schools.

These, according to Mosley (1999) “are what teachers find act as barriers to increasing the use of technology in classrooms”. This discourages teachers or gives them an excuse for not experimenting it in classrooms. Nevertheless, suffice it to say that if the challenges are attended to, and an effective adoption of computers within the classroom is made, there would undoubtedly be a difference in the teaching of English pronunciation.

References


